

Fax / Télécopie

Office of Elizabeth May, O.C., M.P. Saanich - Gulf Islands I Bureau de Circonscription, Elizabeth May, Députée Saanich - Gulf Islands

To / Destinataire:

The Honourable Christy Clark Premier of British Columbia Box 9041 Stn Prov Govt Victoria, BC V8W 9E1

Fax / Télécopieur :

250 387-0087

From:

Elizabeth May, O.C., M.P.

Member of Parliament for Saanich-Gulf Islands
Leader of the Green Party of Canada

Constituency Office | 9711 Fourth Street Sidney BC Canada V81. 278

Bureau de Circonscription | 9711 Rue Fourth, Sidney CB, V&L 2Y8
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(Dilawa

Room 518, Confederation Building Ottawa, Ontario K1A 0A6

Tel.: 613-996-1119 Fax: 613-996-0850

> HOUSE OF COMMONS CHAMBRE DES COMMUNES CANADA

Pirconscription 9711, rue Fourth, bureau 1 Elizabeth Mav Sidney (Colombie-Britannique) V8L 2Y8

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Pièce 518, Édifice de la Confédération

April 8, 2013

Ottawa (Ontario) KIA 0A6

Tel.: 613-996-1119

Téléc.: 613-996-0850

Member of Parliament / Députée Tel.: 250-657-2000 Saanich - Gulf Islands / Saanich - Gulf Islands Téléc.: 250-657-2004

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Fax: 250-657-2004

The Honourable Christy Clark Premier of British Columbia

> Victoria, BC V8W 9E1 Via fax: 250 387-0087

Box 9041 Stn Prov Govt

The Honourable Terry Lake BC Minister of the Environment PO Box 9047 Stn Prov Govt Victoria, BC V8W 9E2 Via fax: 250 387-1356

Dear Premier Clark and Minister Lake,

I would like to add my voice to the huge and growing number of people and groups strongly opposed to the granting of a permit to South Island Aggregates to dump contaminated soil in the Shawnigan Lake watershed. This is a reckless idea and I am appalled that you are supporting the introduction of contaminated waste into such a sensitive location.

Yours truly,

Elizabeth May, O.C., M.P.

Member of Parliament for Saanich-Gulf Islands

Leader of the Green Party of Canada

cc. Vicki Bridge

222 - 2453 Beacon Avenue

Sidney, BC V8L 1X7



April 3, 2013



Honourable Christy Clark
Premier
Province of 80

By Face 250-382-0087

Dear Premier:

Re:

Cancellation of South Island Aggregate (SIA) Permit to Haul and Dump Contorninated Soil in Shawnigan Lake Watershed

I am a long time Shawnigan Lake, BC property owner,



I am disappointed at the shortsightedness of the Ministry of Environment for Issuing a draft permit to SIA to haul and dump contaminated soil in the Shawnigan Lake watershed. This is not acceptable, under any conditions, and will inevitably lead to the contamination of our water supply, polluting of one of BC's most popular recreation areas, and adversely affect the health of our 7,000 residents. If contamination spreads to our aquifers (which has been predicted), then the problem will affect communities throughout Vancouver Island. Premier Clark, you need to protect the families of Shawnigan Lake from this completely preventable unvironmental disaster and direct Minister Lake to cancel the draft permit.

I am a business owner and support the free enterprise approach. This permit to haul and dump toxins, however, will not create new jobs. Instead it will threaten businesses in and around Shawnigan Lake, depress real estate values and lead to further economic hardships for this already struggling community.

I believe that approving this permit is also bad public policy. Allowing contaminated fill into watersheds for the purpose of backfilling mines has the potential (local scientists say "certainty") to cause irreparable and irreversible environmental damage. Who benefits? Two businessman over the wishes of 7,000 residents. Approving this permit will leave a black eye on the Liberal environmental record for decades to come.

All four local candidates are opposing this permit, as is local government, citizen's groups and First Nations. Liberal candidate Steve Houser has done a great job rallying groups around this issue, showing real leadership and demonstrating to this traditional NDP constituency what real leadership looks like. With your decision to cancel the draft SIA permit, I believe the Liberal candidate could prevail in this riding, belstering party support throughout the Island and province. If this election is to be won, we need to do what is light, not what is expedient.

.../2

Premier Clark, this community has come together and united in opposition over this issue. Your leadership, at this critical time, could be the issue that sways voters. Turge you to cancel the above referenced permit for the following reasons:

- 2. It is opposed by 200% of Shawnigan Lake residents, including the MLA and candidates from all four political parties (including your own party), regional government representatives, volunteer area associations whose mandate is to protect the watershed and all other community interests, including first Nations.
- The science offers no guarantee that the leachate from the contaminated soll will not find its way
 into our danking water and air shed.
- 3. The hauling of the contaminated soil itself presents environmental and safety risks to Shawnigan and area residents.
- 4. The granting of such a permit violates the Ministry of Environment's mandate and responsibility.

Cancellation of the SIA draft permit is the right thing to do for our environment, our families and our democracy.

Sincerely,

cc: Minister Torry Lake Minister of Environment

> Mr. Steve Housser Liberal Candidate, Cowichan

April 2, 2013



Honourable Christy Clark Premier Province of 8C

By Fax: 250-387-0087

Dear Premier:

Re: Cancellation of South Island Aggregate (SIA) Permit to

Haul and Dump Contaminated Soil in Shawnigan Lake Watershed

lam a long time Shawnigan Lake, BC resident

522

I am disappointed at the shortsightedness of the Ministry of Environment for issuing a draft permit to SIA to hauf and dump contaminated soil in the Shawnigan Lake watershed. This is not acceptable, under any conditions, and will inevitably lead to the contamination of our water supply, polluting of one of BC's most popular recreation areas, and adversely affect the health of our 7,000 residents. If contamination spreads to our aquifers (which has been predicted), then the problem will affect communities throughout Vancouver Island. Premier Clark, you need to protect the families of Shawnigan Lake from this completely preventable environmental disaster and direct Minister Lake to cancel the draft permit.

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I believe that approving this permit is also bad public policy. Allowing contaminated fill into watersheds for the purpose of backfilling mines has the potential (local scientists say "certainty") to cause irreparable and irreversible environmental damage. Who benefits? Two greedy non-resident businessmen over the wishes of 7,000 residents. Approving this permit will leave a black eye on the Liberal environmental record for decades to come.

All four local candidates are opposing this permit, as is local government, citizen's groups and First Nations. Liberal candidate Steve Houser has done a great job rallying groups around this issue, showing real leadership and demonstrating to this traditional NDP constituency what real leadership looks like. With your decision to cancel the draft SIA permit, I believe the Liberal candidate could prevail in this riding, bolstering party support throughout the Island and province. If this election is to be won, we need to do what is right, not what is expedient.

Premier Clark, this community has come together and united in apposition over this issue. Your leadership, at this critical time, could be the issue that sways voters. I urge you to cancel the above referenced permit for the following reasons:

- It is opposed by 100% of Shawnigan Lake residents, including the MLA and candidates from all four political parties (including your own party), regional government representatives, volunteer area associations whose mandate is to protect the watershed and all other community interests, including First Nations.
- 2. The science offers no guarantee that the leachate from the contaminated soil will not find its way into our drinking water and air shed.
- The hauling of the contaminated soil itself presents environmental and safety risks to Shawnigan and area residents.
- 4. The granting of such a permit violates the Ministry of Environment's mandate and responsibility.

Cancellation of the SIA draft permit is the right thing to do for our environment, our families and our democracy.



cc: Minister Terry Lake
Minister of Environment

Mr. Steve Housser Liberal Candidate, Cowichan

Christie Clarke,

I ask you to remove Mr. Terry Lake as minister of the environment. He has shown a total disregard for the environment in the Cowichan Valley by issuing two permits to destroy two watersheds and a lake in our valley. (By the time you read this he will, without a doubt have signed the permit to allow the pollution of Shawnigan Lake.)

It is my understanding that a minister of the environment is actually supposed to 'protect' the environment and that includes the Cowichan Valley regardless if proper bylaws are or are not in place. Mr. Lake knows full well what he was doing. He is going ahead in spite of the evidence showing that it will be a gross mistake and in spite of all the voices of the people who have cried out against it. That says something loud and clear about your party's integrity.

If he was truly interested in the environment in this province he would have turned down both applications immediately. If everyone else around can see how toxic this situation is then why is he the only one who can't? Because he is not fit for the job or because he has another agenda.

We grew up drinking the water. My brother owns a home there as well. Future generations will not have the joy of water sports nor enjoy the beauty of the area because of this man. It is up to you to stop him. This whole dilemma is now on your plate. We look to you to act to stop this butcher of the environment.

Thank you for your consideration of this matter.



cc Terry Lake

March 23, 2013

I have posted this letter at the actual post office to be sure it gets to you in time.

Mr. Terry Lake, Minister of the Environment, Environmental Protection.

Mr. Lake,

I clearly vote 'NO' to you issuing the permit to South Island Aggretages to turn Shawnigan Lake and the surrounding watershed into another toxic waste dump.

My question is: Will any of the letters you receive that say 'No" have any impact on the permit you have already decided to grant?

You have made it plain to all that you have your own agenda and are not going to be deterred from it in spite of the fact that many people have invested huge portions of their net worth to have property and a house in the Shawnigan Lake area. You are destroying that for them. They will not be able to drink the water and will not be able to sell the property. Can you see how far reaching your decision will become? Do you care even a little?

Was it not enough that you declared Duncan's watershed a toxic waste dump? How can you possibly destroy two watersheds in one area of the Island alone? What have we done to deserve this kind of treatment?

Thank you for your time.



cc Christie Clark



April 11, 2013



Dear

S22

Thank you for letter and for keeping me informed of your concerns regarding South Island Aggregates' application to discharge waste and relocate contaminated soils in the Shawnigan Lake region. Your views on this proposal are noted.

As I am sure you can appreciate, it would not be appropriate for me to intervene when a proposal like this is under review by the Environmental Protection Division. The Ministry of Environment has received a great deal of public input on this issue and that staff there are carefully considering all feedback received.

I understand the importance of the forthcoming decision by Ministry staff and I appreciate being made aware of your concerns. Thank you again for writing.

Sincerely

Christy Clark

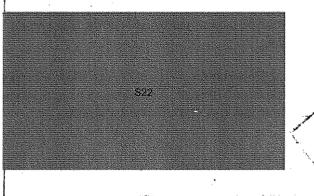
Premier

pc:

Honourable Terry Lake

MS CHISTY CLARK

MY FAMILY AND MYSELF ARE OPPOSED TO THE APPLICATION FOR A
PERMIT TOO ALLOW CONTAMINATED WASTE TO BE TRANSPORTED
AND STORED IN SHAWNIGAN LAKE WATERSHED. THIS IS A CRIME
IF THIS APPLICATION IS TOO BE APPROVED



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February 14, 2013



Dear S22

Thank you for your letter regarding South Island Aggregates' application to relocate soil to land near Shawnigan Lake. I understand that this is an important issue for you and I appreciate that you have taken the time to bring your concerns to my attention.

I have asked my staff to ensure that the Honourable Terry Lake, Minister of Environment, receives a copy of your letter for his review as well. His senior staff have been taking public input into consideration in related discussions.

Once again, thank you for writing - it was good to hear from you.

Christy Clark

Premier

pc: Honourable Terry Lake

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April 5, 201 ATTENTION: CHRISTI CLARK

I am writing to you in regard to the proposed Shawnigan Lake and Victoria water shed contamination site.

As a long time resident of Shawnigan Lake and Victoria, I as well as thousands of others are EXTREMELY concerned about the drinking water that we use from Shawnigan Lake.

The acceptance of this draft is unaceptable by all peoples. The whole concept of putting a toxic waste plant in two water sheds is absolutely absurd, not to mention neglegent on the parts of the Minister of Environment, the Health Minister and the Preimier and many others in government.

I thought in our time we were getting smarter, it doesn't seem that way on the governments behalf.

Or is this about Money??? Can't be anything else in the minds of all the people in Shawnigan Lake, not to mention Victoria. Is Victoria not the capital of British Columbia, what a blunder here on the governments behalf.

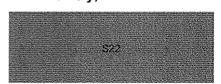
I believe April is cancer awarness month. What a farce that is. The government will be escalating the cancers if this goes into our drinking water.

Absolutely nothing of this proposal makes sense to the intelligent people who are environmentally aware that all that is, IS.

If you don't know what that means, it is what you do involves you. We need to be working with nature, not going against it because it will come back and hurt mankind big time.

Please read the letters from professionals that I am enclosing. Please LISTEN to our MLA's who are against this. PLEASE eduacate yourselves on this matter. It is a HUGE ENVIRONMENTAL DISASTER waiting to happen if you allow this to go through.

Yours truly.



The Miles of the Control of the Cont

CHAINSTAN COM

Page 14 OOP-2013-00294 Premier Christy Clark,

Dear Christy,

Thank you for your reply to my letter of concern about the pipeline request by Enbridge and access to a sea port.

I was feeling good about the safeguards you talked about until you mentioned Terry Lake and the Ministry of the Environment. Of anyone I know he is the least likely to know about protecting the environment.

Point in Question: The removal of contaminated soil from CFB Esquimalt and dumping it in the Cowichan Valley amid protests from our CVRD, First Nations, our 3 mayors and the people of the Valley.

Mr. Lake had Mr. Jim Standen, his Assistant Deputy Minister, answer my letters. He deliberately attempted to deceive me by insinuating it was our CVRD's fault because we did not have a bylaw prohibiting the dumping of contaminated soil in that area.

I wrote to the CVRD and asked if this was true. It is not. They sent me an actual copy of the bylaw amendment dated 2001 that prohibits contaminated soil being dumped there. It was not a last minute, ditch effort to thwart the Ministry of the Environment. Your ministry chose to kick it aside and issue the permit in spite of all the protests from our people.

Between these two men you have one who does not have a clue about preserving our environment and one with a lack of integrity. Mr. Lake thinks taking contaminated soil from CFB Esquimalt and dumping it beside the Koksilah River that feeds into our watershed and Kelvin Creek that feeds into Sawnigan Lake is safe.

They say they are depositing it into a 'liner'. Check the facts. These liners are failing all over and your ministry said 'no' it will not be responsible for damage when the liner fails and no to clean-up and remediation. We have this contamination forced on us and we will have to fix the resulting damage 'when' not 'if' the liner fails.

I have some basic questions I don't seem to be able to get answers for.

- 1. What contaminants are in the soil? There is a big difference between bird poop, chewing gum and antifreeze.
- 2. What % of the soil is contaminated?
- 3. What level of danger are we in with this contamination in our watershed?
- 4. What effect can these contaminants have, in their present concentration, on humans, fish and their habitat, animals, plants and the air?
- 5. Who is monitoring the level of contaminants in this soil?
- 6. How closely is it being monitored?

Your Jim Standen from the Ministry of the Environment said they use an "Approved Professional" to determine if the site they are moving the contaminated soil to will also be contaminated.

7. Who is this Approved Professional?

3.35

- 8. Who does he/she work for?
- 9. What are his/her credentials?

Sorry that I suspect this title because any grade school child can figure out that if you pick up contaminated soil, give it a truck ride over the Malahat and dump it that it will not miraculously become uncontaminated and safe, beside a river and creek that feed potable water

sources.

10. Since this soil was contaminated on CFB land why do they not remediate it on the base?

.2.

Good grief ... we can put a man on the moon so why can we not clean it where it got dirty?

- 11. Why do your ministries ignore the local bylaws and expect the people to vote for a party that treats us that way?
- 12. Do you have any intension of changing your policies to include adhering to local bylaws in cases like this?

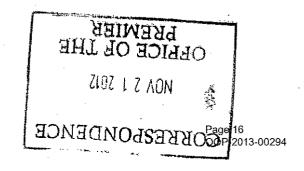
You may also want to look into how your Lands, Forests and Natural Resources guy was responsible for the Cowichan River going dry and salmon having to be caught in Cowichan Bay and trucked to spawning grounds up river. This too should be turned over to locals. If your guy can not see that dumping reserve water when there is no snow pack is not a very intelligent choice then he too does not have a clue.

- 13. What is the total potential loss in salmon numbers because he chose to ignore the people and the MLA who he asked to find our what the people want? He was given the information in April.
- 14. What is the cost to transport the salmon to the spawning grounds?
- 15. What other damage was done to fish, animals, plants, wells by this man's actions? All this was against the wishes of the people. He apparently had his own agenda and protecting lands, forests and natural resources is not it.
- 16. Who pays the bill for the transportation of the salmon?
- 17. Is there any recourse for us now that the trucks are rushing here to dump their contaminated soil?
- 18.Can we stop it?
- 19. How?
- 20. Can it be taken to a safer site?
- 21. If so does our CVRD have to pay the bill for removal?
- 22. Why did the Ministry of the Environment responsible for monitoring the soil being dumped legally and illegally in our valley have to be almost screamed at before they decided to do their job?

Thank you for your time and I do hope you can answer my questions so I can make an informed decision in these matters.

Sincerely,







December 10, 2012



Dear S22

I want to thank you for your follow-up letter.

My staff have advised me that officials at the Ministry of Environment are currently preparing a response to your recent letter regarding the South Island Aggregates application to relocate contaminated soils to land near Shawnigan Lake. I understand that this is an important issue for you and I hope you will find the forthcoming response from Minister Lake's staff to be helpful.

Once again, thank you for writing -I do appreciate receiving your letter. You should be hearing from the appropriate ministry official at the earliest opportunity.

Christy Clark

Premier

pc: Honourable Terry Lake

From

S22

Re Permit to dump contaminateelsoil at the South Island aggregate site at South Showingon water Shed

Ces I sit here writing this letter. I am reminded of the family members who have used and are stell wring our cottage - citually we are now ento the fourth generation.

2 catended the meeting Thursday night fuly 12th at Kerry Park, Mile Bay and listened, with interest to the speech by Hubert Bunce. I was absolutely horrified to think that this beautiful lake may become polluted due to the contaminated soil eventually leaking through the proposed lines that will be placed in the pit.

leshy on earth would you even consider a permit for this project The properties Surverunding the Fake, the village Shaumaan Schools, business, the farms all rely on Shaumaan Lake for water also the houses and farms along the criflouto Mile Bay rely on Shaumaan water

what about the homes with wells and the victoria watershed that are in close proximity to the S.I. A. site?

Have you taken into consideration the toxic material that may be linked to cancer? either in the water or in the cir

Have you considered what the pollution would do to our property values - not only on the lake but business and the surrounding areas?

A concerned showing an hatce cruner so please say 140 to the Permet for the Scrith Island aggregates



August 2, 2012



Dear S22

Thank you for your letter.

I appreciate the time that you have taken to share your thoughts with me as they relate to protection of the environment and drinking water resources in the Shawnigan Lake area. A copy of your letter has been forwarded to the Honourable Terry Lake, Minister of Environment. Minister Lake will ensure you receive a response that addresses your concerns directly. You will be hearing from the Minister's office in this regard at the earliest opportunity.

Again, thank you for writing.

Sincerely,

Christy Clark

Premier

pc: Honourable Terry Lake

From:

32

Sent: Tuesday, March 26, 2013 1:04 PM

To: ENV Protection Responses West Coast ENV:EX; OfficeofthePremier, Office PREM:EX Subject: Re: FW: ENVIRONMENTAL PROTECTION NOTICE - Notice of a Draft Version of the Permit 105809 for South Island Aggregates/Cobble Hill Holdings Ltd. at 640 Stebbings Road for Review and Comment

See attached letter signed by all 4 party members on Mar 25th requesting that the permit be denied until further discussions can happen. If all 4 parties have come together to request this, why is the Provincial government not stepping in to weigh in on matters?

\$22

On Mon, Mar 25, 2013 at 5:03 PM, ENV Protection Responses West Coast ENV:EX <EnvProtectResponseWestCoast@gov.bc.ca> wrote:

Please note that the review and comment period has been extended to 21 days.

Regards,

Ministry of Environment - Environmental Protection West Coast

From: ENV Protection Responses West Coast ENV:EX

Sent: Tuesday, March 19, 2013 12:31 PM

Subject: ENVIRONMENTAL PROTECTION NOTICE - Notice of a Draft Version of the Permit 105809 for South Island Aggregates/Cobble Hill Holdings Ltd. at 640 Stebbings Road for Review and Comment

Considering the substantial level of local public interest in the permit application by South Island Aggregates/Cobble Hill Holdings Ltd. the Ministry of Environment has taken the step of making available a draft version of the permit at the following website

http://www.env.gov.bc.ca/epd/regions/vanc island/env-mgt/index.htm.

The draft permit is available for public review and comment for 14 days after the last date of posting of this notice. Any comment on the specific details of the draft permit must be made to: The Attention of the Director via email to the following email address

EnvProtectResponseWestCoast@gov.bc.ca or by mail to Environmental Protection 2080A Labieux Road Nanaimo BC V9T 6J9. All submissions must be received within 14 days after the last date of posting.

A hard copy of the draft permit may be also viewed at the Shawnigan Lake Community Centre during normal business hours.

Subsequent to the review period a final decision on the permit application will be made. A separate notification will go out that will advise all those groups and individuals that provided comment on the application of their potential right to appeal within a 30 period after notification of the decision.

Dated at Nanaimo, British Columbia on March 19, 2013.

Ministry of Environment Environmental Protection West Coast Region 2080A Labieux Road Nanaimo BC V9T 6J9 We stand together for

Clean Drinking Water

for the people of Shawnigan Lake

The safety of drinking water for the residents of Shawnigan Lake is under threat because of a plan to dump contaminated incustrial waste within our community's watershee.

Local residents, drawing on expenise provided by respected independent scientific consultants, have repealedly raised concerns about the progressilly extine Ministry of the Environment has assed a draff permit. Residents are concerned about contamination of acuiters and hearby water sources and are unconvinced that the progressills planned containment works will be sufficient.

Ensuring clean, safe dimking water for thousands of residents of the area is an lasue that crosses all party lines. The undersigned are jointly calling on the ministry to not take a permit until the science-based modelling and incoving a gaps are filled and all the community's outstanding concerns have been addressed.

Copplate Talkidle Shen Fall III.

From: S22

Sent: Tuesday, March 26, 2013 12:21 PM

To: ENV Protection Responses West Coast ENV:EX; OfficeofthePremier, Office PREM:EX Subject: Re: FW: ENVIRONMENTAL PROTECTION NOTICE - Notice of a Draft Version of the Permit 105809 for South Island Aggregates/Cobble Hill Holdings Ltd. at 640 Stebbings Road for Review and Comment

I would like to request that ALL engineering and environmental documents and seismic studies that were supplied with regards to acquiring the permit be made available digitally per the freedom of information act to the residents of Shawnigan Lake, with accompanying translation that the general public would understand in regards to water sampling, ground water, seismic studies, potential contamination of surrounding lakes, such a Butte Lake, and Butchart Lake, as well as, the Sooke Reservoir....etc and as per Bruce Fraser's request http://www.fraserforshawnigan.ca/

There are too many indicators that point to a catastropic environmental event if certain "what if" scenarios play out.

As on CKNW out of Vancouver:

"Lake says contaminated soil needs to be dealt as it was with other sites like Expo 86 for example."

So as a resident of Shawnigan Lake, am I supposed to understand that any contamination will be dealt with after the fact....like Expo 86 land???? It cost taxpayers millions of dollars??? http://www.canada.com/story_print.html?id=66efec5e-34f6-43db-8a94-2a7fc3467b4e&sponsor=

As a typical resident a lot of the legal speak in the documents does not make clear sense and I would request that it is written in clear concise layman's terms that the general public can understand.

How about answering questions posed by our local politicians? all 4 were at our meeting last night, and signed to help put a stop to this.. but Terry Lake was absent and it shows that he doesn't care what isn't happening outside his backyard.

I invite Terry Lake and Cristy Clark to join us at the Oceanfront Suites in Cowichan Bay on Wed, Mar 27th to view the documentary "Troubled Water" by Dan Manly AND answer our concerns in person.

Concerned Shawnigan Lake resident.



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Regards,
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West Coast

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Dated at Nanaimo, British Columbia on March 19, 2013.

Ministry of Environment Environmental Protection West Coast Region 2080A Labieux Road Nanaimo BC V9T 6J9 From: Klak, Stephanie PREM:EX Sent: Thursday, April 4, 2013 1:47 PM

To: Nicoll, Sara ENV:EX

Subject: RE: FW: ENVIRONMENTAL PROTECTION NOTICE - Notice of a Draft Version of the Permit 105809 for South Island Aggregates/Cobble Hill Holdings Ltd. at 640 Stebbings Road

for Review and Comment

Thanks very much, Sara. That would be great. I'll mark this file as external on our end.

Stephanie

From: Nicoll, Sara ENV:EX

Sent: Thursday, April 4, 2013 1:25 PM

To: Klak, Stephanie PREM:EX

Subject: RE: FW: ENVIRONMENTAL PROTECTION NOTICE - Notice of a Draft Version of the Permit 105809 for South Island Aggregates/Cobble Hill Holdings Ltd. at 640 Stebbings Road

for Review and Comment

Hi Stephanie:

Based on advice from our DMO, it looks like this one will need to go through the FOI process. I can do a response on behalf of the Premier noting this (we have some standard language referring to FOI) if that works for you.

Sara

Sara Nicoll

Manager, Correspondence Projects
Ministry of Environment

Phone: 250 387-9874

From: Klak, Stephanie PREM:EX Sent: Thursday, April 4, 2013 12:10 PM

To: Nicoll, Sara ENV:EX

Subject: FW: FW: ENVIRONMENTAL PROTECTION NOTICE - Notice of a Draft Version of the Permit 105809 for South Island Aggregates/Cobble Hill Holdings Ltd. at 640 Stebbings Road for Review and Comment

Hi Sara,

I'm not sure if documents relating to SIA's permit application are available to the public and, if they're not, whether see see needs to submit an official FOI request. Just wondering how your Ministry is approaching this incoming.

Stephanie Klak

Premier's Correspondence Branch Stephanie.Klak@gov.bc.ca

----Original Message----

From:

\$22

Sent: Wednesday, March 20, 2013 10:41 PM To: Office of the Premier, Office PREM:EX

Subject: SHAWNIGAN LAKE CONTAMINATED WASTE SITE TEMPORARY PERMIT

I would like the Premier to comment on whether she supports this proposed contaminated waste site.

The people of Shawnigan Lake and the Cowichan Valley would like to know the BC Liberals stance on this.

522

I want to know how it makes sense to put a massive contaminated waste site in a watershed that is also in close proximity to the drinking water of all of Greater Victoria never mind just Shawnigan Lake.

"Shawnigan Lake the new site of the largest contaminated waste site on Vancouver Island." Is it time for me to sell my home and leave? That's what I want to know, If the government's intention is that I should live next to a contaminated waste site.

If your government is foolish enough to support this I will do everything in my power to ensure the BC Liberal Party is not in power very soon. I find this absolutely mind boggling that I even have to ask this question.

I want a simple answer Yes the BC Liberal Government Supports this temporary permit and the future contaminated waste site

or No the BC Liberal Party does not support this proposed contaminated waste site in a Shawnigan Lake.

Please chose one

I can't even fathom how anyone would think this is OK. I can't believe this can happen in a Democracy. This is insane.

(Yes) for supporting this contaminated waste site.

(No) for not supporting this contaminated waste site.

Thank You

822

----Original Message----

From: OfficeofthePremier, Office PREM:EX

Sent: Tuesday, April 9, 2013 9:25 AM

To: \$22

Cc: Minister, ENV ENV:EX

Subject: RE: SHAWNIGAN LAKE CONTAMINATED WASTE SITE TEMPORARY

PERMIT

Thank you for your email regarding South Island Aggregates' application to discharge waste and relocate contaminated soils in the Shawnigan Lake region.

It would not be appropriate for the Premier to intervene when a proposal like this is under review by the Environmental Protection Division. However, the Ministry is inviting the public to comment on a draft permit. If you have not done so already, we would encourage you to share your feedback with the Ministry's Environmental Protection Division: http://www.env.gov.bc.ca/epd/regions/vanc_island/env-mgt/sia_permit.htm.

We understand the concerns that you and others have raised as well as the importance of the forthcoming decision by Ministry staff. Please be assured that all feedback received will be carefully considered and factored into related deliberations.

Again, thank you for letting us know that this is a priority for you.

pc: Honourable Terry Lake

From: S22
Sent: Wednesday, March 20, 2013 12:55 PM
To: OfficeofthePremier, Office PREM:EX
Subject: An Urgent Matter - Our Community needs your help
Importance: High

Dear Christy,

I am a resident and see from Shawnigan Lake on Vancouver Island and I want to start off with an apology. Yesterday, after a frustrating time of trying to reach local politicians, the environment minister and bureaucrats about a matter that is vitally important to our family and neighbours,

The issue at hand is a rock quarry site near Shawnigan Lake where the owners have applied to take hazardous material and fill the hole. Sounds like a good business move – truck out gravel and instead of dead-heading the trucks back, bring them full of fill material. The problem is that this site is in the headwaters of the Shawnigan Lake Watershed, above an aquifer and next to a creek that feeds the lake. You may not be aware but Shawnigan residents, some 7000 people, get their drinking water directly out of the lake.

The owners of the quarry have hired a consultant to explain their processes in handling the material and show that they can keep the material out of our water supply. The Residents Association have hired their own consultant to show that the plan is not foolproof. The Environment Ministry only knows that it received an application and they are looking to see if the facility meets guidelines. It does — and they have issued a draft permit outlining the safeguards that the owners must follow. As of yesterday, the residents have 14 days to comment on the plan — not whether the plan is implemented, only how the facility will be run. This appears to be a done deal.

From the Draft Permit:

The types of soil that can be bio-remediated at the treatment facility are soils contaminated with hydrocarbons, specifically soils contaminated with Benzene, toluene, ethylbenzene, xylenes (BTEX), styrene, Methyl tertiary butyl ether (MTBE), Volatile petroleum hydrocarbons (VPHs), Light and heavy extractable petroleum hydrocarbons (LEPH/HEPH), Polycyclic aromatic hydrocarbons (PAHs), Chlorinated Hydrocarbons, Phenolic Substances, chloride, sodium and Glycols as defined in Schedules 4 and 5 of the CSR.

Local residents and politicians of all stripes are lined up against this plan and have been very vocal about it. Your own candidate in this riding, Steve Housser, is the only one that has come

out and said that he would work to revoke any permits issued if elected. Smart guy, because no one will be elected here that supports the plan to poison its residents.

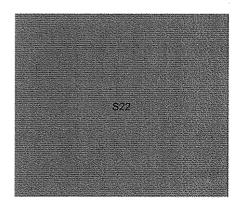
Here are the challenges – the environment ministry just follows its process, the residents here are in unincorporated territory and the Province is in charge of whether these things take place here, from use of our facilities, natural resources and how much tax is charged. The residents are just going along for the ride. Our Regional District is powerless, we are represented by an NDP member of the Legislature, and the province is foolishly relying on the Environment Ministry to advise them.

The residents here are mobilizing — and prior to the election there will be major protests and attempts to embarrass you and your government. After all it is just common sense that you don't put a hazardous waste site next to a drinking water source. The reports and science are useless — both sides will argue they are right, but the residents here face the consequences, should there be any. None of us really knows what effect this might have in 20 years or even 1000 years, but if the worst were to happen it would destroy our drinking water source. Nothing is worth that risk.

Here's a polite and respectful suggestion to the Premier of the province and perhaps the only person that could order this stopped; Get out ahead of the protests and ensure that no hazardous material will be allowed in our watershed. Make a statement on World Water Day (March 22nd) that you care about the 7000 residents of Shawnigan Lake. This is a particularly strong NDP area and if you were ever going to carry the riding, there is no better way than to guarantee the safety of our water supply – something the sitting MLA cannot currently do.

I appreciate your time in reading this and I hope to hear from you on this issue shortly.

Kindest regards,



From: OfficeofthePremier, Office PREM:EX

Sent: Tuesday, April 9, 2013 9:01 AM

To: 522

Cc: Minister, ENV ENV:EX

Subject: RE: An Urgent Matter - Our Community needs your help

S22

We wanted to take this opportunity to thank you for your honesty and to acknowledge your concerns regarding South Island Aggregates' (SIA) proposal. Please accept our apology for the delay in responding.

We have noted your objection to the proposal as well as your comments on the permit review process itself. As you have indicated, the Ministry is currently inviting the public to comment on a draft permit for SIA; if you have not done so already, we would encourage you to share your concerns with the Ministry's Environmental Protection Division:

http://www.env.gov.bc.ca/epd/regions/vanc_island/env-mgt/sia_permit.htm

In the meantime, we will be sure to share a copy of your email with the Honourable Terry Lake, Minister of Environment, so that he and his staff have an opportunity to review your comments on the permit review process and include that feedback in discussions moving forward.

We have received a great deal of public input on this issue and we certainly understand the importance of the forthcoming decision by Ministry staff.

Thank you again for writing – we appreciate receiving your feedback.

pc: Honourable Terry Lake

----Original Message----

From: fraser [mailto:fraser@islandnet.com] Sent: Sunday, March 24, 2013 11:46 AM To: OfficeofthePremier, Office PREM:EX

Subject: SIA Permit

Dear Madame Premier, the good people of Shawnigan need your help in preventing a miscarriage of environmental regulation. It appears that a decision is about to be made that is objected to by the entire population of a community, 7000 of whom stand to see their water supply placed at risk and their property values debased. There are too many serious questions about this contaminated soil application, both in the details of the intended permit and in the legislative system that prevents your Environment Minister from intervening in the public interest. That is why I am calling for a proper Commission of Inquiry to ensure that an extremely damaging situation does not slip into an approval that is so widely seen to be inappropriate. I believe that we now need your intervention to ensure that the right thing is done and seen to be done.

Sincerely,
Dr. Bruce Fraser
Director, Area B, Shawnigan
Cowichan Valley Regional District

I call for a Commission of Inquiry to Answer Serious Public Questions about the SIA Proposal and the MOE Permit Process

Consider what is about to be permitted for processing and dumping in the proposed SIA contaminated soil operation at their Stebbings Road Quarry in The Shawnigan Watershed.

The types of soil that can be bio-remediated at the treatment facility are soils contaminated with hydrocarbons, specifically soils contaminated with Benzene, toluene, ethylbenzene, xylenes (BTEX), styrene, Methyl tertiary butyl ether (MTBE), Volatile petroleum hydrocarbons (VPHs), Light and heavy extractable petroleum hydrocarbons (LEPH/HEPH), Polycyclic aromatic hydrocarbons (PAHs), Chlorinated Hydrocarbons, Phenolic Substances, chloride, sodium and Glycols as defined in Schedules 4 and 5 of the CSR.

Soils co-contaminated with hydrocarbons as described in this section and metals or other contaminants not suitable for bioremediation meeting industrial land use standards as defined in Schedules 4 and 5 of the CSR may also be accepted for treatment at the biocell.

The types of soil that can be discharged at the landfill facility are soils and associated ash contaminated with Inorganic Substances (including metals), Dioxins, Furans, BTEX, MTBE, VPHs, LEPH/HEPH, PAHs, styrene, Chlorinated Hydrocarbons, Phenolic Substances, chloride, sodium

The types of soil that can be bio-remediated at the treatment facility are soils contaminated with hydrocarbons, specifically soils contaminated with Benzene, toluene, ethylbenzene, xylenes (BTEX), styrene, Methyl tertiary butyl ether (MTBE), Volatile petroleum hydrocarbons (VPHs),

Light and heavy extractable petroleum hydrocarbons (LEPH/HEPH), Polycyclic aromatic hydrocarbons (PAHs), Chlorinated Hydrocarbons, Phenolic Substances, chloride, sodium and Glycols as defined in Schedules 4 and 5 of the CSR.

Soils co-contaminated with hydrocarbons as described in this section and metals or other contaminants not suitable for bioremediation meeting industrial land use standards as defined in Schedules 4 and 5 of the CSR may also be accepted for treatment at the biocell.

There shall be no objectionable hydrocarbon odour evident outside the property boundaries. The Permitee shall, at a minimum, implement contingency measures if the ambient air quality sampling results exceed the air quality standards defined under Subsection 3.5. The contingency measures are defined in the EPM as defined in Subsection 2.13 and include, but are not limited to, reduced soil turning times and the covering of soil piles. Should hydrocarbon odour become objectionable, the Director may require additional control measures.

The Permittee shall collect monthly ambient air samples during the active season (i.e. between April and November, inclusive) at the down-wind property line using a Summa® Canister. Ambient air samples shall also be collected using a Summa® Canister if and when soils with measurable volatile contaminant concentrations exceeding the established thresholds are being managed or treated at the soil treatment facility at the location and as documented in the Environmental Procedures Manual.

How did SIA's original proposal to sequester seemingly innocuous sounding industrial and commercial grade contaminated soil in an supposedly impervious rock outcrop suddenly appear as a remedial facility that will deal with a long list of noxious chemicals and require major safeguard requirements to contain risks for both the watershed and the airshed?

If the risks to the Shawnigan Watershed are considered to be so minimal by the proponent and the Ministry of Environment, why is it necessary to provide an extensive list of detailed requirements for management of the facility's potential impact on water and air and layers of restrictions based on the anticipated potential for engineering system failure, accidents, climate events, delivery of unpermitted materials, change of ownership and so on?

On what basis is the Ministry of Environment convinced of the soundness of the engineering proposal, now provided with a draft permit, that fifty years of operation and subsequent time beyond pit closure will remain sound in perpetuity?

Does the draft permit provided by the Ministry of Environment provide an ironclad and sufficient requirement for security that could actually remediate pollution of the Shawnigan aquifer in case of contamination, either during the life of the operation or in the long time after the proponent is gone beyond the 25 years specified in the permit?

What criteria were actually employed by the MOE bureaucrats to determine that the Stebbings Road Quarry, located in the headwaters of a major community watershed, is an acceptable location for a contaminated soils treatment and dump facility?

Would the Stebbings Road location for such a facility be an acceptable option if there were actually a search for a suitable location instead of a reaction to a commercially attractive proposal from a self-interested party for a quarry originally only licensed for the impacts of rock removal?

Are the rules for proposal assessment by the staff assigned as a "statutory decision maker" under the Environmental Management Act only capable of providing management requirements and not capable of giving attention to the ultimate suitability of the site?

With the continuing shrinkage of provincial management capacity within the Ministry of Environment and in the light of the fact that for at least a dozen years they have been incapable of dealing with a host of unlicensed dumping in the Shawnigan Watershed, how can there be any public confidence in the Ministry's ability to manage the monitoring, reporting, remediation and enforcement requirements in the draft permit?

When the SIA dump site has been filled and the company dissolved or in the interim handed to new owners or the subject of bankruptcy, who other than local government will be responsible for the extreme costs of remediation to meet the likely more stringent future requirements for management of public water supplies?

Have the results of public "consultation" been a real factor in decision-making or have they just been used to justify a decision track and amplify permit conditions while the decision on the site location is largely a foregone conclusion?

What did the SIA engineers actually say about the significant technical challenges raised by the independent Lowen Report and the concerns of the Provincial Groundwater Protection Officer, responses that have not yet been made public?

What consideration has been given to the risks associated with widely predicted seismic activity anticipated for our region?

What consideration has been given to the increasing likelihood of extreme winter weather events in the Shawnigan Watershed when most agencies are basing their long term planning on a 200 year event instead of the 10 year event referenced in the permit?

In the face of the disagreement with permitting a contaminated soil facility in the headwaters of Shawnigan Lake from a seven thousand strong community, dependent on its watershed for domestic water supply, how has the response capacity of the democratic leadership of the province been completely trumped by delegating final decision making authority to mid-level bureaucrats?

With the increasingly stringent requirements for very costly water quality management imposed by the provincial government health and watershed regulatory authorities on local government water purveyors, why would that same level of government be actively permitting a significant pollution risk on that same local government? These questions are too serious to be greeted by silence from the provincial government. I believe that it is necessary for the provincial government to establish a Commission of Inquiry, under the Provincial Inquiry Act to provide independent and properly qualified answers to the Shawnigan residents and to the wider public in communities throughout the province for whom this also relevant.

The opportunity that is now being held out for 2 weeks of public comment during Spring Break, with the proviso that comment will only be entertained on the technical details of the permit conditions that are difficult for the lay public to understand, is wholly inadequate for the weight of decisions being made. Is it not time to call a halt to this degree of haste and take the time to deal with the serious concerns of the Shawnigan Community?

In this context, I request that the provincial government move immediately to convene a Commission of Inquiry, with terms of reference acceptable to the Regional District Board, and to hold the SIA permit in abeyance until the conclusions of the Inquiry Commission are published and fully discussed with the affected Shawnigan community.

Dr. Bruce Fraser Director, Area B, Shawnigan Cowichan Valley Regional District ----Original Message----

From: Nicoll, Sara ENV:EX

Sent: Tuesday, March 26, 2013 9:56 AM

To: Klak, Stephanie PREM:EX

Subject: RE: SIA Permit

Hi Stephanie:

Yes, we have an open file for Bruce Fraser on this topic - feel free to refer to us for response. He may only be happy if you address the question of the premier getting involved to change the process around how MOE considers permits. If you need more info on that, I can check in with staff.

Sara

----Original Message----

From: Klak, Stephanie PREM:EX

Sent: Monday, March 25, 2013 3:22 PM

To: Nicoll, Sara ENV:EX Subject: FW: SIA Permit

Hi Sara,

I'm not sure if Dr. Fraser has been in touch with Minister Lake directly. He has some specific questions and I'm wondering if we may refer his email over to MOE for follow up as appropriate?

Thanks for taking a look when you have a moment.

Stephanie Klak
Premier's Correspondence Branch
Stephanie, Klak@gov.bc.ca

From: OfficeofthePremier, Office PREM:EX

Sent: Friday, April 5, 2013 3:52 PM

To: 'fraser'

Cc: Minister, ENV ENV:EX Subject: RE: SIA Permit

Dr. Fraser,

Thank you for your email regarding South Island Aggregates' (SIA) permit application to discharge waste and relocate contaminated soils in the Shawnigan Lake region. We understand the importance of this decision and have noted your objection to the proposal as well as your specific feedback on the permit review process.

As we are sure you can appreciate, it would not be appropriate for the Premier to intervene when a proposal is under review by the Environmental Protection Division. However, as you have noted, the Ministry is currently soliciting public input on a draft permit. All feedback received will be carefully considered.

In your email, we see that you have raised a number of specific questions pertaining to the proposal. On your behalf, we have shared your correspondence with the Ministry of Environment and we have asked that the Minister or his designate follow up with you at the earliest opportunity. Staff at the Ministry are in the position to speak to policy matters and procedures in greater detail and we hope that the forthcoming response will be helpful in explaining how government is reviewing SIA's proposal.

We also want to assure you that your comments on the permit review process will be reflected on and included in our discussions moving forward. Again, we appreciate receiving your feedback. Thank you for writing.

pc: Honourable Terry Lake

From: Shauna Benson [mailto:southcowichanchamber@shaw.ca]

Sent: Friday, March 22, 2013 10:15 AM To: OfficeofthePremier, Office PREM:EX

Subject: Shawnigan Lake Watershed SIA dumping needs to stop and alternate option available

Honourable Premier

There is a huge issue withe the permit granted to SIA for the dumping of contaminated soil in South Cowichan Watershed.

We currently have two private sector business cleaning up after bad decisions made in past years! On their own dime. Businesses like SIA should have to clean their soil at source...or bring it to a facility that does this.

Bringing in contaminated soil into a watershed area goes against the Health Plan, Environmental Plan...

It also will effect Businesses and Tourism.

Minister Lakes response is nothing.

We need you to step in. This is coming from Community, Business, local government, MLA and New Candidates...all parties.

I look forward to hearing from you today.

I am in Vancouver today and over weekend.

Shauna Benson
Executive Director
South Cowichan Chamber of Commerce



Response from Minister Terry Lake below...

> Minister Lake says:

> "The Ministry of Environment has a legal obligation to consider the

> application from South Island Aggregates to treat and discharge

> contaminated soil. Ministry staff are the statutory evidence-based

> decision-makers and as such, the decision is kept at arm's length from

> the political process.

>

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> Further to this, the ministry staff engaged in the authorization
> process are professionals with many years experience in assessing
> these types of applications. As well, reports and assessments prepared
> in support of the application must be prepared by qualified
> professionals with sufficient expertise in the areas under consideration.
>
> The ministry recognizes the public's concern around the relocation of
> contaminated soil. This is why a consultation was initiated in May
> 2012 and later extended to October 2012, with close to 150 emails and
> letters received. The ministry has made sure these concerns were addressed by SIA.
>
> With the posting of the draft permit, the ministry initiated an
> additional 14-day consultation period focusing on comments and
> questions specific to the draft permit conditions.
>
> My personal commitment as minister of the environment is to ensure
> rigorous monitoring and compliance is in place to protect the
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> environment and I expect that to be the case in this decision."

> >

From: OfficeofthePremier, Office PREM:EX

Sent: Tuesday, April 9, 2013 8:58 AM

To: 'Shauna Benson'

Cc: Minister, ENV ENV:EX

Subject: RE: Shawnigan Lake Watershed SIA dumping needs to stop and alternate option

available

Ms. Benson,

Thank you for your email and for bringing your concerns regarding South Island Aggregates' (SIA) proposal to our attention. Please accept our apologies for the delay in responding.

As we are sure you can appreciate, it would not be appropriate for the Premier to intervene when a proposal like this is under review by the Environmental Protection Division.

In the meantime, however, the Ministry is asking for public input on a draft. We understand the concerns that you and others have raised as well as the importance of the forthcoming decision by Ministry staff. Please be assured that all feedback received will be carefully considered and factored into related deliberations.

Again, we appreciate that you have taken the time to make us aware of your concerns and to let us know that this is a priority for you.

pc: Honourable Terry Lake

From 522

Sent: Sunday, March 31, 2013 2:09 PM To: OfficeofthePremier, Office PREM:EX

Subject: SIA Permit to Haul and Dump 5 million tons of contaminated soil in Shawnigan

Watershed

Importance: High

Dear Premier:

I am a long time Shawnigan Lake resident, The topic of this email involves all three. 522

First, as a Shawnigan resident, it is unacceptable, under any conditions, to allow Victoria to dump their highly contaminated soil in our watershed. This will inevitably lead to the poisoning of our water supply and adversely affect the health of our 7,000 residents. Christy, you need to protect the families of Shawnigan Lake from this completely preventable environmental disaster. Simply direct Minister Lake to cancel the draft permit. Victoria should clean up its own mess.

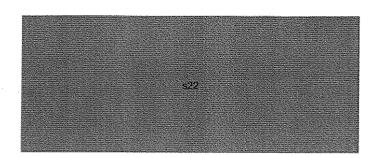
S22 I believe in the Liberal government and the free enterprise approach. This permit to haul and dump toxins, however, will not create any jobs. Instead it will kill a number of businesses in and around Shawnigan Lake, depress real estate values and lead to further economic hardships for this struggling community.

This is also bad public policy. Allowing contaminated fill into watersheds for the purpose of backfilling mines has the potential (local scientists say "certainty") to cause irreparable and irreversible environmental damage. Who benefits? Two greedy non-resident businessmen over the wishes of 7,000 residents. Allowing this permit will leave a black eye on the Liberal environmental record for decades to come.

All four local candidates are opposing this permit, as is local government, citizen's group and First Nations. Liberal candidate Steve Houser has done a fantastic job rallying groups around this issue, showing real leadership and demonstrating to this traditional NDP constituency what real leadership looks like. With your decision to stop this draft permit, I believe the Liberal candidate could prevail in this riding, bolstering party support throughout the Island and province. If this election is to be win, we need to win Island seats and we need to remind the electorate about family values, leadership and about doing what is right, not always what is expedient.

Christy, this community has come together and united in opposition over this issue. Your leadership, at this critical time, could be the issue that sways voters toward substance versus rhetoric. Please kill this permit and protect our families.

Sincerely



From: OfficeofthePremier, Office PREM:EX

Sent: Tuesday, April 9, 2013 9:10 AM

To s22
Cc: Minister, ENV ENV:EX

Subject: RE: SIA Permit to Haul and Dump 5 million tons of contaminated soil in Shawnigan

Watershed

\$22

Thank you for your email and for bringing your concerns regarding South Island Aggregates' (SIA) proposal to our attention.

As we are sure you can appreciate, it would not be appropriate for the Premier to intervene when a proposal like this is under review by the Environmental Protection Division. In the meantime, the Ministry is inviting the public to comment on a draft permit to the proponent: http://www.env.gov.bc.ca/epd/regions/vanc_island/env-mgt/sia_permit.htm.

We understand the concerns that you and others have raised as well as the importance of the forthcoming decision by Ministry staff. Again, we do appreciate that you have taken the time to make us aware of your concerns and impressions on this issue. Thank you for writing.

pc: Honourable Terry Lake

From: Christy Clark.MLA [mailto:Christy.Clark.MLA@leg.bc.ca]

Sent: Tuesday, April 2, 2013 9:24 AM To: OfficeofthePremier, Office PREM:EX

Subject: FW: No toxic waste in Shawnigan drinking water

From:

Sent: March-31-13 10:37 PM To: Christy Clark, MLA

Subject: No toxic waste in Shawnigan drinking water

Dear Christy Clark,

I am writing to express my grave concern and utter disgust at your actions regarding the draft permit issued to South Island Aggregates which would allow them to dump 100's of thousands of tons of toxic waste contaminated with chemicals and laced with dioxin in the Shawnigan Watershed. That is appalling behavior on your part. I don't care if the land that this toxic waste is to be dumped on is technically owned by South Island Aggregates, the watershed and rights to safe drinking water is not owned by them and they have absolutely no right to take that away from Shawnigan residents. I live in Victoria and so maybe won't be affected by this as immediately as others closer to the source, but the reality (which you do not seem to get) is that we will all be affected in the end. There is no way to stop pollution from crossing borders between class and ethnicity once it reaches critical points. I would also like to ask you if you would have issued this permit if your parents, children, or grandchildren lived in the Shawnigan lake area? My guess is that you would not. Are you not ashamed?

I have been told that you are the only one who can put a stop to this and I sincerely hope to you do immediately, for all of us, yourself and your family included. It is in all of our best interests to reduce pollution in any way that we can, regardless of costs to industry. Dirty industry must clean up their mess, not simply push it onto marginalized or rural communities.

The dumping of toxic waste will go on for 50 years, and yet you are giving citizens a mere 3 weeks to respond to this? It seems rather convenient that you are trying to push this through on the down low before the election campaigns really get going. Once again, that is shameful and undemocratic behavior in my mind.

Please, act for the future, not the interests of big industry. Stop the dumping of toxic chemicals in the Shawnigan Watershed.

Sincerely,

827

From: OfficeofthePremier, Office PREM:EX Sent: Tuesday, April 9, 2013 10:32 AM

To: \$22

Cc: Minister, ENV ENV:EX

Subject: RE: No toxic waste in Shawnigan drinking water

Thank you for your email regarding South Island Aggregates' application to discharge waste and relocate contaminated soils in the Shawnigan Lake region.

It would not be appropriate for the Premier to intervene when a proposal like this is under review by the Environmental Protection Division. However, the Ministry of Environment is inviting the public to comment on a draft permit. If you have not done so already, we would encourage you to share your feedback with the Ministry's Environmental Protection Division: http://www.env.gov.bc.ca/epd/regions/vanc_island/env-mgt/sia_permit.htm.

We understand the concerns that you and others have raised as well as the importance of the forthcoming decision by Ministry staff. Please be assured that all feedback received will be carefully considered and factored into related deliberations.

Again, thank you for letting us know that this is a priority for you.

pc: Honourable Terry Lake

From:

522

Sent: Tuesday, April 9, 2013 11:13 PM To: OfficeofthePremier, Office PREM:EX

Subject: Objection to SIA permit for contaminated soil in Shawnigan Lake watershed



09 April 2013

Dear Ms. Clark.

I am writing to you in regards to the draft permit granted to South Island Aggregates that will allow for the disposal of contaminated soil in my community. Based on the maps in the proposal, I am under the impression that this site is next to a stream that feeds directly into Shawnigan Lake. I am deeply concerned that the contaminated soil, which will likely contain many substances known to be carcinogenic, might leak into our community's watershed.

I live in a property that does not have a well.

S22

are dependent upon the water from Shawnigan Lake. If the cell that is planned to hold the refuse leaks, or if excessive precipitation results in run off, I am deeply concerned that our water source will be contaminated.

While there are numerous directives for what substances the site may contain, how much soil is to be deposited and how often the site will be monitored, I am still deeply troubled that the site is in a watershed. I am pretty certain that if a company proposed a similar venture within the Sooke watershed, a draft permit would never have been granted.

While the Ministry of Environment and SIA have weighed the risks to our watershed and deemed them relatively null, I have one last question. If there is a leak, and the contaminated soil or its contents finds itself in my water what will SIA or the Ministry of Environment do to compensate me? I'm pretty sure that benzenes aren't potable. We will have to move. But we won't be able to sell out property because it will be worthless. And many thousands in our community will be in a similar position.

While I understand that there is a need for treating and relocating contaminated soil, I don't think that a community's watershed is an appropriate place for it.

Please consider this objection.

Sincerely,

200

From: OfficeofthePremier, Office PREM:EX

Sent: Monday, April 15, 2013 3:07 PM

To: \$22

Cc: Minister, ENV ENV:EX

Subject: RE: Objection to SIA permit for contaminated soil in Shawnigan Lake watershed

Thank you for your email regarding South Island Aggregates' application to discharge waste and relocate contaminated soils in the Shawnigan Lake region.

Last month, as you may know, the Ministry of Environment initiated a 21-day public comment period on a draft permit to the proponent. Officials at the Ministry are currently reviewing the feedback received in great detail before making their decision on whether to issue the permit as is, issue a modified permit with additional conditions, or deny the permit application.

We understand that this is an important issue for you and we appreciate that you have taken the time to bring your concerns to our attention. On your behalf, we have shared your comments with the Honourable Terry Lake, Minister of Environment, for his review as well. Thank you again for writing.

pc: Honourable Terry Lake

From:

822

Sent: Wednesday, April 10, 2013 1:06 PM To: OfficeofthePremier, Office PREM:EX

Subject: Shawnigan watershed

I have followed the news and listened with great interest on the debate of processing contaminated soil in the Shawnigan watershed. One minister was defending the decision very adamantly and I can't help but think that if this is such a safe thing to do, then do it in the Victoria watershed.

I would like to go on record that I oppose any ideology that could potentially put our watershed in great risk. I believe that our community deserves the respect of the government when making decisions that could potentially affect our living conditions.

Sincerely,

\$22

From: OfficeofthePremier, Office PREM:EX Sent: Monday, April 15, 2013 3:08 PM

To: \$22

Cc: Minister, ENV ENV:EX

Subject: RE: Shawnigan watershed

Thank you for your email regarding South Island Aggregates' application to discharge waste and relocate contaminated soils in the Shawnigan Lake region.

Last month, as you may know, the Ministry of Environment initiated a 21-day public comment period on a draft permit to the proponent. Officials at the Ministry are currently reviewing the feedback received in great detail before making their decision on whether to issue the permit as is, issue a modified permit with additional conditions, or deny the permit application.

We understand that this is an important issue for you and we appreciate that you have taken the time to bring your concerns to our attention. On your behalf, we have shared your comments with the Honourable Terry Lake, Minister of Environment, for his review as well. Thank you again for writing.

pc: Honourable Terry Lake

From: Jane Shields [mailto:janes@livingwater.org.uk]

Sent: Thursday, April 11, 2013 11:39 AM To: OfficeofthePremier, Office PREM:EX

Subject: Response to Contaminated Treatment of Waste near Shawnigan Lake (1 of 2)

Importance: High

Dear Premier Christy Clarke,

I am writing to you on the request of friends who live close to Shawnigan Lake to offer an alternative approach to the contaminated soils landfill proposal, that can provide a sustainable, cost effective solution to the management and on site treatment of the contaminated soils and materials arising in the region, thus avoiding the potential risk of contamination of the water supply of the 7,000 residents living in the Shawnigan Lake catchment.

Living Water Ecosystems Ltd. has been designing and applying an ecological approach to the management and treatment of contaminated water and a wide range of effluent and wastes for over 24 years. Please refer to the attached letter, our company information and client list along with results and photographs from a project where we treated the contaminated surface water run-off containing hydrocarbons and oil arising from a 25 hectare oil terminal and bioremediated the concentrated oily wastes and sludges arising from a BP Oil Terminal in England which have similar properties to the contaminated wastes proposed to be landfilled.

The second email contains a selection of photographs of ecological treatment systems. Due to the large file size of the Powerpoint presentation containing case studies and other image files, I will post you a CD containing all the documents.

Please contact me should you wish to discuss any of the points or ideas raised in more detail.

I would welcome your comments.

Thank you for your time and attention.

Yours sincerely,

Jane Shields

Living Water is the 2009 winner of the Green Business Fife Award for Water. http://www.greenbusinessfife.co.uk/awards/

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Direct email: janes@livingwater.org.uk Web: www.livingwater.org.uk

By email & post

Attn: Premier Christy Clarke

11 April 2013

The Honourable Christy Clark Premier of British Columbia Box 9041 Station PROV GOVT Victoria, BC Canada V8W 9E1

Dear Premier Christy Clarke,

Re: South Island Aggregates (SIA) Contaminated Soils Landfill – Stebbings Road near Shawnigan Lake, B.C.

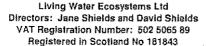
I am writing to you because I have been contacted by friends who are residents that live close to Shawnigan Lake and are concerned by the potential impact of contamination of Shawnigan Lake, the drinking water supply of the 7,000 strong Community; due to the permit you issued to allow contaminated soil and other materials to be landfilled in the nearby quarry.

Living Water Ecosystems Ltd. has been in business for 24 years and we specialise in the natural and ecological treatment of contaminated effluent, wastes and water arising from a range of industries. Our services include the up front management and minimisation of water and waste to reduce the problem prior to designing a treatment system. Please find enclosed a CD containing information about our work, case studies, a Client list, photographs of a selection of our treatment systems and results from the bioremediation of oily wastes and sludges arising from the BP oil terminal which have similar properties to those contaminated wastes proposed to be landfilled.

I have read the technical report prepared on behalf of South Island Aggregates (SIA) to gain an understanding of their proposals. Although thorough there are fundamental points that should be addressed and considered prior to issuing a permit to allow contaminated wastes to be brought to a site adjacent to an important water supply catchment.











Points that need further assessment and consideration are listed below.

- The existing contaminated surface water and silts arising from the current quarrying operations should be monitored to ensure that the existing operations are not causing contamination to the wider catchment. If the current operations are not sufficient to settle and treat the water and wastes arising, then it would certainly not be able to provide sufficient treatment for contaminated wastes arising in much larger quantities. This information is also essential to provide realistic, baseline run-off calculations and determine whether or not the company can manage the future loading volumes and rates when it expands its operations.
- It is always better to treat water and waste as close to source as possible. This makes sense on all levels (i.e. sustainability, environmental, financial, economically, carbon footprint etc.). There are sound, economically viable natural techniques that can enable the on site treatment and recycling of previously contaminated water and wastes.
- Contrary to best practice, described above, there is no viable justification for transporting large quantities of contaminated materials long distances to the SIA proposed landfill.
- The technical report does not provide sufficient evidence that the management techniques and treatment processes put forward will be sufficient to manage and treat the contaminated soils and water run-off to the quality required to prevent pollution of the full range of water resources. We would expect to have much more detailed technical proposals that can be considered.
- Although bioremediation is put forward as one option for treatment, in our experience the
 described process would not be sufficient to fully treat the range of contaminants set out in their
 report.
- Only contaminated soils are mentioned in the report and their constituents are hydrocarbon based, but in practice there is likely to be a much wider range of contaminated soils and other materials being brought to the landfill that have differing chemical constituents. These other materials may need a totally different treatment system which would not be in place.
- In our experience working with oil terminals the levels of hydrocarbons, BTEX, PAHs etc, are far higher than the levels set out in their technical report. Much more detailed analyses from the contaminated materials / soils expected to be processed needs to be carried out in advance of a Permit being issued.
- The Precautionary Principle should be applied to the proposed landfill as the consequences of permanently polluting drinking water aquifers; reservoirs etc. for a population of 7,000 residents are too great a risk.
- There are much safer, viable alternatives which will also be less costly to implement than the landfill being proposed and we feel that alternative options should be considered before a permit is issued.

The above points are only a fraction of considerations and questions requiring more detailed studies and responses and we feel that the permit for processing contaminated soils and materials should not be issued until they are addressed.

We think it is essential for you to allow those for and against the project to have sufficient time to carry out further studies necessary to address the points raised and others arising so that the technical case for and against can be fairly evaluated.

We know that there are viable alternative options for the management, treatment and recycling of contaminated water and wastes for the region as a whole and we think that a regional strategy should be set out and agreed first prior to making decisions on a piecemeal basis.

We can help you to prepare such a regional strategy if you are interested.

Please contact me should you wish to discuss our ideas in more detail or to embark upon a integrated regional strategy.

Thank you for your time and consideration.

Yours sincerely,

Jane Shields Director

for Living Water Ecosystems Ltd.

Living Water

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Living Water Capabilities

Living Water, founded in 1989 by Jane Shields and David Shields, is a pioneering and innovative company applying ecological principles to solve a range of water and waste problems associated with households, communities, developments, landfill, agriculture, vineyards and industry.

Our approach begins with water and waste minimisation, resource management and recycling and our treatment systems recreate pond, wetland, soil and woodland ecologies, selected and designed to meet the unique requirements of each project.

We have developed techniques to treat effluent and wastes with a high organic loading (e.g. distilleries, vineyards, farms, cosmetic industry) and those with a high hydrocarbon content (e.g. oil industry, road gully tankers, contaminated soil and sludges).

The aim of our work is to transform contaminated water and waste into usable resources using a combination of natural processes. Any material that cannot be reused or recycled is incorporated into the food web where it can enhance biodiversity.

Living Water has carried out consultancy, water and waste management work and the design and implementation of a range of ecological systems for a number of clients including British Petroleum plc, AMEC Services plc, The Body Shop International plc, GEHE plc, Tayside Contracts, Electro Furnace Products Ltd., EWOS Ltd., BSW Timber plc, The National Trust (England and Wales), The National Trust for Scotland, NEXFOR, William Grant & Sons and other distilleries, industries, regional and city councils, water authorities, architects, engineers, developers and householders. A complete client list is provided at the end of this document.

Living Water Ecosystems Ltd Directors: Jane Shields and David Shields Registered in Scotland No. 181843 VAT Registration Number: 502 5065 89 Living Water works in a broad range of areas:

- 1. Ecological water and waste treatment
- 2. Bioremediation and phytoremediation of contaminated soils and sludges
- 3. Surface water management and treatment
- 4. Capture and recycling of roof water
- 5. Integrated strategies, watershed and catchment management
- 6. Treatment of vineyard effluent and waste
- 7. Management of surface water and treatment of run-off from vineyards
- 8. Development of new applications of the 'rhizoid regeneration' technique for monitoring pesticides and herbicides in vineyards
- 9. Biodiversity enhancement and functional landscaping

We will now discuss each area in more detail.

1. Ecological water and waste treatment

In designing a system we work with a basic principle that in nature there is no waste because one organism's waste is another's food. Inherent within this are concepts of nutrient balancing, carrying capacity, completing and linking cycles and the food web.

We distinguish between a biological treatment system (using bacteria) which creates a sludge (unconsumed nutrient) and an ecological system which utilises a much wider range of flora and fauna (bacteria, microorganisms, invertebrates, fungi and plants) that consume nutrients and thus minimise sludge production. By providing the correct balance and mixture of flora and fauna it is possible to support creatures higher up the food chain, i.e. fish, birds, amphibians and mammals. The more complex the food web, the greater the efficiency, effectiveness and flexibility of the treatment system.

Each system is a unique design according to the particular characteristics of the pollutant (liquid or solid) and the context in which it is produced or discharged.

Steps include:

- Environmental audit.
- Management of the process to reduce the volume or toxicity of all end products.
- Management of water (process water, roof water, surface water).
- Assessment of the chemical composition and concentration of the effluent or waste product.
- Assessment of volume, flow rates, discharge rates and other relevant information on the timing or dynamics of feeds and waste products.
- Determination of potential resources that can be created using the waste products.
- Site assessment (level survey, climatic factors, available area, location in context with the wider community and landscape).
- Choosing and designing the biological and ecological system(s) required for the treatment and transformation of the effluent and waste into a resource.
- · Appropriate sizing of the treatment system.
- Drawing up of detailed drawings and specifications.
- · Liaison with project team and official bodies.
- · Project management (we can act as the main contractor).
- · Site management.
- Compliance with Health & Safety requirements.
- · Supervision and commissioning of the construction process.
- · Maintenance and aftercare.
- Landscaping and habitat creation.

We offer our clients a complete service from integrated management and design through to implementation and landscaping. An environmental audit and up front management steps are required because this is a necessary part of the design solution.

The implementation of water and waste minimisation measures has given our industrial clients a commercial payback on treatment systems of between one and two years.

Our treatment systems are considered best practice, owing to our integrated approach. They achieve excellent standards and are accepted by the Environment Agencies as one of the best available wastewater treatment industry options. Wherever possible we discharge via land and trees (functional landscaping) instead of to water so that discharge is to an appropriate ecological system.

2. Bioremediation and phytoremediation of contaminated soils and sludges

We use, and are continuing to develop, natural remediation techniques (bioremediation and phytoremediation) and composting processes that improve the quality of materials including:

- Gully sludge (arisings from road gullies including hydrocarbons, oils, chemicals heavy metals, salt, grit, soil).
- · Pipeline piggings (pigwax).
- Tank bottom sludges.
- Contaminated straw and hay from filters.
- · Waste from petrol interceptors, catch pits and settlement tanks.
- Contaminated soil (containing hydrocarbons, jet fuel, acid mine drainage).

To date we have focussed mainly on hydrocarbon rich sludges and soil from the oil industry and from companies maintaining road gullies. We have successfully treated their effluents and contaminated water.

Our objective is to utilise bioremediation and composting techniques to recycle various materials currently specified as special waste into a useful soil product. Special waste can only be disposed of in designated landfill sites and is a very expensive option. In the case of contaminated soils we treat material so it can support native vegetation and a healthy ecology.

In the case of gully sludge, we have been able to transform it into British and European agricultural grade compost supporting earthworms and a range of healthy soil microorganisms. It is then ready for use in the reinstatement of road verges, capping landfills and other landscaping applications. By mixing it with subsoils that were also considered a waste product we have created a high quality topsoil substitute. This company saves approximately £25,000 per year in tipping levies, landfill charges and transport, and also receives an income when the final product is sold.

Most of the remediation carried out for oil companies are for in situ clean-up operations and all materials are transformed and utilised on site for landscaping and increasing biodiversity.

3. Surface water management and treatment

In the UK treatment of surface water arising from new developments is a requirement set by the Environment Agencies in order to prevent contamination of water bodies.

We have developed a range of designs using wetland habitats that can capture, treat, ameliorate, attenuate and store storm events yet are able to provide enough water year round to endure dry periods. It can be safely discharged to a water body or used for irrigation and habitat creation.

Other measures that are also used for the attenuation of surface water include: porous pavement, filter drains and Hydrobrakes™. (The latter reduces discharges to a lower, constant rate.)

In some areas that have sewage works receiving a combined surface and foul water mix, surface water treatment systems can be essential to prevent flooding of the sewers and can be used as part of an integrated strategy for flood prevention.

Living Water has designed systems for use in both treatment and flood prevention. We have also treated contaminated roof and surface water that is subsequently recycled to the factory at a rate of 13 m³ per hour year round.

4. Capture and recycling of roof water

Providing the roof materials are suitable and the building is located in an unpolluted area, roof water is a relatively uncontaminated resource. This water can be captured, filtered and recycled for use in buildings. In Europe the majority of captured roof water is used for flushing toilets, washing and irrigation. Uncontaminated roof water treated with an UV filter or equivalent can be used as drinking water.

As fresh water becomes scarcer the use of roof water for drinking is increasing. We recommend the use of low flush toilets, taps, showers and appliances in order to reduce water requirements so that the captured roof water can meet a greater proportion of demand.

5. Integrated strategies, watershed and catchment management

Our approach focusses on the elimination of pollution problems at source. Each problem requires one or more solutions. For factories, a site strategy may be sufficient as the source of the problem is localised. However, when diffuse pollution, e.g., runoff from farmland, affects a river or lake, it is necessary to identify the sources of pollution in the catchment area. On a larger scale, e.g., when an estuary or sea becomes polluted, it is necessary to assess the entire watershed.

To develop an integrated strategy for a site, catchment or watershed the methodology is similar, consisting of identifying each source of pollution and its solution. Although working at a catchment or watershed level is necessary to improve water quality, conflicting points of view and lack of co-operation often make it difficult in practice.

Most of our work with watershed management has been carried out in developing countries (Costa Rica, Tanzania, Kenya, Uganda [Lake Victoria] and Fiji). Catchment and watershed issues can be more difficult, time consuming and complex especially when politics between several countries are involved. However, when a watershed management plan is implemented correctly success is possible and remediation can therefore be worth the effort over a number of years. An example is described below.

When several coastal communities in Fiji complained of 'dead water' and reduced fish stocks due to the death of coral reefs, Living Water was asked by a Fijian NGO to identify the problems and provide solutions. We implemented a watershed management strategy to deal with a range of problems including run-off from sugar cane farming, animal husbandry, clear cutting of forests, soil erosion, sewage, rubbish, and removal of mangroves, all of which had been found to contribute to coral reef death. The solutions were identified, and pilot treatment system projects completed. Successful treatment includes involvement and education of the community. Local people have been trained and a number of solutions have been developed and implemented.

The area from which rainfall drains to a river or lake.

² The area from which rainfall drains to an estuary or sea.

6. Treatment of wine effluent and waste

In 1995 we were invited by a French environmental consultant to help develop an ecological solution to wine effluent. This was urgently needed because traditional practices and conventional technology were not sufficient to meet European (EU) legislation for water quality. Given our experience with treating the effluent from the whisky industry and having studied the effluent and practices in a number of vineyards we decided to seek European funding to develop a solution for vineyard effluent.

We received an EU grant for our project "Ecological Treatment and Transformation of Effluent from the Drinks Industry into a Resource for Re-use, Irrigation and Land Reclamation". This involved studying whisky and wine production processes in Scotland, Ireland, France, Greece and Portugal for a period of one year to develop the solutions required.

This successful project led to an experimental treatment system being installed in Chateau La Chapelle-Maillard, an organic (biodynamic) vineyard in the Bordeaux region of France. This system consists of a straw filter to remove solid material, three constructed wetlands in series and a planted soakaway. This system has been monitored by Centre Technique Interprofessionnel de la Vigne et du Vin (ITV) located in Epernay, France.

Wine effluent is the result of cleaning the vats and machinery used in the vinification process. While not an obvious pollutant, such effluent contains sufficient sugars, alcohols and tartaric acid to constitute an oxygen sink and hence a danger to the environment if discharged without treatment. There are three distinct processes in the production of wine and each produces its own pollutants.

To indicate the amount of pollution, or *loading*, we will use the concept of chemical oxygen demand, COD (the oxygen required to decompose a given sample through chemical oxidation). The biochemical oxygen demand, BOD₅, (the oxygen required to decompose a sample biologically over 5 days) in vineyard effluent is typically 50% of COD.

Grape Juice Extraction (grape harvest) and Pressing: During this process stalks and leaves are removed and the crushed grapes are stored in vats to begin fermenting. Wine effluent is a result of washing the equipment and consists mainly of skins, yeasts and sugars. Crushed grapes are pressed to extract the juice and solids are sent for distillation. The effluent is a result of washing equipment and consists mainly of products of fermentation. The COD is approximately 9,900 mg/l.

Racking: During racking wine is decanted and the remaining liquor and sediment has a COD of 5,300 mg/l.

Removal of Tartrates: Loading due to crystals of tartaric salts ('soda') that accumulate on the walls of the vats is expressed as BOD₅. A range is expressed below:

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35 kg soda = 42,500 \text{ mg/l BOD}_5; pH = 12.05, 25 kg soda = 84,670 \text{ mg/l BOD}_5, pH = 11.60
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Over three years the experimental wetland treatment system has achieved an average removal of 40 g COD / $\rm m^2$ / day with a peak removal of 130 g COD / $\rm m^2$ / day. The system also consistently raised the pH. A wetland employing recirculation of effluent showed improved efficiency: it was regularly able to remove 80g COD / $\rm m^2$ / day, implying an even higher peak removal.

Our system has provided excellent results for this vineyard. We have continued to improve our understanding of how these systems should be sized to give consistent results for a range of wine effluents and other waste water with high organic loading.

We are presently working in partnership with ITV, building two pilot systems near their laboratory to monitor and study the dynamics of the wetland system during the treatment of wine effluent. We are also investigating the uptake mechanisms and effectiveness of pesticide and herbicide removal by wetland plants. Two vineyards have expressed an interest in having a full-scale experimental treatment system designed by ourselves and monitored by ITV. These experiences will enable us to develop and fine-tune our treatment system and ensure its effectiveness for champagne, white and red wine effluent.

7. Management of surface water and treatment of run-off from vineyards

Frost is another problem highlighted by ITV on our visit to the Champagne region in France, which is at the northern limit of wine growing. During March and April pesticides, herbicides and fertilisers, if required, are sprayed onto the vines. Frosts also occur at this time of year, so water is sprayed onto the vines in order to prevent them from freezing. Subsequently this water, now contaminated with pesticides, herbicides and fertilisers, washes soil into a nearby watercourse. The residual pesticide or herbicide from bulk containers and from washing down of spraying machines, conducted either on the vineyard or in the wine production area, poses an additional problem.

Up front management of surface water on the vineyard itself is difficult because of the intensity of farming and the proximity of the vines.

A Champagne vineyard owner has asked Living Water to install a system to treat this contaminated run-off, which flows into the Seine River. ITV will survey the land, perform run-off calculations for soil and water and estimate concentrations of contaminants. These data will form the basis of our design.

During the pilot projects designed by Living Water treatment of pesticides and herbicides in a wetland system will be studied to provide a framework for the design of the full scale treatment system.

8. Development of new applications of the 'rhizoid regeneration' technique for monitoring pesticides and herbicides in vineyards

Jane Shields developed a 'rhizoid regeneration' technique during post-graduate research at Heriot-Watt University, Edinburgh. The aim of the original research was to develop an effective treatment system for the marine environment using algae. However, there was no effective method for assessment of the contaminants in the water without using marine animals in a LD_{50} test (the concentration of a substance required to kill 50% of the organisms). This is a crude measurement and Jane wanted to find an alternative to animal experimentation.

Methods with multicellular algae used dead material or staining, both ineffective and crude. All the available methods focussed on the concentrations required to kill a certain type of organism. Her thesis became the development of this technique.

Algae form the first link in many food webs, oxygenate the water and are important in the cycling of dissolved organic and inorganic substances. Toxins accumulated by algae may be passed up the whole food web, and if stored rather than metabolised may be concentrated and have effects at higher trophic levels.

For this reason the focus was on the development of a sensitive technique that could detect the first signs of stress in algal populations, which required the algae to remain alive. Another difficulty to overcome was the variability and steepness of physiochemical gradients in estuarine water, the continuous and frequently unpredictable oscillations of salinity and dissolved and particulate matter in the water. It was also necessary for the technique to not be affected by reproduction.

The genus Enteromorpha (Chlorophyta, Ulvales), a green tubular parenchymatous alga, was chosen as it has a wide geographical distribution (both northern and southern hemispheres, well know nutrient requirements, small genetic and phenotypic variation, good taxonomic characterisation of the strains, a high growth rate and ease of handling. The habitat ranges from fresh water to seawater but it is more common in estuarine and coastal habitats.

One of the most precarious stages in the life history of a marine benthic organism is the colonisation of new substrata, for which highly specialised processes of settlement and early growth have developed. In Enteromorpha, a primary rhizoid develops which penetrates a substrate on structures being colonised and other rhizoids soon follow the point of entry. Secondary rhizoid regeneration occurs in nature when the alga is removed from the substrate by either predation or wave action and must reattach.

The technique is based on the secondary rhizoid regeneration process that can be simulated by cutting 5 mm off the basal end of the algal filament which removes the specialised cells that grow rhizoids. This technique has proved to be extremely sensitive as the algal filaments must be in good health in order to regenerate the specialised cells and produce rhizoids. Assessment is based on the number of algal filaments that have regenerated in a given substance or natural waters and the density and number of the rhizoids which is a finer indicator of the degree of stress on the organism.

This technique has been used to assess water quality along an estuary by studying different algal populations located in different parts of an estuary in combination with testing samples along an estuary tested against a base population used as a control, using standard statistical analysis. It has also been shown to be effective in testing particular contaminants at known concentrations, e.g. copper, biocide and salinity.

ITV in France has asked Jane Shields to see if the rhizoid regeneration technique can be developed to monitor pesticides and herbicides. Of the hundreds in use there are specific tests for a few only, so it is virtually impossible to understand the full impact of these contaminants in the soil or water. Analysis is made even more difficult by the fact that most agrochemicals are used in mixtures.

We are starting to work on the development of the rhizoid regeneration test for this purpose. Initial funding is expected from ITV.

9. Biodiversity enhancement and functional landscaping

Biodiversity includes bacteria, invertebrates, microorganisms, insects, fungi, plants, animals that are essential for a healthy ecology and functioning of the major life cycles. Enhancement of biodiversity requires the creation of the infrastructure or habitat on and in which the ecological food web can develop and the inhabitants can survive.

Life does not exist in isolation. Therefore in order to improve biodiversity, it is essential not only to improve the immediate environment but to place the habitat in its wider context. On a larger scale it is preferable to create wildlife corridors that link different habitats, enabling various species to move uninhibited from one area to another, widening their range and thus their viability as a species. Land animals such as deer, badger, fox and hedgehogs all benefit from wildlife corridors linking woodlands, agricultural land, hedgerows and wild areas.

Biodiversity can also be increased through the improvement of the quality of water, soil and air and the decrease of noise and traffic.

All components of a Living Water treatment system are multifunctional. We specialise in creating aquatic, wetland, meadow and woodland habitats with native species that treat as well as increase biodiversity. These environments can also be used to ameliorate, capture, treat and reuse roof and surface water and to provide a park for use by the public. Willows or other trees used in soakaways can also be used for crafts or as biomass for energy production.

We feel it is important to integrate the system into the surroundings and wherever possible, to provide a landscape structure as a solid base upon which the appropriate succession can establish itself.

Landscaping is also used to prevent ingress of surface water, grass, weeds and leaf matter into the treatment system and can be incorporated into developments to create wildlife corridors.

Living Water Client List

A selection of completed designs (constructed or awaiting construction)

Aberdeen City Council

Ecological treatment of gully tanker effluent and waste from the Aberdeen catchment. Comprises salt marsh, wetlands and pond, from which treated water is recycled, and a composting process for

solid waste

Constructed wetlands and willow soakaway for the treatment of A & L Consultants Ltd (Architects)

sewage from a development at Kilronan Castle, Co. Roscommon,

Eire (population equivalent 672)

Ancre Hill Estates Ecological system for the treatment of winery effluent, and waste at

Ancre Hill Winery, Monmouthshire, Wales. Management and recycling of treated surface water for growing biodynamic plants

Ashley Pettit Architects Treatment and management of surface water at Ballacollister,

Isle of Man

Phytoremediation and phytostabilisation of picrite lagoons at the BAE Systems plc

Royal Ordnance site, Bishopton

Balfour Beatty Mott MacDonald Ecological system to treat sewage and contaminated surface water

arising from a highway depot near Stanford, Kent. Design is sized

to accept gully tanker waste if required

J.N. Bentley Ltd / University of Newcastle Planting and monitoring of salt marsh wetlands for remediation of

minewater, Bates Colliery, Blyth, Northumberland

The Barrwood Trust Two composting toilet blocks, serving up to 1500 visitors per day

and 500 campers, at Barrwood Scout Camp, near Stirling

Experimental ecological waste treatment facility for cosmetics The Body Shop International plc

effluent from a factory in Littlehampton

Bordlands Development Company Constructed wetlands and planted willow soakaway for the

treatment of sewage from a population of 30 at Romano Bridge

British Petroleum plc On-site bloremediation of oily sludges and all solid waste products

at Belfast Terminal

British Petroleum plc Management, treatment and recycling of water and waste

at Dalston Terminal, Carlisle

British Petroleum old Management, treatment and recycling of water and waste

at Hamble Terminal, Southampton

British Petroleum plc On-site bioremediation of pipeline piggings, oily sludges and all

solid waste products at Hamble Terminal, Southampton

British Petraleum plc / AMEC Improvements to surface water collection pond to treat oil and

other contaminants using wetland rafts and cells at Cruden Bay,

Aberdeenshire

British Petroleum plc / Bovis Sewage and surface water treatment for upgrading of filling station

at Ingliston, near Edinburgh

Wetland treatment system, willow soakaway and wetland scrape for the treatment of sewage from a 6-bedroom house at Rashiecot

Den, near Dundee

Bushy Park House Constructed wetland and planted willow soakaway for sewage

treatment for a population of 30 at Enniskerry, Ireland

Brodie Paterson

Camusdarach Camping and Caravan Park Constructed wetlands for the treatment of septic tank effluent from a caravan park at Arisaig, Inverness-shire Chateau La Chapelle-Maillard, France Treatment of sewage and vineyard effluent using composting, constructed wetlands and trees at a site near Bordeaux Chivas Brothers / Pernod Ricard Planting of wetland treatment system for distillery effluent at Glenallachie Distillery, Aberlour City Design Architects' Co-operative Constructed wetlands for treatment of effluent at a new house and bed & breakfast in Smailholm. Berwickshire Clackmannanshire Council Constructed wetlands for the treatment and management of surface water at Hawkhill Community Centre, Alioa Craigallan Homes Ecological sewage treatment system for a 10-house development at Over Ascreavie Farm, Kingoldrum, near Kirriemuir The Dogs' Trust Wetlands for treatment of wash-down water from kennels at Shoreham by Sea, Sussex Dorset County Council Ecological treatment of gully waste, sewage and contaminated surface water, plus integrated strategy for a new depot at Staibridge, Dorset **Dorset County Council** Plant selection and planting of an ecological system for treatment of surface water at a school in Gillingham, Dorset **Drift Permaculture Project** Constructed ponds, wetlands and stream section for treatment of captured surface water at the John Marley Centre, Newcastle upon Tyne. Recirculation to be powered by solar energy and wind Durham County Council / Gleeson plc Rainwater management/harvesting system for Brandon Sheltered Housing, Durham, comprising 90 flats East Lothian Council Ecological system for rainwater harvesting and the treatment and management of surface water for a new primary school at Tranent, East Lothian Eau Vivante Eco Systemes Various projects for the treatment of vineyard effluent, sewage and grey water, and habitat creation (France) Electro Furnace Products Ltd Ecological approach to the amelioration of surface water runoff, and treatment for removal of magnesium oxide, at a factory in Hull ERDC Civil Engineering / Wetland planting of pond to enhance treatment and biodiversity Central Regional Council at Castle Business Park, Stirling Errol Brick Company Ecological system for the management and treatment of sewage and surface water for a brickworks at Errol, Perthshire European Commission, EC Exploratory Award Integrated strategies for the alcohol industries, including distilleries, vineyards and breweries, in six European Union countries **EWOS Ltd** Water & waste management and treatment for a fish food factory in West Lothian, including water & heat recovery, surface water management, and process water/sewage treatment using pond, wetlands & willow plantation **EWOS Ltd** Landscaping and habitat creation at a fish food factory in West Lothian, including surrounding fields Falkirk Council Ecological system for the treatment of leachate arising from composting operations and gully tanker waste at Kinnell Kerse Recycling Centre Fife Regional Council / ERDC Civil Engineering Wetland planting of a new swale to enhance treatment of contaminated surface water at the Ferrytoll Park and Ride, North Queensterry

Construction of an ecological system for the treatment of sewage Forbes of Kingennie and the creation of a wildlife reserve for a 120-person development (formerly Kingennie Fishings) at Kingennie, near Dundee Forbes of Kingennie Expansion of existing ecological treatment system at Kingennie Fishings, Kingennie, to include 12 additional houses Forbes of Kingennie Ecological system for the treatment of sewage from Kingennie Court and Lodges development (population equivalent 55) Forestry Commission Scotland Sustainable all-season public toilets at River Affric and Dog Falls. Glen Affric Sustainable all-season public toilets at Schiehallion, Braes of Foss. Forestry Commission Scotland near Tummel Bridge Forestry Commission Scotland Sustainable all-season public toilets at Carie, Loch Rannoch Sustainable all-season public toilets at Sallochy, Loch Lomond Forestry Commission Scotland F.R. Evans of Leeds Ltd / Three integrated wetlands for surface water treatment at the Ferrymuir development, South Queensferry Horsman Woolley Landscape Architects Constructed wetlands for treatment of septic tank effluent Gatliff Hebridean Youth Hostel Trust at Howmore Hostel, South Uist Treatment of leachate from a former landfill at Brant Road, Lincoln GEHE plc / Lloyds Pharmacy Ltd Ecological system for the treatment of sewage from a 66-person The Good House Company development at Fleckhouse Farm, near Kelty, Fife Ecological system for the treatment of sewage from a 12-house GSK Developments Ltd development at West Dron, Perthshire Treatment of sewage using wetlands and willow soakaway for Heartstone Development Ltd South Couston Lowland Crofting development, Armadale Ecological treatment system to improve the existing lagoon Hever Castle sewage system at Hever Castle, Edenbridge, Kent Management of surface water and treatment of sewage for a hotel Hever Hotel and Country Club and country club at Hever, Kent Highland Distilleries Company plc Pilot ecological system for treatment and re-use of pot ale solids at Tamdhu Distillery, near Aberlour Ecological system to treat spent lees & other effluent, and polish lan Macleod Distillers Ltd discharge from a mechanical sewage treatment plant at Glengoyne Distillery Ecological system for the treatment of distillery effluent at Inver House Distillers Knockdhu Distillery, Aberdeenshire Improvements to a sewage treatment system in Nottingham Killarney Homes Landscape design for the Archaeological Interpretation Centre at Kilmartin Trust Kilmartin, Argyllshire Wetland treatment system for hotel, chalets and cafe (population Kings House Hotel equivalent 100) at Balquhidder, Perthshire Ecological system for the treatment and attenuation of Kronospan Ltd contaminated surface water discharging from lagoons at Chirk, Integrated ecological treatment for an organic jam manufacturer, Labaronne-Citaf SA, Vienne, France Confits de Provence, at Aix en Provence, France Ecological system for tertiary treatment of sewage from a holiday Langvale Homes Ltd home development at Whitemoss Golf Club, near Aberuthven

(population equivalent 112)

Gully effluent treatment system and an integrated strategy for foul-Leicester DLO, Leicester County Council and surface water drainage at Billesdon Depot, Billesdon Leicester DLO and Billesdon Parish Council Design input for a pond as part of a park for local residents, and for habital creation & enhancement of biodiversity Leicestershire County Council Ashby Canal Restoration, Donisthorpe Woodland, Wetland treatment of water prior to discharge to canal, and pond & wetlands for landscaping and blodiversity Ladges on Loch Ness Ltd Wetland system and willow soakaway for the treatment and disposal of sewage for 14 holiday units near Loch Ness Modern Space Wetland treatment system and planted willow soakaway for a 50-person development at Old Sauchie, Stirling Moray Council Ecological treatment of road gully tanker effluent and waste from the Moray catchment. System comprises salt marsh, wetlands and pond, from which treated water is recycled, and a composting process for solid waste Muir Construction Ltd Three wetland systems for the treatment of surface water runoff from a business park development at Deer Park, Livingston, West Lothian The National Trust (England and Wales) / Ecological treatment of parlour washings and surface water A.G. Twine, Esq. at a dairy farm in Oxfordshire The National Trust for Scotland Wetland treatment system for sewage at Culloden Battlefield Visitor Centre, Inverness NEXFOR, inverness Containment and treatment of contaminated surface water (formerly CSC Forest Products) and sewage from an oriented-strand board factory near Inverness Noah's Ark Leisure Centre Wetland system, willow soakaway and wetland scrape for the treatment of sewage, and management & treatment of surface water in a facility doubling as a wildlife pond at Noah's Ark Leisure Centre, Perthshire Northumberland Wildlife Trust Wetlands and willow soakaway for sewage effluent from an educational centre in Newcastle upon Tyne Orkney Islands Council Treatment of guily effluent and waste as part of a wider integrated waste management strategy for Orkney Out of Nowhere Sewage treatment at Colney Wood Memorial Park, Norfolk Perth & Kinross Council (for Tayside Contracts) integrated strategy for water & waste management and treatment at the new Welton Road depot, Blairgowrie Perthshire Housing Association Wetland system and willow soakaway for the treatment of sewage from a 150-person development at Ballinluig, near Pitlochry Private Client Ecological system for the treatment of sewage at a property in Aberdour, Fife Private Client Composting lavatory and ecological system for the treatment of grey water at a property near Tarbert, Argyllshire Wetland system and willow soakaway for the treatment of sewage Private Client at a property at Kirtling, Cambridgeshire Private Client Sewage treatment, surface water attenuation and rainwater harvesting systems for a new property near Tarbert, Argyllshire. Private Client Ecological sewage treatment system for two 'Earthship' Lodges near Kinross Robinson's Fruiterers Treatment system for vegetable processing waste and sewage at a factory at Ballapaddag, Isle of Man. Design includes a composting facility and management of process & surface water

Ryelands Lowland Crofting Project Constructed wetlands for treatment of septic tank effluent at Ryelands, West Lothian Treatment of leachate from a composting operation for East Scottish Organic Services **Dumbartonshire Council** Pond and wetlands to polish septic tank effluent for a Scottish Water population of 150 at Achmore, Isle of Lewis Wetlands for the treatment of sewage for a population of 500 at Scottish Water Liniclate, Isle of Benbecula Scottish Water Design of treatment wetlands for a sewage works upgrade at Lochty, Angus Polishing of combined sewage from a conventional Scottish Water small-scale sewage treatment works at Muirdrum, Tayside Upgrade of sewage treatment works treating surface water and raw Scottish Water screened sewage from a population of 760 at Rothienorman, Aberdeenshire Upgrading and replanting of tertiary treatment wetlands at Scottish Water Newbigging of Angus Wastewater Treatment Works, designed to treat the combined sewer outflow (CSO) from a population of 300 Drainage improvements including constructed wetlands for the Scottish Youth Hostel Association treatment of sewage from a population of 200 at Carbisdale Castle, Sutherland Ecological system for the treatment of sewage and factory effluent Simon Howie Butchers Ltd at a butchery near Findony, Perthshire Ecological system for the treatment of gully tanker effluent and South Gloucestershire Council waste at Harnhill Quarry Wetland treatment system with a willow soakaway and wetland Stephen Homes Ltd scrapes for a 37-household development at Clathymore, Perthshire Wetland treatment system and willow soakaway for a population Strathallan Estate of 200 at the Sawmill Lane development, Perthshire Ecological treatment of road gully tanker effluent and waste from **Tayside Contracts** the Dundee catchment. System comprises salt marsh, wetlands and pond, from which treated water is recycled, and a composting process for solid waste Pilot project (one year): composting of road gully sludge for Tayside Contracts Perthshire catchment **Tayside Contracts** Treatment of road gully tanker effluent and waste for Perthshire catchment using composting, salt marsh, wetlands and willow soakaway Tayvalley Homes Ltd Ecological system for the treatment of sewage and the management and treatment of surface water at a 7-house development at East Nether Blelock Farm, near Dunkeld Ecological system for the treatment of sewage from a 6-house Tayvalley Homes Ltd development at Over Bielock, near Dunkeid Wetland system and willow soakaway for the treatment of sewage Tighmor / I & H Brown Ltd from a 200-person development at Cuthill Towers, Perthshire Landscaping and planting of a mound soakaway system at Tighmor / I & H Brown Ltd Laidneskea Steading, near Aberfeldy, Perthshire Tighmor / I & H Brown Ltd. Wetland system and willow soakaway for the treatment of sewage from a 60-person development at Lawhead, East Lothian

Tighmor / I & H Brown Ltd Wetland system and willow soakaway for the treatment of sewage from a 25-person development at Borelick, Perthshire

United Distillers plc Planting of wetland treatment system for distillery effluent at Ben Rinnes Distillery, Aberlour

William Grant and Sons

Treatment of copper-containing effluent from the Glenfiddich and Balvenie Distilleries, Dufftown, using wetlands and a willow soakaway

William Grant and Sons Extension of existing system for treatment of distillery effluent at the Glenfiddich and Balvenie Distilleries, Dufftown

Wiltshire Council

Ecological systems for the management and treatment of gully effluent, lorry washings, contaminated surface water, sewage and rainwater for a new depot at Amesbury. Recycling of treated water

Wiltshire Council

Ecological systems for the management and treatment of guily effluent, lorry washings, contaminated surface water and rainwater for a new depot at Marlborough. Recycling of treated water

Wiltshire Council

Ecological systems for the management and treatment of gully effluent, lorry washings, contaminated surface water, sewage and rainwater for a new depot at Wootton Bassett. Recycling of treated water

A selection of feasibility studies and design work in hand

Airdrie & District Angling Club

Sewage treatment for a disabled angling facility, consisting of constructed wetlands and a planted willow soakaway at

Hillend Loch, North Lanarkshire

A & L Consultants Ltd (Architects)

Ecological sewage treatment systems at various development sites in Eire (population equivalent 8 – 100)

Alan Hunting Associates

Feasibility study: Treatment of sewage from Sedlescombe Golf Club, East Sussex, and recycling of the treated water for irrigation

Allen Gordon and Co

Wetland system and willow soakaway for the treatment of sewage from a holiday lodge development at Rohallion, Dunkeld

Anglesey Aquaculture Ltd

Up-front mitigation measures and ecological system to improve

treatment of effluent from a land-based saline fish-farm at Black Point, Beaumaris, Wales

Anglian Water

Constructed wetland and willow soakaway for treatment of sewage and storm water overflows at Watton Sewage Treatment Works

Angus NHS Trust

Improvements to Brechin Hospital sewage treatment works including wetland system for on-site treatment of sewage studge

Arup

Feasibility study: An ecological approach to treatment of landfill leachate, Blackford Glen / Braid Hills Quarry, Edinburgh

Arup

Feasibility study: An ecological approach to treatment of landfill leachate, Halles Quarry, Edinburgh

The Barton William Planning Partnership

Ecological sewage treatment system for a 50-house development at Greenside, near Lundin Links, Fife

BEAR Scotland Ltd

Design study: ecological system for treatment of gully tanker effluent and waste at various proposed sites

Black Isle Brewing Co Ltd

Ecological system at Munlochy, Ross-shire, for the treatment of brewery effluent and sewage from 10 staff and 8000 tourists annually, plus composting of solids

Black Isle Brewing Co Ltd

Ecological system for a brewery & a 6-house development, and the associated Allangrange development, near Muniochy, Rosshire. Comprises sewage & effluent treatment and composting of

solids for the two sites

Blyth Bridge Action Group

Report on the impact on aquifers and bodies of water of a proposed industrial-scale chicken farm near Blyth Bridge, Peebles-shire

BOA Property Ltd

Ecological system for the management and treatment of sewage and surface water for a development near Bradford on Avon

Borders Brewery

Ecological systems for the treatment of effluent from a new brewery, and sewage treatment for staff and tourists at Lanton Mill, near Jedburgh (population equivalent 87)

BP plc / AMEC

Feasibility study: Treatment of oily surface water at Brechin Oil Pumping Station

BP plc / AMEC

Feasibility study: Treatment of piggings and waxy oil at Cruden Bay Pumping Station

BP Exploration Operating Company Ltd

Preparation of an integrated strategy for the Wytch Farm Gathering Station, Furzey Island, Dorset, and new office premises at Furzebrook Rail Terminal. Strategy includes water and waste management & treatment, sewage treatment, and bioremediation of oily and contaminated solids

BP plc Integrated strategy for the management & treatment of water and waste and improvement of biodiversity at Belfast Terminal BSW Timber plc Drainage strategy and constructed wetlands for surface water runoff at Cargo Sawmill, Carlisle BSW Timber old Feasibility Report on proposed land reclamation and drainage strategy at a site in Fort William Building Design Ecological sewage treatment system for a seasonal workers' camp at a farm in Kettins, Perthshire Chivas Regal Design study: ecological systems at a number of distilleries for the treatment of distillery effluent & spent lees and the subsequent recovery of dissolved copper Christian Garnett Partnership Feasibility study: Ecological systems for treatment of foul and surface water at new offices, Bohunt Manor, Liphook, Hampshire Club La Costa Ecological system for the treatment of sewage from a 100-unit development & leisure complex (population equivalent 3,800) at Feddal, Perthshire Coillte Teoranta: Irish National Forestry Service Treatment Wetlands for sewage from a population of 750 at Lough Key Forest Park, Co. Roscommon, Ireland Coillte Teoranta: Irish National Forestry Service Ecological sewage treatment system for Coilite Teoranta's new headquarters and housing development at Sheffield Wood, Cappoley, Co. Laois, Ireland Colin Galavan and Associates Ecological sewage treatment system for a 5-bedroom house at Ahare, Co. Wexford, Ireland Collective Architecture Feasibility study for the urban renewal project Water and Biodiversity Strategy at Dick's Hill, Strangaer Cornwall Council / Cormac Collective Ecological system for the treatment and recycling of gully tanker waste, compost leachate and washdown water from aggregates & recycling operations at Helsbury Quarry, near Penzance Cornwall Council / Cormac Collective Ecological systems and land management techniques to improve quality of runoff water at Castle-an-Dinas Quarry, near Penzance David Orlowski Architects Ltd Ecological system for the treatment of sewage for an eco-holiday village at Camserney Falls, near Aberfeldy (population equivalent Deep Sea World Improvements to water and waste management at Ellesmere Port Douch Partners Ltd SUDS strategy for a housing development in East Grinstead, Sussex **Dundonald Golf Links** Design study: ecological system for the management, reduction and treatment of golf course-related effluent at Dundonald Golf Links, Ayrshire The Ecology Centre Ecological systems for sewage treatment and surface water management at the new Ecology Centre, Kinghorn, Fife Edinburgh City Council Assessment of and improvements to a reed bed for treatment of acid mine drainage at Gilmerton Bing, Edinburgh Forbes of Kingennie Ecological treatment system for three holiday chalets at Omachie Farm, near Dundee Forbes of Kingennie Ecological treatment system for student accommodation (population 150) at Omachie Farm, near Dundee Forth Valley & Lomond Leader Group Study on the provision of sustainable toilets and drainage options (Stirling Council)

for remote rural, cool-climate locations

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Gardiner and Theobald LLP	Ecological system for the treatment of sewage from a 4400-person development at Tornagrain, near Inverness
Glasgow City Council Cleansing Department	Feasibility study: Ecological treatment of landfill leachate at a site near Glasgow
GL Heam	Feasibility study and first-stage design: Appraisal of existing infrastructure and options for ecological sewage and surface water treatment at a strategic development site on the Bohunt Manor Estate, Liphook, Hampshire
Gordonstoun Schools Ltd	Management of pond treatment system at Gordonstoun School, near Elgin
Groves-Raines Architects Ltd	Dry toilets at Inveravon Church, Ballindalloch, near Elgin
Hanson plc	Drainage strategy for a 40-hectare site: preventing runoff into the burn from a slate quarry at Claughton Quarry, Lancashire
Hever Castle	Ecological treatment system for sewage and effluent from the Pavilion Restaurant, Hever Castle, Edenbridge, Kent
Highland Distilleries Company plc	Pilot ecological system for treatment of distillery effluent at Highland Park Distillery, Orkney
lan Macleod Distillers Ltd	Feasibility study: Ecological system to treat vessel wash waters and boiler blowdown at Glengoyne Distillery
ICI Argentina	Feasibility study: Treatment of effluent from a factory producing chemicals for the wine-making industry in Palmira, Argentina
James Denholm Partnership	Ecological system for the treatment of sewage from a 7-house development near Comrie
Kent highway Services / Ringway Infrastructure Services	Ecological system for the treatment of gully tanker waste, contaminated surface water and other effluent at Ashford Depot
Knoydart Foundation	Feasibility study: Improvement of existing sewage systems around the Home Farm Estate, Inverie, Knoydart
Kronospan Ltd	Appraisal of and treatment options for solid waste arising from factory operations at Chirk, Wrexham
Loyal Developments Ltd	Diversion of surface & rain water and ecological sewage treatment system for the Lands of Loyal Hotel, Alyth
Manorlane	Ecological treatment of anaerobic digestate at Miltonduff Distillery, Elgin
Maxicrop International Ltd	Feasibility study: An ecological treatment system for waste products from a fertiliser factory in Corby
Midlothian Council	Ecological system for the treatment of gully effluent and solids at Fushiebridge Depot, near Gorebridge
Millard Consulting	Ecological system for tertiary treatment of sewage from the Croft-na-Caber holiday complex at Kenmore, Loch Tay (population equivalent 580)
Montgomery Forgan Associates	Ecological system for the treatment of sewage from 70 chalets at Perth Airport (population equivalent 350)
Montrose Golf Links Ltd	Design study: ecological system for the management, reduction and treatment of golf course-related effluent at Montrose Golf Links, Montrose
Murdoch Chartered Architects	Ecological system for the treatment of sewage for a property at the Walled Garden, Methven Castle
Murray Montgomery Partnership	Ecological sewage treatment system for a new Cookery School in Aberdeen

Nalanda Monastery, France	Sewage treatment for the monastery, using wetlands and trees
The National Trust for Scotland	Improvements to sewage treatment system at the Glencoe Visitor Centre
Northumberland County Council	Detailed design for the treatment of gully effluent & waste and contaminated surface water runoff, as part of a wider integrated waste management plan at Bearl and Stakeford Depots
O'Carroll Associates	Ecological system for the treatment of sewage and surface water for a proposed brain injuries rehabilitation centre at Kinnegad, Eire
Perth and Kinross Council	Rainwater harvesting, surface water management and ecological sewage treatment system for changing rooms at the Sports Pitch. Blairgowrie
Perth & Kinross Council	Remediation strategy for the former landfill at Dalcrue, near Blairgowrie
Private Client	Ecological system for the treatment of sewage for a 6-bedroom house near Ballinatad, County Sligo, Eire
Private Client	Wetlands and willow plantation for the treatment and evapo- transpiration of sewage from a 120-person development in Ballyduff, Co. Wexford, Eire
Private Client	Improvements to drainage for a 3-bedroom house near Biggar, South Lanarkshire
Private Client	Ecological sewage treatment system for a 48-person housing development in Blairgowrie, Perthshire
Private Client	Ecological system for the treatment of sewage for an agri-tourism project near Carrick-on-Shannon, Eire
Private Client	Ecological sewage treatment system for a 28-person housing development in Pillochry, Perthshire
R.J. Macleod Contractors Ltd	Rainwater harvesting system at the new substation control building at Inverarnan, Argyll and Bute
Royal Zoological Society of Scotland	Improvements to water management at Edinburgh Zoo
Scottish Greenbelt Company	Assessment of and improvements to pond at Pitreavie Castle
Scottish Natural Heritage	Design work for the reinstatement of a natural fen at a site in Stirlingshire.
Scottish Water	Feasibility study: Use of wetlands for polishing effluent at Kirriemuir sewage works, near Forfar
Scottish Water	Design for a sludge dewatering system at a sewage works at Keith, near Elgin, using wetland plants, trees and vermiculture
Scottish Water .	Design of treatment wetlands for an upgrade to the sewage works at Johnstonebridge, Dumfries & Galloway
Scottish Water	Wetland system for the treatment of combined stormwater overflows from Cowdenbeath Wastewater Treatment Works
Scottish Water Solutions	Constructed wetland and willow soakaway for the waste water treatment works at Dinnet, Aberdeenshire
Scottish Water Solutions	Wetland treatment system for improving water quality at the Lockerbie Waste Water Treatment Works
Shell U.K. Exploration and Production	Enhancement of fire pond, treatment of oily runoff & waste and treatment of sewage at St. Fergus, near Fraserburgh
Shanks Waste Solutions plc	Ecological treatment options for polishing landfill leachate and concentrated effluent lakes at an active landfill site. Greengairs

Ecological sewage treatment systems for two developments at a Simpson and Brown Architects steading in Papple, East Lothian Smiths of Peterhead Ltd Ecological systems for treatment of sewage and process water; management and treatment of surface water; landscaping and biodiversity enhancement at a new woollen mill near Peterhead, Aberdeenshire Feasibility study: Capture, management & treatment of water, South Caernarion Creameries Ltd effluent and sludge at South Caernarion Creameries, Rhydygwysti, Ecological systems for the treatment of winery effluent & waste, South Downs Real Estate Ltd surface water and sewage at Nyetimber Winery, West Sussex Appraisal of four sites for a proposed ecological system for the South Gloucestershire Council treatment of gully tanker effluent and waste Drainage strategy for a recycling facility at Collace Quarry, near Tayside Contracts Perth **Tayside Contracts** Ecological system for the treatment of contaminated water at Turfhills Depot, near Kinross Tayside Contracts Ecological system for the treatment and recycling of gully tanker waste, compost leachate and washdown water from aggregates & (for Dundee City Council) recycling operations for a facility at Riverside, near Dundee Planning guidance on sustainable development for the Highland Thirdwave Ltd Council, focussing on management and treatment of water & waste Ecological treatment of distillery effluent and sludge from United Distillers plc Dalwhinnie Distillery; creation of functional landscape and habitat Ecological treatment system for compost leachate & gully waste, West Lothian Recycling Ltd and recycling for dust suppression at a site in Broxburn Ecological treatment of gully tanker effluent, lorry washings and West Sussex Council / Dome UK sewage at four Council Depots in West Sussex William Grant & Sons Distillers Ltd Study to investigate effluent treatment and treatment & recycling of surface water at Girvan Distillery, Ayrshire Study of foul drainage problems at Formonthills Community Woodland Trust Woodland, Fife; recommendations for resolution; design of ecological sewage treatment system Study of the impact of land use on private water supplies in the The Worldwide Fund for Nature Strathtay watershed

SUMMARY OF RESULTS ON THE BIOREMEDIATION TRIALS AT THE BP OIL UK LTD. TERMINAL AT HAMBLE SHOWING FULL PROCESS REDUCTION Living Water, April 2003

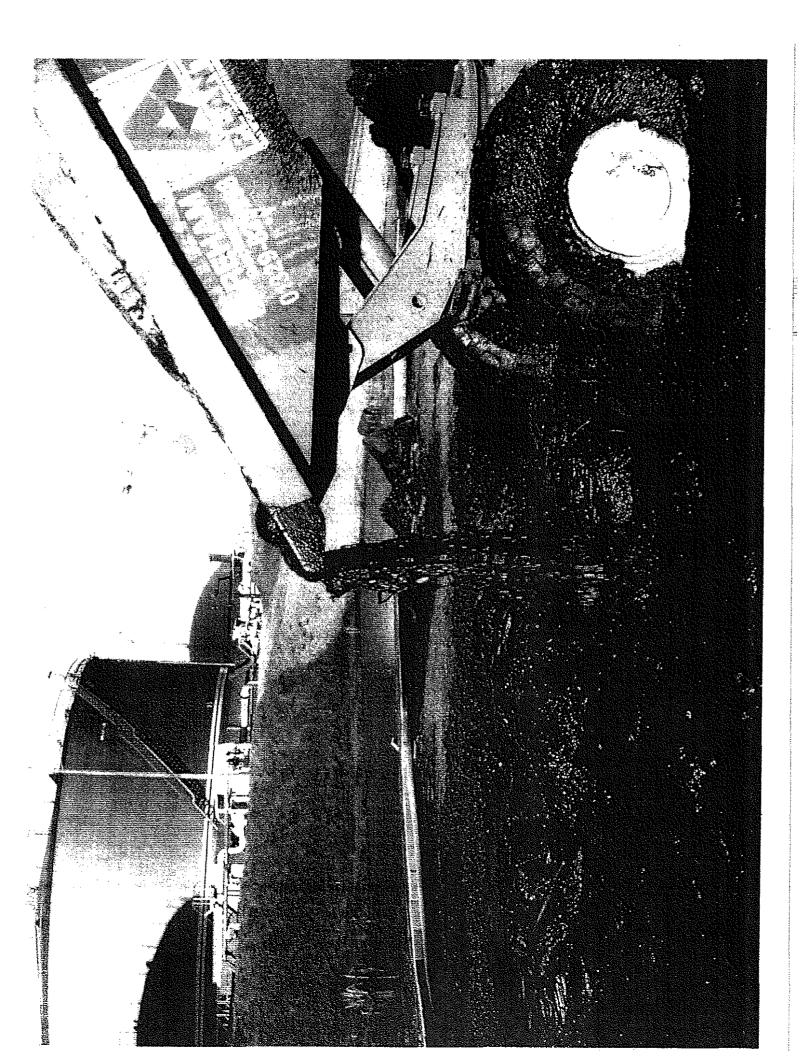
04-Mar-03 04-Mar-03 04-Mar-03 04-Mar-03	30-Jan-03 30-Jan-03 30-Jan-03 30-Jan-03	12-Dec-02 12-Dec-02 12-Dec-02 12-Dec-02	06-Nov-02 06-Nov-02 06-Nov-02	03-Oct-02 03-Oct-02 03-Oct-02 03-Oct-02	Date of Sample 23-Sep-02 23-Sep-02 23-Sep-02 23-Sep-02	
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762.00 2,205.00 2,060.00 1,214.00	2,640.00 2,105.00 2,910.00 1,385.00	3,390.00 5,465.00 3,860.00 805.00	1,211.00 6,680.00 4,830.00 1,145.00	7,425.00 10,975.00 9,620.00 3,055.00	Total Petroleum Hydrocarbons TPH GCFID (AR) 385,000.00 52,200.00 12,765.00 75,000.00	Averages mg/kg
<u>^10</u>	1311 200 200	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	7774 7744	4 & & &	Benzene 50,260.00 704.00 85.50 1,965.00	Averages ug/kg
<u> </u>	<u> </u>	19.50 5.00	<10 11.00 410	98.50 131.50 33.00 15.50	Tolupna 382,050.00 16,755.00 1,937.00 36,170.00	Averages Averages ug/kg
4 4 4 6 6 8 8 8 8	44 4 4 40 4 4	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<10 5.50 <10	252,00 389,00 386.00 57.50	Ethyl Benzene 136,765,00 11,295,00 3,330,00 29,755,00	Averages ug/kg
2222	20 20 20	<20 <23.5 <20 28.00	<23.5 <32.5 <20.5 <20	933.00 1,495.00 870.00 119.50	Xylenes 613,560.09 110,840.00 6,467.00 89,315.00	Averages Averages
420 420 420	& & & & & & & &	<20 <20 <20	20 20 20	66 66 66 66	MTBE <2000 <50 <35	Averages ug/kg
18.50 9.00 18.50	6.50 5.50 3.50 32.00	22.00 16.50 25.50 51.00	8.00 10.00 25.00 123.00	20,50 23,50 8,00 61,50	Sulphide 21.50 12.50 15.00	Averages mg/kg
1,242,00 1,130,50 1,000,50 2,625,00	4,580.00 4,305.00 2,070.00 6,545.00	3,445.00 2,030.00 1,385.00 4,720.00	2,765.00 1,845.00 1,605.00 4,580.00	5,030.00 1,130.50 1,000.50 2,625.00	Nutrients: Available Potassium 11.50 54.50 585.00 154.50	Averages mg/l
79.70 50.55 55.55 54.80	184.00 126.00 83.50 213.00	113.50 65.00 55.55 153.50	121.00 57.20 55.70 120.50	79.70 50.55 55.56 54.80	Nutrients: Available Phosphorus <2.0 6.50 5.75	Averages rng/l
0.50 0.24	0.72 0.75 0.43 0.87	0.54 0.50 0.33 0.60	0.56 0.40 0.38 0.56	0.50 0.35 0.24 0.54	Nutrients: Total Nitrogen 0.12 0.16 0.16 0.16	Averages %

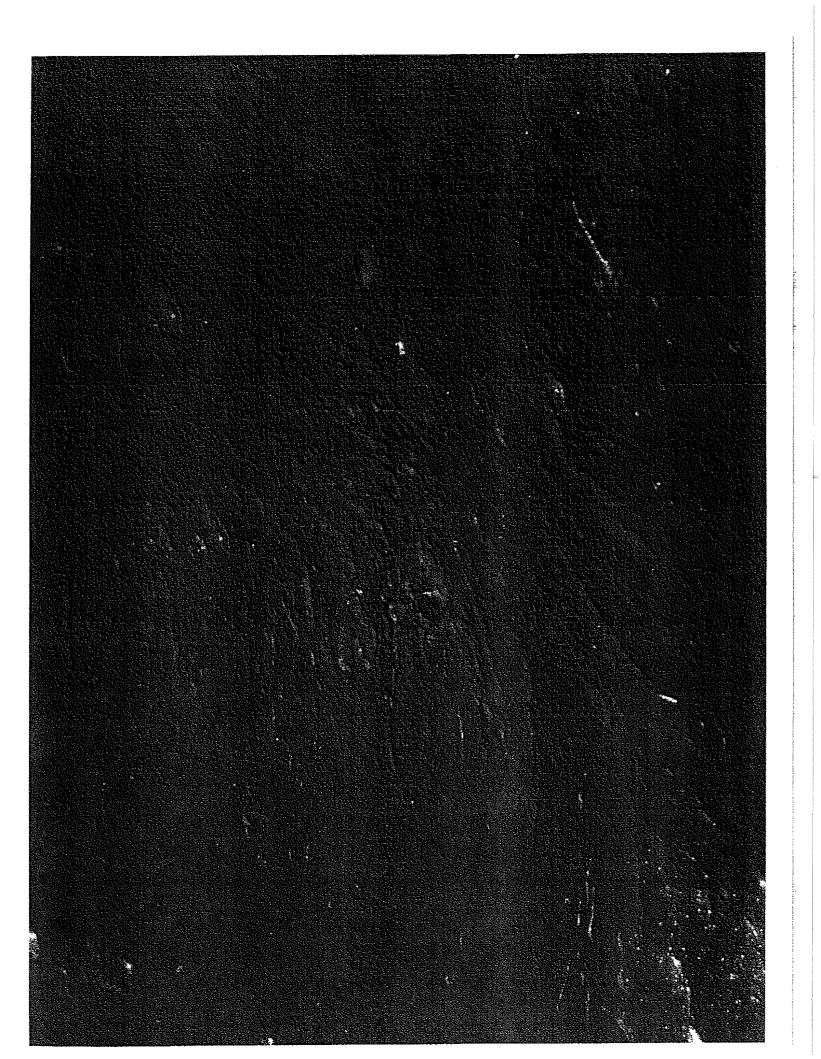
	04-Mar-03	04-Mar-03	04-Mar-03	04-Mar-03	04-Mar-03	30-Jan-03	30-Jan-03	Date of Sample		04-Mar-03 04-Mar-03	04-Mar-03 04-Mar-03	04-Mar-03 04-Mar-03	04-Mar-03 04-Mar-03	04-Mar-03 04-Mar-03	30~Jan-03 30~Jan-03	30-Jan-03 30-Jan-03	Date of Sample	
	Biopile A4	Biopile A3	Biopile A2	Blopite A1	Tank 18 / T2-A	Tenk 18/11-A	Tank 18 / To-A	Sample	Method	Blopilo 4A Biopile 4B	Biopile 3A Biopile 3B	Bioplie 2A Bioplie 2B	Biopile 1A Biopile 18	Tank 18 / T2-1 Tank 18 / T2-2	Tank 18 / T1-1 Tank 18 / T1-2	Tank 18 / TO-1 Tank 18 / TO-2	Sampie	Method
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From: Jane Shields [mailto:janes@livingwater.org.uk]

Sent: Thursday, April 11, 2013 11:56 AM To: OfficeofthePremier, Office PREM:EX

Subject: Re: Response to Contaminated Treatment of Waste near Shawnigan Lake (2 of 2)

Importance: High

Dear Premier Christy Clarke,

Further to my first email, please find attached, photographs from a selection of projects showing the ecological treatment of water / effluent contaminated with hydrocarbons, oil, lorry washing, sewage, soil and other contaminants arising from oil terminal and highway depot operations.

The CD that I will post will contain more photographs, a Powerpoint presentation containing case studies and the documents emailed, to you to provide you with an indication of our experience and the application of a positive alternative approach to a contaminated soils landfill near Shawnigan Lake.

Thank you for your time and attention.

I look forward to hearing from you.

Yours sincerely,

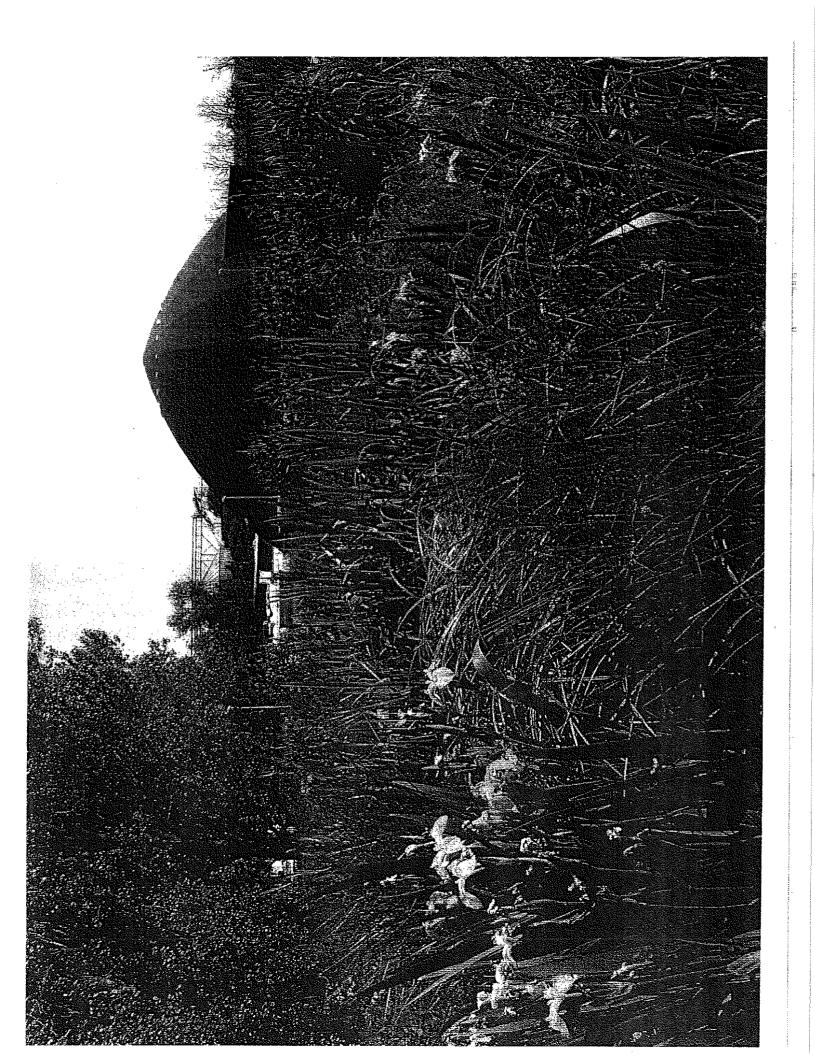
Jane Shields

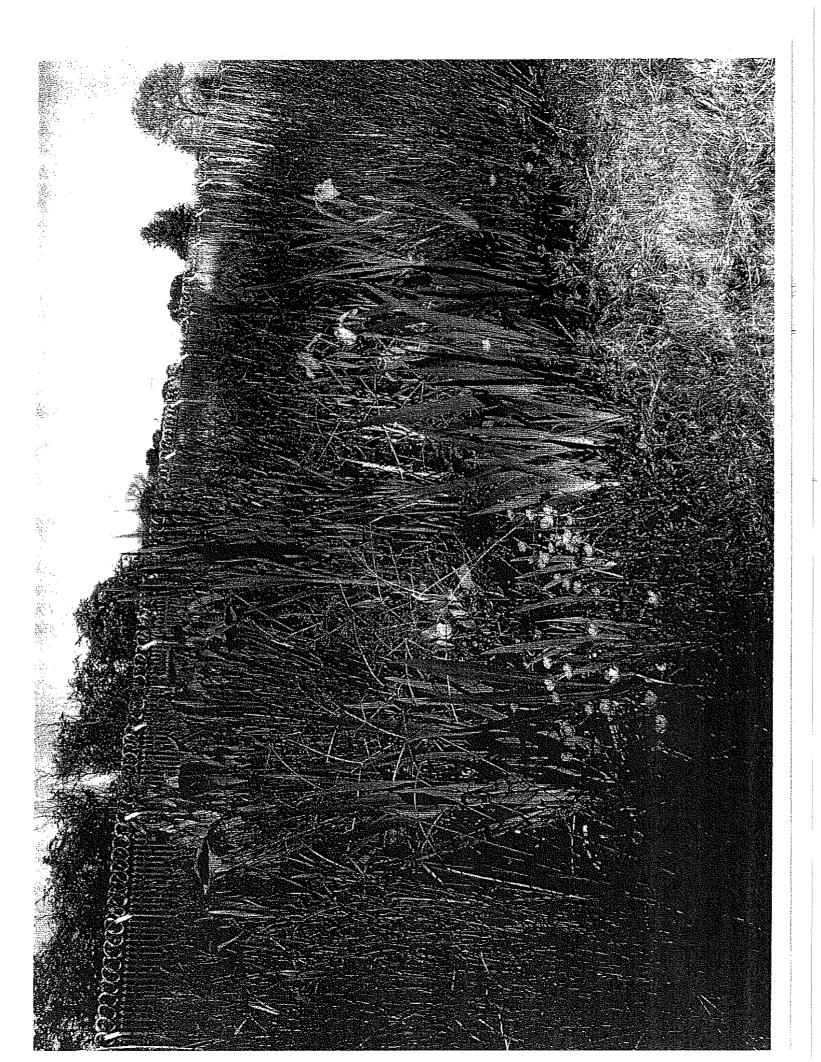
Living Water is the 2009 winner of the Green Business Fife Award for Water. http://www.greenbusinessfife.co.uk/awards/

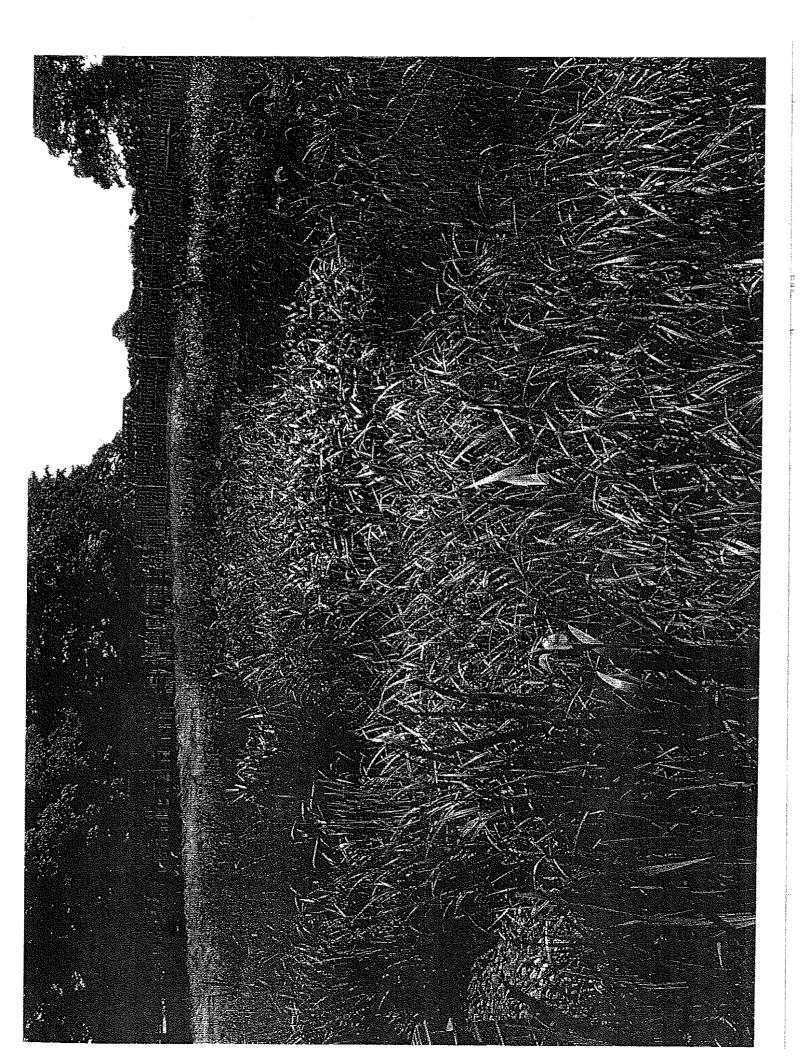
Jane Shields, Director Living Water Ecosystems Ltd Carlingnose Studios North Queensferry Fife, KY11 1ER Scotland, UK

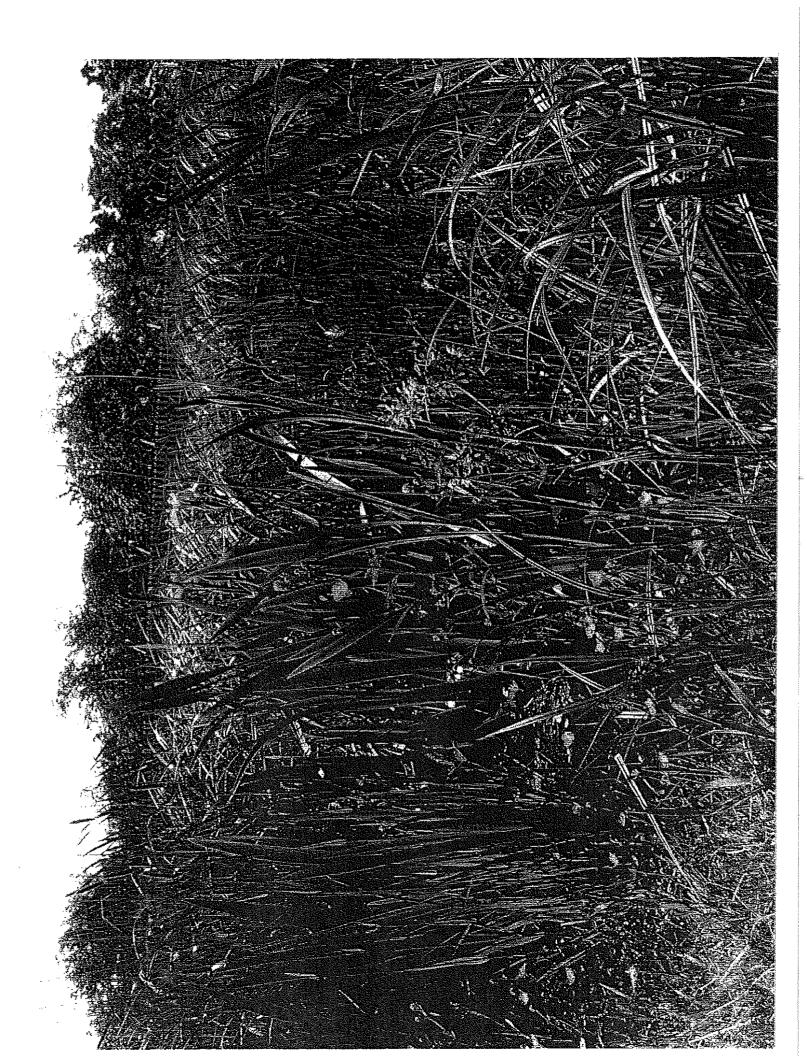
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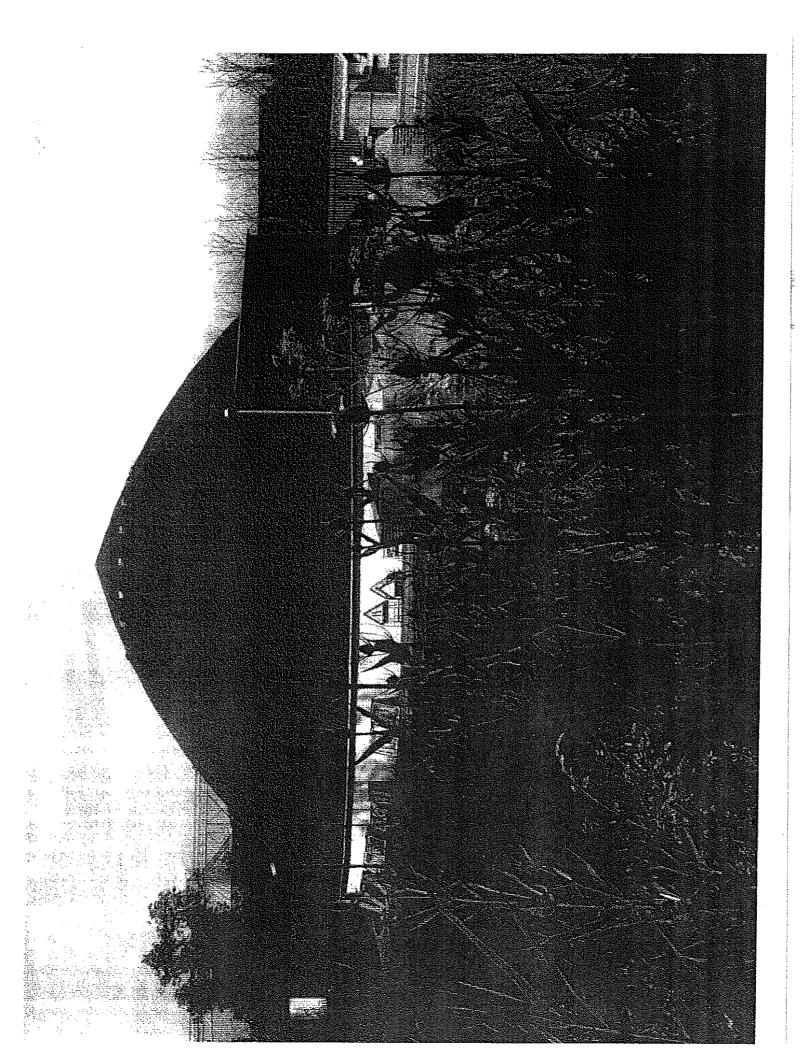
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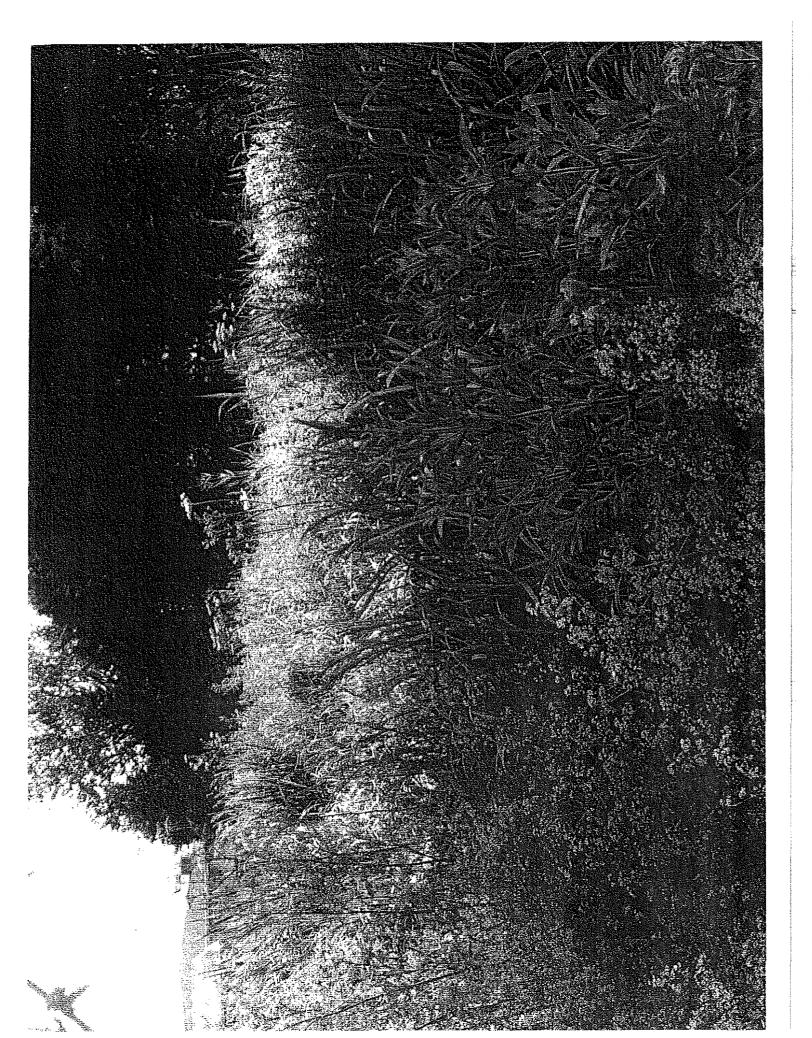


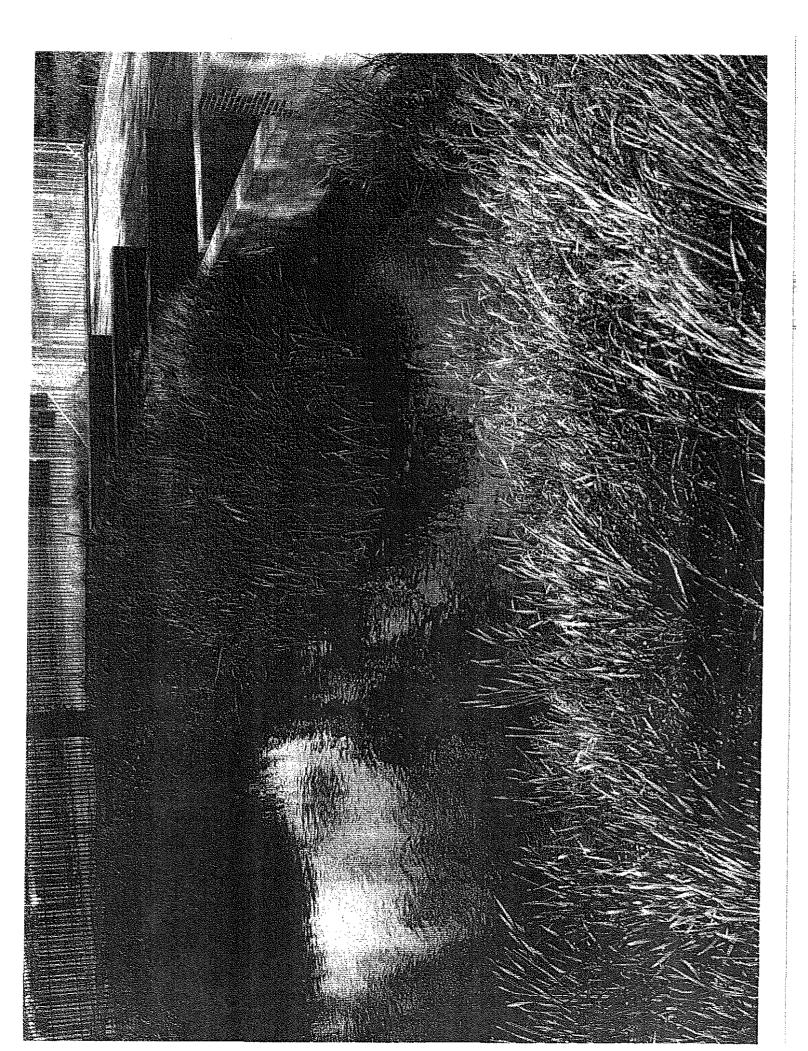


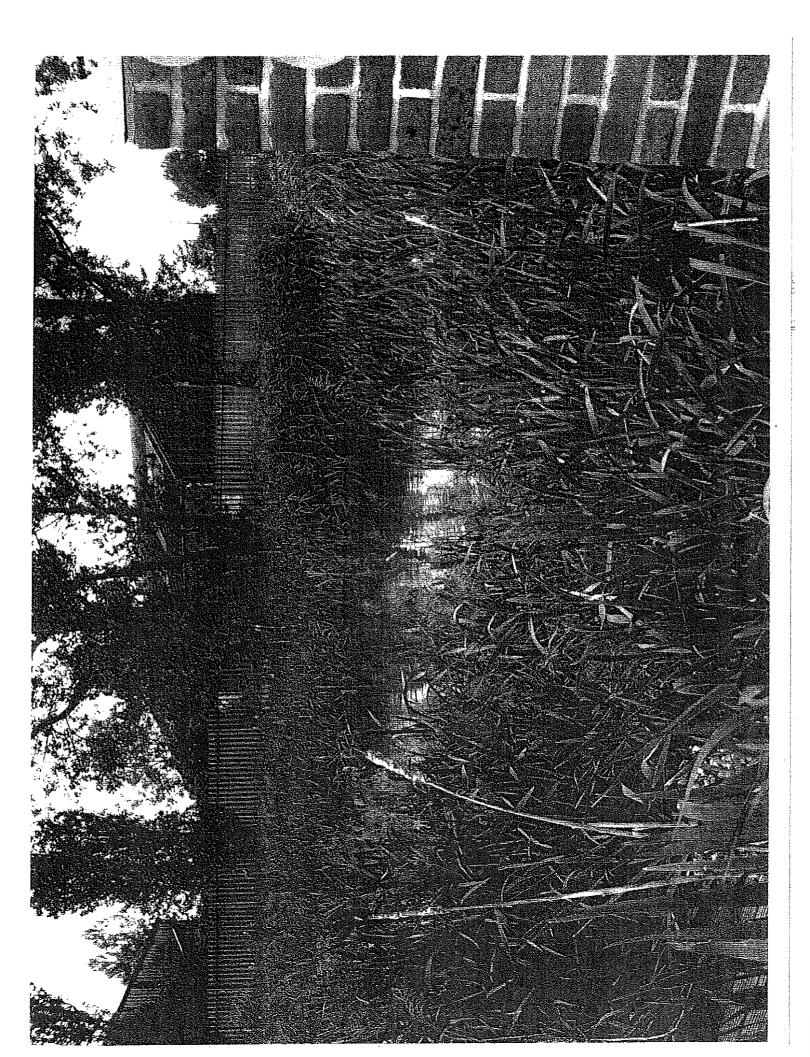


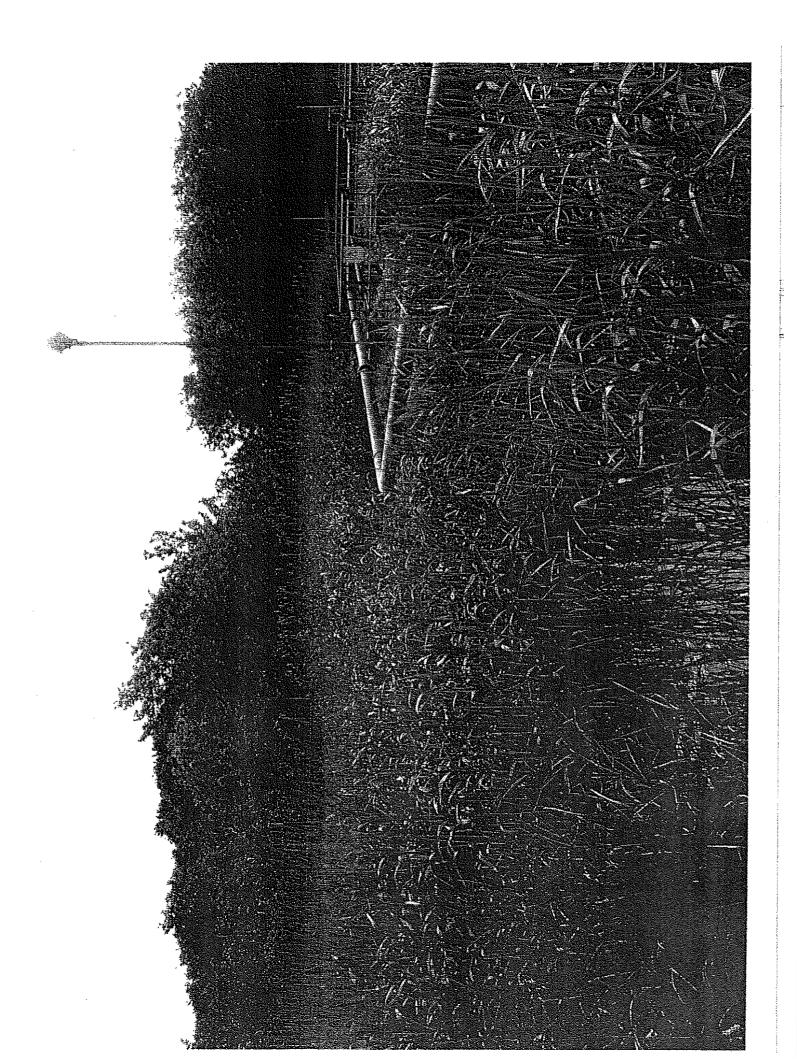


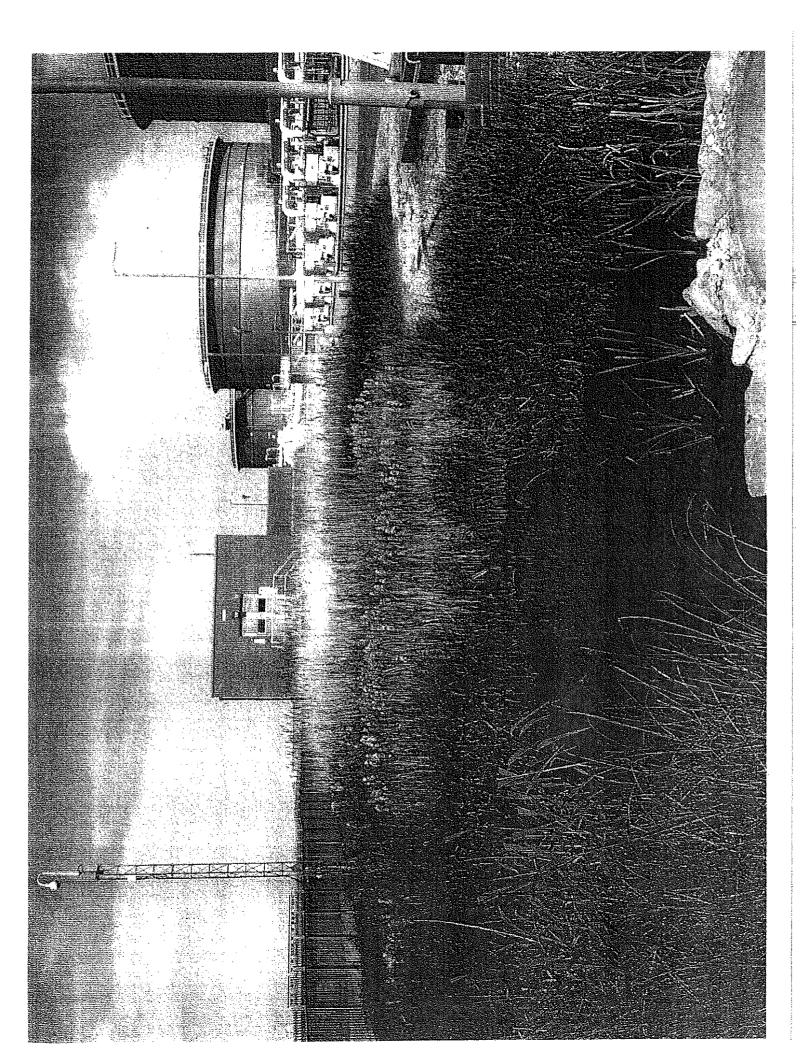


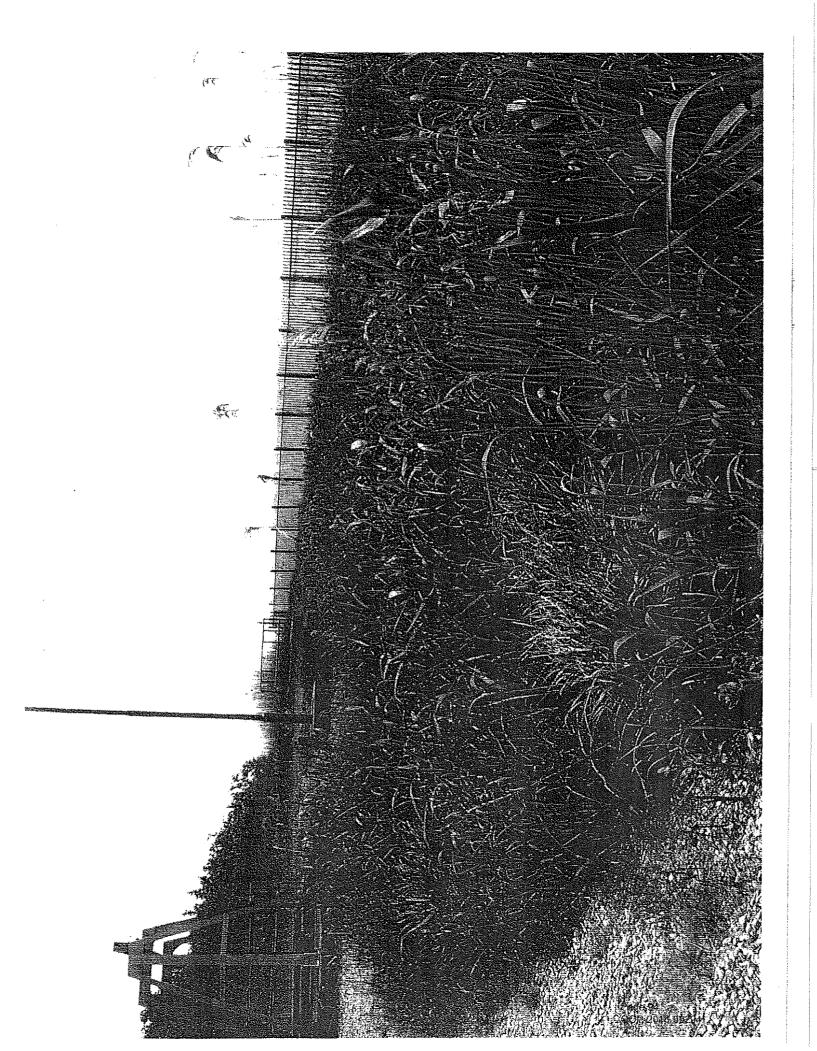


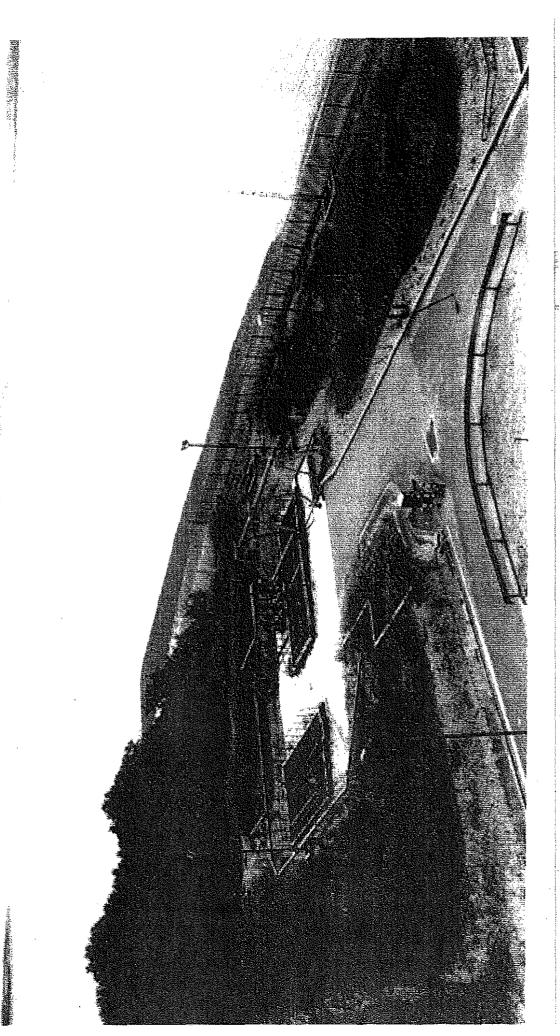












From: Damir Wallener

S22

Sent: Tuesday, March 26, 2013 8:30 AM

To: Minister, ENV ENV:EX

Cc: OfficeofthePremier, Office PREM:EX

Subject: The Shawnigan Lake Soil Dumping Issue

Hon. Terry Lake Minister of Environment Room 112 – Parliament Buildings Victoria, B.C. V8V 1X4 March 25, 2013 Dear Minister,

Re: Draft Ministry of Environment Permit to dump contaminated soil in the Shawnigan Watershed.

This evening, the residents of Shawnigan Lake gathered by the hundreds and spoke with a single unified voice. That voice was unanimous in its opposition to the proposed permit allowing the dumping of contaminated soil in the Shawnigan watershed.

At this gathering, candidates from the four major parties contesting the Cowichan Valley seat expressed their views on the permit, and the permitting process. Every single candidate, including Stephen Housser, representing the Party of which you are a member, came together in full cooperation to sign two documents demonstrating our unified opposition to the permit and the plan behind it.

One of the letters was offered by sitting MLA Bill Routley of the BC NDP, and the other was offered by myself as the candidate for the BC Conservatives. That a Conservative and NDP candidate could come together on an environmental issue is a clear indication of just how opposed this community is to both the permit and the permitting process.

The electors in the room – more than 500 of them – were clear on two very specific demands:

- 1. An immediate halt to the permitting process until the fall sitting of the legislature.
- 2. At the fall sitting, a legislative review to determine exactly how a community, in our democratic province, can speak with such clarity and yet still have its wishes completely ignored. This is not an issue of technical disagreement or an issue that requires more studies or more reviews. This is an issue of political will. There are a variety of existing regulatory mechanisms available to halt the permitting process, and it is crucial that the Ministry respect the democratically expressed wishes of its people.

Sincerely,
Damir Wallener
Candidate,
BC Conservative Party
Cowichan Valley

cc: Honourable Christy Clark, Premier

This is an unacceptable trampling of the wishes of Cowichan Valley residents and cannot wait until the fall sitting of the legislature to be dealt with it. Damage will already been done, and the focusing lens of the election will make it easier for Victoria to continue ignoring us.

Therefore, this is our commitment to our constituency:

1. Immediately upon taking office, the Ministry responsible will be required to attach conditions and provisions, acceptable to the CVRD, to the final permit

2. At the fall sitting, we will review Ministry operations and make changes necessary to prevent small communities from being run over like this in the future

This is a covenant between the principal MLA candidates for the Cowichan Valley, and voters, We, the undersigned, are committing ourselves to this course of action.

Signed.

Damir Wallener

Conservatives

Kerry Davis-

geen of the

Bill Routley

Mar.

Stephen Hauser

BC. Chri

3C LIBERALS **Thristy** Clark From: \$22

Sent: Monday, March 25, 2013 3:57 PM

To: Lake.MLA, Terry LASS:EX; OfficeofthePremier, Office PREM:EX

Subject: FW: Comment re PERMIT 105809 FOR THE, TREATMENT UTILIZATION, AND

LANDFILLING OF CONTANINATED SOIL AND ASH FOR SOUTH ISLAND AGGREGATES/COBBLE HILL HOLDINGS LTD AT 640 STEBBINGS ROAD

The Director, Ministry of the Environment, Province of BC

My first comment is that this plan to place contaminated material over an aquifer, near a stream feeding a lake that supplies drinking water to 7000 people is far too risky to contemplate. Since someone did contemplate it and because the Environment Ministry is considering it, my comments are based on the realization that it just might happen, however unwise. I would encourage the Environment Ministry to deny this permit, not based on science (because there are differing opinions based on who commissioned the study), but based on common sense – that no one would place a hazardous waste storage or treatment facility adjacent to a community drinking water source.

In 1978, the town of Love Canal, near Niagara Falls, New York, was evacuated over the burial of only 21,000 tons of hazardous waste. 800 families were moved out and many people became ill over the effects of the buried chemicals. The site was lined with a solid layer of clay, thought to be impermeable at the time. The material was stored in metal and fibre barrels, also thought to be completely safe. Through the process of time, heavy rainfall (a 1 in 25 year event) and nearby highway construction, this material came to the surface and changed the way we think about hazardous material forever. It is also important to note here that Love "Canal" was not a water source for the community, but an uncompleted project that never held water and was filled in. People there became ill from just having the material in close proximity, the very same material that is going to buried at SIA's site in a watershed for 7000 people.

The SIA permit allows for 100,000 tons per year of contaminated material to be stored or remediated there, 5 times the total amount of material at Love Canal. The permit does not specify how many years the site will remain active, but it calls for updated plans every 5 years, so at least 5 years, likely more than 10. This could amount to more than 1 Million tons of hazardous material. My comment is that this plan allows for far too much material in a sensitive watershed area. Zero would be best, but certainly no more material should be on site than could be effectively trucked out of there in a week, should there be any evidence that the plans to contain the material and its odour not be within the planned limits. SIA has no expertise in building or operating a facility of this type:

- 2) Section 1.4.4 states that the discharged treated effluent should be to "working water" standards. Given the proximity to the creek and its importance to Shawnigan Lake water quality, this should be improved to "Drinking Water" standards. The same standard should apply to 1.5.3.
- 3) Given that this plan affects drinking water, the proponents are obligated to ensure approval of the Health Minister with respect to the Drinking Water Protection Act.

- 4) Under Section 1.5.1 there is an allowance for a 1 in 10 year event. This should be in excess of the Love Canal experience which was 1 in 25 years. I suggest 1 in 200 years which seems to be the standard these days.
- Section 2.3 specifies temporary storage of materials that exceed the requirements of the permit. This requires a specific time frame based on best practices for materials of that type. Further, any material kept on site that falls outside the acceptable standard should be subject to a fee to discourage the "inadvertent" acceptance of banned material.
- Section 4.2 demands that the permit holders place a security deposit with the Environment ministry to cover the costs of maintenance, monitoring and closure should the permit holders not meet their obligations. There is no allowance for the potential downstream effects of a malfunctioning site. Should testing prove that there has been contamination to the stream, the lake, the ground or the air in the area that the permit holders are liable for, then compensation to damaged parties should be available regardless of the financial condition of the permit holders at that future date. There needs to be a deposit large enough to compensate the community for its losses. That deposit could come in the form of cash, an irrevocable letter of credit or an insurance policy (bond) in amount sufficient to meet potential claims.

The calculation of this deposit should be enough to compensate the evacuation of at least 1000 homeowners, the loss of their property, their potential future medical claims and lost income. The cost to clean up Love Canal in 1982 was \$4 Million and the 800 homeowners were paid \$129 Million for their homes by the government and subsequently recovered from Occidental Petroleum in 1995. Love Canal is still uninhabited and behind chain link fences. In 2011, 3 families on adjacent properties have sued for \$113 Million for newly discovered issues. Shawnigan Lake could have to evacuate up to 7000 residents and approximately 3000 homes. Using the median price for a Cowichan Valley home in January of 2013 (\$324,500), only 1000 displaced families would receive \$324.5 Million for their homes alone. Perhaps a \$2 Billion bond would suffice.

- 7) In a recent statement by Environment Minister Terry Lake "My personal commitment as minister of the environment is to ensure rigorous monitoring and compliance is in place to protect the environment and I expect that to be the case in this decision." The Draft Permit shows that much of the monitoring is actually being performed by the proponents of the plan with reports sent to the Environment Ministry. This is unacceptable and the ministry should be monitoring the site on a frequent basis with costs borne by the proponents.
- 8) The Draft Permit shows that there will be permit fees subject to a schedule already in place at the ministry. This fee schedule isn't published or is difficult to find, so I ask that the fees in this case be sufficient to cover the costs of the Ministry to review the application and issue the permit.
- 9) One of the proponents, Marty Block, was on C-FAX radio today with his engineer, where they stated that "none" of the material to be accepted was leachate. In the list of accepted material in the Draft Permit are a number of soluble materials, among them Sodium, Furan, and MTBE. Although BTEX is not soluble, it is miscible and whatever grows on the site afterward could be highly toxic. I call on the Environment Ministry to fully define the acceptable materials and their properties so that they can be studied for acceptability in a residential neighbourhood and watershed.

The answers to these concerns should be specific to the questions asked and I sincerely hope that the Environment Ministry does not simply reply that all these items have been considered and thanks for my participation. Given the highly technical nature of the matter before us and the limited knowledge that the residents of this area possess on this issue, it is vital to our well-being, both physical and mental, that our concern is addressed as completely as possible.

Thank you for your time and effort in ensuring the safety of the citizens of Shawnigan Lake.



From: Christy Clark.MLA [mailto:Christy.Clark.MLA@leg.bc.ca]

Sent: Tuesday, March 26, 2013 11:45 AM To: Office of the Premier, Office PREM:EX

Subject: FW: A matter for Tourism, Children & Families, Community, Sports & culture,

Education, Health, Environment, - Shawnigan Lake Wtershed- contaminated soil will effect our

Economy

From: Shauna Benson [mailto:southcowichanchamber@shaw.ca]

Sent: March-26-13 11:26 AM

To: 'Shauna Benson'; Bell, Pat JTST:EX; Letnick.MLA, Norm; Cadieux.MLA, Stephanie;

McRae.MLA, Don; Coleman.MLA, Rich; Lake.MLA, Terry; Thomson.MLA, Steve;

MacDiarmid.MLA, Margaret; william.bennett.mla@leg.bc.ca

Cc: Christy Clark, MLA

Subject: RE: A matter for Tourism, Children & Families, Community, Sports & culture,

Education, Health, Environment, - Shawnigan Lake Wtershed- contaminated soil will effect our

Economy

Hello again Ministers!

We need some help from our government on this issue!

You do have the power to stop this!

Find an alternative land source that is not in a Watershed, or that does not have underground springs!

We have two Private Businesses that are cleaning up someone else's mess from previous bad calls in this area.

Bamberton- had to clean up their site, spending Millions of their own dollars! Richwood Contracting is currently doing the same for the other end of Shawnigan!

Have it so business has to clean their contaminates be for moving them anywhere.

As the South Cowichan Chamber of Commerce- there is a matter that will have a huge affect on our Economy that I know can be easily diverted!

Please look at an alternative to the Dumping of Contaminated soil in the Shawnigan Lake Watershed.

We have Families, Schools, Business & Tourism that all rely on a secure clean water source in and around the Shawnigan Lake Area, actually for all of the Cowichan Valley!

This affects all the Ministries you are responsible for!

SIA has been given the go ahead to deposit their contaminated goods in a gravel pit within the Shawnigan Lake Watershed.

You have Individuals, Businesses, Regional Directors and the Whole Region District asking you to put a stop to the dumping and help find an alternate solution.

Please read the attached letter from the Cowichan Valley Regional District.

We look forward to hearing from you and working on a solution, before more contaminants can be dumped.

Warm regards,

Shauna Benson
'Your Rural Chamber'
Executive Director | South Cowichan Chamber of Commerce
ph. 250.743.3566 | 118 – 2720 Mill Bay road, Mill Bay, BC V0R 2P1
southcowichanchamber@shaw.ca | www.southcowichanchamber.org

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From: Dyan Freer [mailto:dfreer@cvrd.bc.ca]

Sent: Tuesday, April 9, 2013 7:22 PM To: OfficeofthePremier, Office PREM:EX

Cc: Bunce, Hubert ENV:EX; Routley.MLA, Bill LASS:EX; Fleming.MLA, Rob LASS:EX;

Kendall, Perry HLTH: EX; XT: HLTH Hasselback, Paul; Directors; Warren Jones;

kerry.davis@greenparty.bc.ca; steve.housser@bcliberals.com;

Georgia@shawniganwatershedroundtable.ca

Subject: Letter from the CVRD Environment Commission

Please find attached a letter from the Cowichan Valley Regional District Environment Commission regarding the South Island Aggregates request for a permit to bring in contaminated soil to the Shawnigan Lake area.

Sincerely,

Dyan Freer for the CVRD Environment Commission Administrative Assistant, Environmental Policy and Capital Projects Divisions Engineering and Environmental Services Department Cowichan Valley Regional District 175 Ingram Street, Duncan, BC V9L 1N8

Tel: 250,746.2504 Toll Free: 1.800.665,3955 Fax: 250.746.2543

E-mail: dfreer@cvrd.bc.ca

April 9, 2013

Via Email to EnvProtectResponseWestCoast@gov.bc.ca

Minister of Environment Environmental Protection Branch 2080 Labieux Road NANAIMO, BC V9T 6J9

Attention: Environmental Protection Response West Coast

Dear Sir:

Re: South Island Aggregates (Cobble Hill Holdings Ltd.) Draft Waste Discharge Permit (PR-105809)

The CVRD Environment Commission's mandate includes the responsibility to undertake specific inquiries aimed at evaluating major issues affecting the community and the environment. To that end, we hereby wish to provide comment on the specific details of the draft permit (PR-105809) wording.

It must be stated that the preference of the Environment Commission would be to strongly recommend that the Environment Minister use his discretionary power and by order designate this project as a reviewable project under the BC Environmental Assessment Act (the "Act"). According to Part 2, Section 6 of the Act, the minister need only be satisfied that the project may have a significant adverse environmental, economic, social, heritage or health effect, and that the designation is in the public interest. Surely these criteria have been met in this instance, "considering the substantial level of local public interest in the permit application by South Island Aggregates/Cobble Hill Holdings Ltd", to quote the Ministry of Environment on its own website: http://www.env.gov.bc.ca/epd/regions/vanc_island/env-mgt/sia_permit.htm.

Environmental Assessment will provide an integrated process for identifying and evaluating any potentially adverse effects this project may have on the Shawnigan Lake Watershed, answering many questions posed by the public and scientific community alike with the purpose of avoiding or mitigating any such effects where practicable. Since reviewable projects require the issuance of an environmental assessment certificate prior to any other permit decisions being made, we ask that this project be designated reviewable by order of the Minister of Environment.

The following comments refer to the Draft Waste Discharge Permit (PR-105809) and are in no particular order:

.../2

- In the first paragraph, with respect to: "Contravention of any of these conditions is a violation of the Environmental Management Act and may lead to prosecution". Throughout the permit references to regulatory frameworks specific to penalties should be identified for specific condition violations, should there be any.
- As per the Water and Air Baseline Monitoring Guidance Document, a baseline study containing and interpreting quality-assured environmental baseline data collected over an absolute minimum of 12 months (with 24 or more months preferred) must be performed (http://www.env.gov.bc.ca/epd/regions/vanc island/env-mgt/sia permit.htm) prior to any development.
- In Section 1.2.2 reference is made to the fact that the characteristics of the discharge must be equivalent to or better than groundwater used for drinking water standards, but then this criterion is missing from 1.4.4 and 3.3.
- More clarity is required around the characterization requirements of inbound material. It
 should be a requirement that the waste screening or characterization process be signed
 off by a qualified environmental professional who is at arm's length to the operation and
 the analytical suite should include a spectrum of parameters, not just Contaminants of
 Concern that are clearly identified in the permit. The Permit should specify the temporary
 storage holding area integrity requirements and more clearly describe the process for
 soil acceptance into the facility.
- The Erosion and Sediment Control Plan should be prepared by a Certified Professional in Erosion and Sediment Control (CPESC).
- Solar-powered continuous autosampling equipment should be employed to sample surface water coupled with ultrasonic flowmeters to enable the determination of massloading of various parameters into the receiving environment. This would also enable the characterization of storm events more accurately in order to anticipate future storm water volumes and potential storage requirements.
- The soil volume and associated ash inventory currently existing onsite should be characterized and quantified prior to any permitted disposal activity.
- Clarification is sought regarding the use of "Effluent Standards for Hazardous Waste Facilities" with respect to stormwater and water treatment system ancillary discharge when the facility is only authorized to receive IL+ material.
- Considering the potential risk related to limestone deposition connectivity between the Sooke Basin and Shawnigan Lake aquifers, the permit, if issued at all, should be staged, prohibiting soils contaminated with highly water soluble parameters such as sodium chloride, until such time as the leachate collection and water treatment systems effectiveness have been verified. If it is determined that the environmental protection systems proposed in the permit application are functioning properly, additional parameters for disposal can be added to the permit, with more confidence in the facility's ability to manage these contaminants:
 - (http://www.shawniganresidentsassociation.com/images/stories/Lowen%20Report.pdf).
- It is requested that the Director specify the most stringent discharge criteria among regulatory frameworks as referenced in Section 1.4.4 of the Draft Permit and clearly identify the parameters to be analysed and their concentrations.

It is requested that the settling pond for ancillary discharge be designed and sized to accommodate a 1 in 200 year 24-hour flood event, given the extreme consequences of system failure.

- It is requested that the Bedrock Integrity Inspection and Risk Assessment Report, the Soil Acceptance Plan, the Erosion and Sediment Control Plan, the Emergency Response Plan, and the Environmental Procedures Manual be made available online to the public at a minimum of thirty days prior to facility receiving soil (if indeed the permit is granted).
- Clarification is sought regarding the consequences for breaching any criteria specified in any associated Plan.
- It is requested that a separate Quality Management Plan be developed and submitted addressing issues of Quality Assurance and Quality Control clearly outlining reporting requirements and associated forms and submittal schedules and procedures.
- Clarification is sought regarding the discharge of contaminants which have bypassed the
 authorized treatment works. Specifically, with respect to Section 2.15, please confirm
 that the permit criteria <u>expects</u> those contaminants authorized under Subsection 1.2 will
 meet or exceed standards for groundwater used for drinking water or the discharge will
 be prohibited.
- It is requested that a minimum of <u>25</u> groundwater sampling sites be installed and maintained and that groundwater samples shall be taken <u>twice per month</u> at each monitoring well. The specific parameters to be analysed should be identified in the permit and the results should be compared to groundwater for drinking water standards.
- The specific parameters to be analysed for surface water quality analysis should be identified in the permit and these samples should be taken continuously using an autosampler and flowmeter to determine mass loading. Specific protocols for monitoring during rainfall events should be adopted to characterize first flush mass loading concentrations to the receiving environment.
- Duplicate sampling at a rate of 10% should be implemented for quality assurance purposes and sampling results should be posted online as soon as they become available.
- The determination of the security cost required by the proponent must be realistic for a minimum twenty-five year post closure period and must incorporate contingency for the worst case scenario, i.e. contamination of the drinking water supply for both the Sooke Lake Basin and Shawnigan Watersheds.
- The Bedrock Integrity Inspection and Risk Assessment must consider the potential impact of a force 8 or greater earthquake, for which there is a 37% chance of occurrence over the next 50 years from the San Andreas Fault line, on the facility integrity.
- Annual reviews and revisions to the EPM should be made available online to the public within 2 weeks of the annual submittal date of March 31.

The preceding comments are only a representation of the type of questions and additions to the permit that are requested. It is still requested by the Environment Commission that the period of time for public response be extended and/or the permit process be suspended pending further investigation.

Again, we ask that the Ministry of Environment refrain from issuing a Permit at this time and instead exercise its power to require an Environmental Assessment under the BC Environmental Assessment Act prior to this project proceeding.

Yours truly,

Jon Lefebure

Janna Jorgensen

Co-Chairs of CVRD Environment Commission

JR:dkf

pc:

Christy Clark, Premier of British Columbia

Terry Lake, Minister of Environment

Dave Nikolejsin, Associate Deputy Minister, Environmental Assessment Office

Bill Routley, MLA - Cowichan Valley

Rob Fleming, BC Opposition Critic for the Environment

Dr. Perry Kendall, Provincial Health Officer

Dr. Paul Hasselback, Vancouver Island Health Authority

CVRD Board of Directors

Warren Jones, Chief Administrative Officer

CRD Board of Directors

Hubert Bunce, Ministry of Environment

Ed Taje, Ministry of Energy, Mines and Natural Gas

City of Victoria, Councillors

----Original Message----

From: Dr Mackenzie Brooks [mailto:dr@drmackenziebrooks.com]

Sent: Tuesday, April 9, 2013 1:05 PM To: OfficeofthePremier, Office PREM:EX

Cc: Judith Lavoie; Sandra McCulloch; Andrea Rondeau; Gerry Giles; Kelly Musselwhite;

Georgia Collins; Susan Brice; Barb Desiardins

Subject: Re: A chance for you to do one right thing before you lose the positional power you

currently wield.

Thank you very much for your e-mail and update.

It is pretty clear by Minister Terry Lake's statements in the media that the approval of this draft permit is a foregone conclusion. He is offering his 'personal guarantee,' whatever that means.

Has Premier Christy Clark looked at what is actually being permitted by her Minister of Environment and her Environment Ministry staff member Mr. Hubert Bunce with her own eyes?

Or is she only hearing the words that others are telling her?

All any of us are asking of our Premier is to look at the environmental abomination her Environment Minister and staff are permitting with her own eyes.

There is no going back from this poison, in this drinking watershed, once it is placed there. It is 'forever.'

She has the power to do something 'right and good' for the children.

One hundred and sixty children from Dwight School are all writing to Minister Lake asking him to save their water.

They are asking him to leave their drinking water alone.

How pathetic is that?

Children pleading to have their healthy drinking water not be contaminated by our Environment Ministry, here - in Canada, - in British Columbia, - in this day and age - unbelievable.

Has Premier Christy Clark looked at this draft permit with her own eyes?

Thank you,
Dr. Mackenzie Brooks
250.888.0517
Http://www.drmackenziebrooks.com

On 2013-04-09, at 10:40 AM, "OfficeofthePremier, Office PREM:EX" < Premier@gov.bc.ca> wrote:

> Thank you for your email regarding South Island Aggregates' application to discharge waste and relocate contaminated soils in the Shawnigan Lake region. We are reviewing the public input we receive on this issue and we appreciate that you have taken the time to bring your concerns to our attention. > As you may know, the Ministry of Environment has invited the public to comment on a draft version of the permit. If you have not done so already, we would encourage you to share your feedback with the Ministry's Environmental Protection Division: http://www.env.gov.bc.ca/epd/regions/vanc island/env-mgt/sia permit.htm > In the meantime, we will be sure to share a copy of your email with the Honourable Terry Lake, Minister of Environment, so that he too is aware of your concerns. > Again, thank you for letting us know that this is a priority for you. > pc: Honourable Terry Lake > > ----Original Message----> From: Dr Mackenzie Brooks [mailto:dr@drmackenziebrooks.com] > Sent: Tuesday, April 9, 2013 6:02 AM > To: OfficeofthePremier, Office PREM:EX > Cc: Judith Lavoie; Sandra McCulloch; Andrea Rondeau; Gerry Giles; Georgia Collins; Kelly Musselwhite; Susan Brice; Barb Desjardins > Subject: A chance for you to do one right thing before you lose the positional power you currently wield. > Hello Premier Christy Clark, > As one woman to another I am asking you to STOP the South Island Aggregates (SIA) permit to store a hundred thousand tonnes of highly contaminated soil for the next 50 years in the Shawnigan Lake drinking watershed. > Here is your chance to do the right thing, to use your positional power wisely, before you lose > Just this one time- truly do something for the children and not for the money. > Leave their drinking water alone.

> Contaminated soil does not belong in a drinking watershed. Anybody with one iota of common

sense knows this.

- > You know this truth. You have looked after a house. You know what water is like. It goes wherever it wants to go. Water does not follow man-made and scientist/geologist/engineer theories and rules. Water hasn't read their science books.
- > Please look at this permit application with your 'mother eyes', not through your 'politician eyes'. Look with your own eyes.
- > Please, Premier Christy Clark stop this utter insanity.
- > Get Minister Lake out of our drinking watersheds before it is too late and irreversible harm is done.
- > Do it for the children.
- > Thank you,
- > Dr. Mackenzie Brooks
- > 250.888.0517
- > Http://www.drmackenziebrooks.com

From: Dyan Freer [mailto:dfreer@cvrd.bc.ca] Sent: Tuesday, April 9, 2013 10:01 AM To: OfficeofthePremier, Office PREM:EX

Cc: Bunce, Hubert ENV:EX; Routley.MLA, Bill LASS:EX; Fleming.MLA, Rob LASS:EX;

kerry.davis@greenparty.bc.ca; steve.housser@bcliberals.com;

Georgia@shawniganwatershedroundtable.ca; Lachance, Luc ENV:EX; XT:HLTH Hasselback,

Paul; Kendall, Perry HLTH:EX

Subject: Letter to Minister of Environment re contaminated soil permit application for Shawnigan Lake area

FYI - Please find attached a letter addressed to the Minister of Environment from the Cowichan Valley Regional District Environment Commission concerning the application for a permit to dump contaminated soil at the Shawnigan Lake area. If you have any questions or concerns please address myself at the number below.

Thank you.

Dyan Freer

Administrative Assistant, Environmental Policy and Capital Projects Divisions Engineering and Environmental Services Department Cowichan Valley Regional District

175 Ingram Street, Duncan, BC V9L 1N8

Tel: 250.746.2504 Toll Free: 1.800.665.3955 Fax: 250.746.2543

E-mail: dfreer@cvrd.bc.ca

April 8, 2013

B.C. Minister of Environment PO Box 9047 Stn. Prov. Govt. Room 247, Parliament Bldgs. VICTORIA, BC V8W 9E2

Attention: Honourable Dr. Terry Lake, MLA, Minister of Environment

Dear Sir:

Re: South Island Aggregates Draft Waste Discharge Permit (PR-105809)

The Cowichan Valley Regional District (CVRD) Environment Commission was created by CVRD Bylaw 2945 in 2007 and amended for convenience in 2009 by Bylaw 3243. We are writing to add our voice to the concerns already expressed to you by the CVRD Board, the Vancouver Island Health Authority, local residents and qualified engineers regarding draft permit PR-105809 that would allow South Island Aggregates to dump millions of tons of contaminated soil at the Stebbings Road site in the Shawnigan Lake Electoral Area.

A critical component of our mandate is to develop and monitor an Integrated Environment Strategic Plan that provides strategic guidance on priority environmental issues and responses for the CVRD. Our central goal is to plan for and oversee the long-term health of our natural capital including land, air, water and all the components that make up our surrounding habitat.

We implore you to refrain from issuing the aforementioned permit. Not only does the permit enable the endangerment of the health and vitality of the area and its residents, but the lay public has not been given sufficient time to comment given the very highly specialized and technical aspects of the permit and the incomplete science on this matter. We request that you delay the process until more far-reaching, science-based assessments and studies have taken place; sufficient time has been allowed to create an informed public; and alternative locations and solutions have been considered.

Big vision. Little footprint.



It is incumbent upon us to ensure that all possible precautions have been taken to ensure a safe water supply for ourselves and future generations. We live in a rapidly changing world where we are already dealing with the environmental effects of ill-informed human practices, compounded by the need to plan for the potentially staggering effects of climate change and natural disasters that loom ominously. These challenges make it hard enough to minimize threats to our natural capital. Depositing contaminated soil at the head waters of the watershed for BC's largest Electoral Area is unacceptable.

We ask that you do the right thing for the public you are elected to represent and allow more time for input on the conditions of the draft permit.

Janna Jorgensen

Yours truly,

Jon Lefebure

Co-chairs, CVRD Environment Commission

JJ:dkf

pc:

Christy Clark, Premier of British Columbia
Hubert Bruce, Ministry of Environment
Bill Routley, MLA – Cowichan Valley
Rob Fleming, BC Opposition Critic for the Environment
Dr. Perry Kendall, Provincial Health Officer
Dr. Paul Hasselback, Vancouver Island Health Authority
CVRD Board of Directors
Warren Jones, Chief Administrative Officer, CVRD
Tom Anderson, General Manager, Planning and Development
CRD Board of Directors
Kerry Davis, Green Candidate
Steve Housser, Liberal Candidate
Georgia Collins, Executive Director, Shawnigan Basin Society
Dave Nikolejsin, Associate Deputy Minister, Environmental Assessment Office

Members of the CVRD Environment Commission

From: S22
Sent: Friday, April 12, 2013 5:40 AM
To: Bunce, Hubert ENV:EX; Lachance, Luc ENV:EX; Lake.MLA, Terry LASS:EX; Minister
ENV ENV:EX; Taje, Eddy EMNG:EX; OfficeofthePremier, Office PREM:EX;
crowder.j@parl.gc.ca; Routley MLA, Bill LASS:EX; jean@jeancrowder.ca;
steve.housser@bcliberals.com; Fleming.MLA, Rob LASS:EX; office@bcconservative.ca;
kerry.davis@greenparty.bc.ca; \$22 XT:Evans, Carollyne HLTH:IN
letters@timescolonist.com; smcculloch@timescolonist.com; cfaxnews@cfax1070.com;
jlavoie@timescolonist.com; Shane.Woodford@corusent.com; vpalmer@vancouversun.ca;
editor@cowichannewsleader.com; news@cowichanvalleycitizen.com;
editor@shawniganfocus.ca; editor@thetyee.ca; scoop@huffingtonpost.com;
newswatch@bbc.co.uk; nature@natureconservancy.ca; Go public
Subject: April 12 edition - Shawnigan Lake Watershed protection

Happy Friday, everyone. Time is running out on this issue. Have you thought about making any kind of stand against the plan to dump contaminated soil in the Shawnigan Watershed? For the safety and protection of the lake and lands used and enjoyed by the 7000 people who live here, and the untold thousands who visit, please help us. Have you thought about how this will impact us, we who seem to have no rights to protect our own environment against a financial agreement between SIA and our Provincial Government?

Why are we less important than the almight buck? How can those in power now make ill advised decisions that will affect us for decades, centuries?

This project is not well founded, it doesn't fully take into account the possible/probable consequences, and no one in power at the Provincial level seems to give a damn. We will be left holding the garbage bag when it leaks, days after the dumping begins, or decades. It matters not when it happens; it will happen, and we will be screwed. For what, I ask you, for what? There are options, this is not the best of them. The Provincial Government needs to find the alternative and REJECT THIS PROJECT RIGHT FREAKING NOW! WE DON'T WANT VICTORIA'S GARBAGE BROUGHT TO OUR WATERSHED.

We are living in fear for the future of our children, and their children. Have you even been here? We are your neighbours, your fellow citizens. Please join us in protesting the dump.

Sincerely,

From: \$22
Sent: Friday, April 12, 2013 5:40 AM
To: Bunce, Hubert ENV:EX; Lachance, Luc ENV:EX; Lake.MLA, Terry LASS:EX; Minister,
ENV ENV:EX; Taje, Eddy EMNG:EX; OfficeofthePremier, Office PREM:EX;
crowder.j@parl.gc.ca; Routley.MLA, Bill LASS:EX; jean@jeancrowder.ca;
steve.housser@bcliberals.com; Fleming.MLA, Rob LASS:EX; office@bcconservative.ca;
kerry.davis@greenparty.bc.ca; S22 XT:Evans, Carollyne HLTH:IN;
letters@timescolonist.com; smcculloch@timescolonist.com; cfaxnews@cfax1070.com;
ilayoie@timescolonist.com: Shane.Woodford@corusent.com: vpalmer@vancouversun.ca:

editor@cowichannewsleader.com; news@cowichanvalleycitizen.com; editor@shawniganfocus.ca; editor@thetyee.ca; scoop@huffingtonpost.com; newswatch@bbc.co.uk; nature@natureconservancy.ca; Go public Subject: April 12 edition - Shawnigan Lake Watershed protection

Happy Friday, everyone. Time is running out on this issue. Have you thought about making any kind of stand against the plan to dump contaminated soil in the Shawnigan Watershed? For the safety and protection of the lake and lands used and enjoyed by the 7000 people who live here, and the untold thousands who visit, please help us. Have you thought about how this will impact us, we who seem to have no rights to protect our own environment against a financial agreement hetween SIA and our Provincial Government?

Why are we less important than the almight buck? How can those in power now make ill advised decisions that will affect us for decades, centuries?

This project is not well founded, it doesn't fully take into account the possible/probable consequences, and no one in power at the Provincial level seems to give a damn. We will be left holding the garbage bag when it leaks, days after the dumping begins, or decades. It matters not when it happens; it will happen, and we will be screwed. For what, I ask you, for what? There are options, this is not the best of them. The Provincial Government needs to find the alternative and REJECT THIS PROJECT RIGHT FREAKING NOW! WE DON'T WANT VICTORIA'S GARBAGE BROUGHT TO OUR WATERSHED.

We are living in fear for the future of our children, and their children. Have you even been here? We are your neighbours, your fellow citizens. Please join us in protesting the dump.

Sincerely, S22 Shawnigan Lake, BC

, Shawnigan Lake, BC

Outgoing response:

Thank you for your email regarding South Island Aggregates' application to discharge waste and relocate contaminated soils in the Shawnigan Lake region. We are reviewing the public input we receive on this issue and we appreciate that you have taken the time to bring your concerns to our attention.

As you may know, the Ministry of Environment has invited the public to comment on a draft version of the permit. If you have not done so already, we would encourage you to share your feedback with the Ministry's Environmental Protection Division: http://www.env.gov.bc.ca/epd/regions/yanc island/env-mgt/sia permit.htm

In the meantime, we will be sure to share a copy of your email with the Honourable Terry Lake, Minister of Environment, so that he too is aware of your concerns.

Again, thank you for letting us know that this is a priority for you.

pc: Honourable Terry Lake

From:

822

Sent: Thursday, March 21, 2013 9:23 PM To: OfficeofthePremier, Office PREM:EX

Subject: Shawnigan Lake

Dear Madame Premier,

As a very concerned citizen of Shawnigan Lake I respectfully ask that you take a close look at the upcoming decision by the Environment Minister to allow SIA Industries to develop a contamination waste dump site just above the head waters to Shawnigan Lake. The risk management plan is far from full proof and I fear that this poorly thought out decision will eventually lead to the toxic contamination of this lake.

822

From:

922

Sent: Thursday, March 21, 2013 6:31 PM To: OfficeofthePremier, Office PREM:EX

Subject: Shawnigan watershed

We are sending our plea to you to STOP the contamination of the Shawnigan Watershed. Do not allow the proposal to go ahead, It appears that common sense is absent in this decision so far, please help us change that.

Regards,

S22

Sent from my iPad

From: S22

Sent: Thursday, March 21, 2013 5:15 PM

To: **\$22**

Subject: SIA Draft Permit

We can't believe that permits have been granted to dump contaminated soil mainly from the Greater Victoria area into the Shawnigan Lake water shed, while only a mile or so away, the Sooke Lakes which supply water to Victoria is fenced in with warning signs of the dire consequences of even setting foot inside. Seems totally unfair and irresponsible. The editorial page of this morning's Times Colonist seems to agree.

Sincerely

82

Shawnigan Lake Residents.

From:

s22

Sent: Thursday, March 21, 2013 4:24 PM To: OfficeofthePremier, Office PREM:EX

Subject: Shawnigan Watershed

Dear Premier Clark,

It has taken decades of work, by previous governments and the resources of this province to put in place;

- the Ministry of the Environment
- Riparian Regulations
- "Best practices" guidelines

Why would we ignore or put aside all this work to allow a contaminated fill site and associated operations within or near the riparian area of a creek that flows into Shawnigan Lake? The prospect of this dump has already scared away prospective buyers from our project { web link below}.

After watching that meteor hit Russia recently, we are now aware that there is no such thing as "safe" storage for contaminated/hazardous stuff. The future is about not creating this stuff in the first place.

I'm sure you are aware there are other options for handling contaminated soils.

Let's put the resources into remediation to decontaminate the soils rather that move the problem to another location. { in this case, an environmentally sensitive watershed }.

Please rescind the draft permit for SIA's dump.

Thanks for hearing my comments and request.



From:

S22

Sent: Thursday, March 21, 2013 2:52 PM To: OfficeofthePremier, Office PREM:EX

Subject: Please stop the SIA contaminated soil permit

Dear Christy Clark,

I'm writing as a concerned member of the Shawnigan Lake community and want you to know that I oppose the SIA contaminated waste permit. I get my drinking water from the lake and feel that my health, as well as those of my family and friends, will be put in danger due to the proposed waste dumping. I have seen the plans, heard the disputes, and done my research, and even SIA has stated that there is risk involved in this operation.

Please stop this permit. It isn't fair to sell our health like this.

There are other ways and other locations to set up contaminated soil sites that do not involve a community's watershed.

Sincerely,



From: S22

Sent: Thursday, March 21, 2013 11:00 AM To: OfficeofthePremier, Office PREM:EX

Subject: Pristine Shawnigan Lake

Dear Madam Premier:

Please deny SIA's application to poison Shawnigan Lake's watershed.

Sincerely, \$22

From:

S22

Sent: Monday, March 25, 2013 2:47 AM
To: OfficeofthePremier, Office PREM:EX
Subject: protecting Shawnigan families' health

Dear Christy..I have been a big fan and supporter of yours having met you at some Liberal party fundraisers around Victoria. You know our Shawnigan Lake watershed is being threatened by the SIA contaminated waste dumping application. My family are imploring you to use your authority to stop this insane project while you still can. Thanking you in anticipation...

Page 123 OOP-2013-00294 From:

S22

Sent: Sunday, March 24, 2013 6:31 PM To: OfficeofthePremier, Office PREM:EX

Subject: SIA Contaminated Soil in Shawnigan Lake

Dear Christy Clark,

I am writing to you to let you know that I do NOT approve of Permit 105809 for the Treatment, Utilization, and Landfilling of Contaminated Soil for South Island Aggregates/Cobble Hill Holdings Ltd. at 640 Stebbings Road. I do NOT approve of South Island Aggregates contaminated soil being dumped into the Shawnigan Lake watershed. The draft permit released on March 19th has a 14 day comment period, during which I expect you will be hearing a lot of disapproval from the community.

Dumping 100 million tons of contaminated soil into Shawnigan Lake? This CANNOT happen. SIA's permit must be declined. Canada has the world's largest source of drinking water and still we cannot take this resource for granted. It seems inhumane that we need to fight to keep our drinking water safe and clean, yet here we are. Chemical and microbial contaminants do not belong in our lake. Even if the water is treated prior to drinking, toxic heavy metals will still be present in our headwaters. We can't let these contaminated soils get into our water in the first place. Hydrocarbons, benzene, toluene, ethylbenzene, styrene, and other compounds DO NOT belong in our drinking water.

Shawnigan Lake just so happens to be my home. No matter where I am living, Shawnigan Lake will always be my home. My family lives there, my friends families live there. The community's health is of utmost importance. Life depends on water. Water is the primary mode of transportation for all nutrients in the body. It flushes out disease causing wastes and bacteria. It is absolutely essential that we keep our water clean.

We need to respect a resource that is so vital to life. In my own life, I wouldn't trade anything for those days spent around the lake. Time slows down and is sometimes non-existential. Vegetation grows wild and untamed. There are layers upon layers of trees; temperate forest surrounds the lake. All is beautifully nourished, and often turned to gold by the golden hour as the sun dips into the lake. My kindred spirit was raised around that lake. Now that lake needs our protection.

Clean water is being threatened world wide in communities every day. We can't sit in silence while the waters of our homeland are contaminated. We will fight to protect our watershed. SIA's permit if approved would allow South Island Aggregates to "receive, treat, utilize and landfill contaminated soil and ash to the cavity created by an advancing hard rock quarry". We DO NOT accept this.

Our community is coming together and we are demanding that our voices be heard. The federal government has gutted environmental protection laws, and the BC government has undermined environmental protection, so the only thing protecting our water is our people. With the May 14th election just around the corner we are going to make one thing clear: in order to obtain our

votes, the elected party must be willing to pull SIA's permit if it's approved after the appeal process.

Please take all of this into consideration.

Sincerely,

S22

From: \$22

Sent: Sunday, March 24, 2013 12:36 PM To: OfficeofthePremier, Office PREM:EX

Cc: Lake.MLA, Terry LASS:EX

Subject: Contaminated soil in Shawnigan Lake

Premier Christy Clark,

I wish to protest the proposed dumping of contaminated soil in the Shawnigan Lake water shed. This is not a matter of not in my back yard, this is a matter of common sense. I know where the proposed sight is and its location would certainly lead to contamination of the surrounding area. Please put an end to this lunacy now.

Thank you,

522

From: S22
Cont. Friday, March 22, 2013, 3,33 PM

Sent: Friday, March 22, 2013 3:33 PM To: OfficeofthePremier, Office PREM:EX

Cc: steve.housser@bcliberals.com; Routley.MLA, Bill LASS:EX Subject: Waste discharge permit in the Shawnigan Lake Watershed

Dear Premier:

Greetings from S22 We hope all is well. We are writing you this letter in response to the proposed Waste Discharge Permit for the South Island Aggregate contaminated soils facility in the Shawnigan Lake Watershed.

As a home owner at Shawnigan Lake for the past forty years, we are horrified to see a proposal that would dump hundreds of thousands of tons of contaminated soil in the headwaters of the Shawnigan Lake Watershed. ThIs watershed is the source of drinking water for more than 7,000 people in the Shawnigan Lake area! We can't believe that a properly considered government decision has been made and would strongly urge you to have your Environment Minister, Terry Lake, reverse his course and heed the concerns of the Cowichan Valley Regional District and the Shawnigan community.

thanks for your attention,

\$22

From:

522

Sent: Friday, March 22, 2013 2:25 PM To: OfficeofthePremier, Office PREM:EX

Subject: Shawnigan Lake

Dear Premier Christy,

PLEASE turn your attention to the proposed dumping of contaminated waste by SIA in the beautiful Shawnigan Lake area. Do you know what is about to happen?

As a mother and protector of the environment for all our children, you must lead your Environment Minister Terry Lake in the right direction.

As Steve Housser so aptly stated, "this is sheer lunacy"!

I can only imagine that you are not informed on this issue because if you were you would not let this happen!!

Thankyou for your attention,

S22

From: \$22

Sent: Tuesday, March 26, 2013 12:36 PM

To: Bunce, Hubert ENV:EX; Lachance, Luc ENV:EX; joe.sequin@gov.bc.ca; eddt.taje@gov.bc.ca; OfficeofthePremier, Office PREM:EX; crowder.j@parl.gc.ca; Routley.MLA, Bill LASS:EX; steve.housser@bcliberals.com; Fleming.MLA, Rob LASS:EX; office@bcconservative.ca; kerry.davis@greenparty.bc.ca; carrollyne.evans@viha.ca Subject: Shawnigan Lake as a dumping ground

Hello,

I have been hearing of the possibility of Shawnigan Lake being used to dispose of contaminated soil in the near future.

As someone who grew up in this community I understand that this seems like those oppose are just nay sayers expressing the common "not in my back yard" thought patterns but I really believe this is deeper then that.

Though I am no longer a resident of Shawnigan lake many friends and family members of mine are and I'm concerned that the drinking water which was always somewhat pure from our watershed is in jeopardy.

You see, it's not just in our back yard where folks want to be dumping. Its in the food we cook, the water we drink and tea we brew, its in the showers and baths we hope to cleanse ourselves with. In hope of making a few dollars these people are contaminating the entirety of the lives of over 8000 people.

I'm not sure how much power the person reading this will have against this action but if you care about your fellow man you will at very least support our cause.

From: s22
Sent: Monday, March 25, 2013 12:57 PM

To: OfficeofthePremier, Office PREM:EX

Subject: Toxic Waste Dumping in Shawnigan Lake watershed

The application for a permit to dump tons of toxic waste in the watershed should be DENIED.It is irresponsible to allow this type of environmental contamination with possibilities of poisoning groundwater or Lake Shawnigan itself.

The proper course of action would be to construct a toxic decontamination facility in a suitable area and render such waste to be non-toxic. This would be a far better use of tax dollars than many government expenditures, including expenditures for a toothless environmental review process.

Sincerely,

S22

of lip service to environmental protection and subsequent inaction that you could imagine.

From: S22

Sent: Wednesday, March 27, 2013 12:46 PM To: OfficeofthePremier, Office PREM:EX Subject: Shawnigan Lake Contaminated soil

Dear Ms. Clark,

I am taking this opportunity to inform you of our strong opposition to the impending approval for SIA to proceed with its plan to use the site in the Shawnigan Lake watershed.

The research indicates that this is not an appropriate site. Is it true that once again you choose to ignore the findings of your own consultants?

Why do you (we tax payers) even bother with the expense and pretense of hiring consultants? What financial benefits does this company offer you?

Regards, \$22 Ladysmith

From:

Sent: Wednesday, March 27, 2013 9:21 AM To: OfficeofthePremier, Office PREM:EX

Subject: Stop Proposed Contaminated Fill Site in Shawnigan Lake, BC Watershed

Dear Premier Christy Clark,

Please, please, please do not allow contaminated soil to be dumped in our watershed here at Shawnigan Lake, BC, by South Island Aggregate.

Please ask yourself...."would I take the tiniest, most remote chance on my family's health and allow contaminated soil to be dumped in my community's watershed?" I hope it would matter to you as much as it matters to me and my community! It only takes one small, unforeseen incident to affect thousands of families in many, many ways.

These are the types of contaminants that will be accepted (and who knows what else could accidently find it's way unnoticed) and therefore be a very real threat of seeping into our life giving lake..... soils contaminated with hydrocarbons, specifically soils contaminated with Benzene, toluene, ethylbenzene, xylenes (BTEX), styrene, Methyl tertiary butyl ether (MTBE), Volatile petroleum hydrocarbons (VPHs), Light and heavy extractable petroleum hydrocarbons (LEPH/HEPH), Polycyclic aromatic hydrocarbons (PAHs), Chlorinated Hydrocarbons, Phenolic Substances, chloride, sodium and Glycols.

Can 100,000 tonnes per year of dumping contaminated soil really be carefully monitored and kept out of our lake when it is in an area so close?

Please respond to my email and reassure me and my children that you would never allow contaminated soil to be dumped into our watershed, knowing the very real and potential danger to human and animal lives as well as a very delicate ecosystem, which in my opinion, is already at risk

Thank you for your review and attention to this matter!

Sincerely,

822

From:

Sent: Tuesday, April 2, 2013 10:38 AM To: OfficeofthePremier, Office PREM:EX Subject: Toxic Dumping near Shawnigan Lake

Dear Premier Clark

I just want to add my voice to the overwhelming opposition to allowing the "storage" or dumping of toxic wastes at the Stebbings Road site. I know what will be going in that site because I have friends and relatives who create some of this toxic product when they work on ships. Lead, mercury, arsenic etc will be among the contaminated waste destined for that site. Please have your Environment Minister Terry Lake deny this permit for the sake of the health of our community.

Sincerely,

\$22

From: Sent: Monday, April 1, 2013 4:02 PM To: OfficeofthePremier, Office PREM:EX Subject: Shawnigan Water Shed Dear Christ Clark I don't get it!! and for this to happen, cyrd law is, a Biologist must review your property to find any riparian areas and file a report with the ministry and cyrd with recommendations for riparian and environmental protection to the land so that a development of a house will cause no danger to it. s22 for an RAR report which then must go through several meetings and then an approval vote by council. Yet SIA which is in to have assessed and to have reggs put in place so the property is never harmed. Deer roam every where and what ever contamination they pick up on their feet they will track with them. Not to mention if they eat anything off this soil will they also be poisoned or contaminated to? If so then their droppings are contaminated. Deer go to the lake to drink. Are they dropping their contaminated feces and urine on the lake shore too? Will this then not contaminate the fish that our Bald Eagles (a protected species) catch and eat? Can u see the domino affect? I can. This example comes to mind. For years Doctors said to women that Premarin pills were ok for birth control. PMU, pregnant mare urine. PMU farms popping up everywhere. It took years to find out why so many women were having heart attacks, breast cancer, ect ect ect. It was the Premarin. The tests came back so bad that they stopped prescribing it and PMU farms were closed. I believe there is only one farm left in Manitoba. My point is... it some times takes years for the fall out and then the sh t hits the fan. Please stop the SIA catastrophe from becoming reality!!!!

S22

From.

Sent: Sunday, March 31, 2013 6:45 PM To: OfficeofthePremier, Office PREM:EX Subject: toxic waste at Shawnigan Lake

Dear Premier Clark:

I have just become aware of a plan to dispose of toxic waste from Victoria in an area close to Shawnigan Lake. I was disturbed to learn that there had been no discussion with residents of the area or even with those who are well informed of the environmental impact of disposing the waste in that area. I urge you to take a strong stand against this plan as it would contaminate Shawnigan Lake and the ground water of that area. Please listen to the people on this one. It is very important.

Thank you for your attention to this matter.

Sincerely,

From: \$22 Sent: Sunday, March 31, 2013 2:40 PM

To: OfficeofthePremier, Office PREM:EX Subject: draft permit for contaminated waste

March 30 2013

Re: Draft Permit to South Island Aggregate on the Malahat to dump 100,000 tonnes a year, up to 5 million tonnes over 50 years, of contaminated waste into the Shawnigan lake watershed and ultimately the Saanich Peninsula

When you examine aerial photos of the South Island Aggregate quarry site, perched high on a hill above Shawnigan Lake, with Shawnigan Creek flowing right through this site, it is obviously an abysmal choice for a contaminated waste site.

Please consider this: not only will the Shawnigan watershed be contaminated, but as it empties into the Saanich Inlet, all of eastern Vancouver Island will ultimately be affected. Chemicals such as polychlorinated biphenals, (PCB's), benzene, toluene, dioxins, mercury, cadmium, arsenic will be leaching forever into the Shawnigan watershed and ultimately infiltrate the Saanich inlet. It will recircle to haunt everyone here.

Furthermore, Bamberton, on the Saanich peninsula, is linked to the South Island Aggregate quarry site via a major vein of porous limestone that runs under the site Look at the Lowen hydrogeological report to the Shawnigan Residents Association. "The onsite, (SIA), well record, (water well tag # 86152, Appendix A), indicates fractured limestone beneath the subject site...limestone is a soluble rock which will be susceptible to solution weathering from acidic landfill leachate. These fractured rocks provide little protection for the underlying aquifer." The Frostads, two geologists well versed on Southern Vancouver geology, have cited in their analysis that water well (tag # 95485) located 300 metres from the quarry site, has abundant calcite (limestone) content. This corroborates the common knowledge that the SIA site is above a vein of limestone that runs down the eastern side of Vancouver Island and ends at Bamberton, This evidence needs to be addressed before we end up destroying our precious salmon run at Goldstream which is adjacent to Bamberton, to name just one possibility from this negligent permit.

Wake up Victoria! Wake up everybody living in the watersheds of Southern Vancouver Island! Wake up Saanich Peninsula! Write your letter to Christie Clarke insisting she protect our water now. It is her Minister of the Environment, Terry Lake, who is pushing this thing through. We want our clean water protected, not sold as a toxic waste dump. Thank you.

S22 Shawnigan Lake

From:

Sent: Thursday, March 28, 2013 9:03 AM To: OfficeofthePremier, Office PREM:EX

Cc: Lake.MLA, Terry LASS:EX

Subject: SIA's Application to Poison Shawnigans Watershed

Dear Premier Christy Clarke & Environment Minister Terry Lake

I know your time is valuable so I will keep this short and to the point. South Island Aggregate, (SIA) has applied for a permit to allow the Capital Regional District to dump contaminated soil at their site, which is located at the top of Mount Baldy. Now, from the perspective of a concerned resident,

s22 and who also drinks from his well, it seems quite absurd that this proposal could even be considered...let alone approved. It is pretty clear to me you don't dump toxic on top of mountains!

For the sake of our right to clean drinking water, our property values, our community's quality of life (to swim in the lake) and our children, please don't allow this permit to be approved. SIA has publicly made it known they aren't interested in being part of our community in an email and by their lack of attendance at community gatherings, they recently bought a water filtering company and have positioned one of their machines right in the middle of our town. I have no respect for businesses that intend to profit from hurting the communities watershed and then intend to profit by selling us water, nor for any government that approves such idiotic behavior.

You know what the right thing is to do, thanks in advance for helping us save our watershed.

In Community

S22

From:

522

\$22

Sent: Tuesday, April 2, 2013 9:11 PM To: OfficeofthePremier, Office PREM:EX Subject: Shawnigan Lake Watershed

Dear Ms Clark,

As you know, the SIA is applying to dump contaminated soil in Shawnigan Lake's watershed and the permit process seems to be moving forward despite the concerns of our community!

"The protection of our drinking water is the key responsibility of Government and the Ministry of the Environment...in this case, Christy Clark's Government has proven that support of big business continues to come ahead of the safety of our community and places our families at long term risk" SRA Director Sally Davies.

Please take immediate action, Ms Clark, to reverse the permit for SIA and protect our watershed! Thank you.

Regards,

S22

Original Message
From: S22
Sent: Thursday, April 4, 2013 7:54 PM
To: OfficeofthePremier, Office PREM:EX
Subject: Contaminated fill site shawnigan creek protection.
premier Christy Clark
my name is \$22, I am writing to you to please stop, the dumping of contaminated
soil in Shawnigan lake, everybody around here is very upset! \$22
all live in Shawnigan lake, I would really appreciate your full attention to this
matter.thanking you \$22
Sent from my iPad

From: \$22

Sent: Sunday, April 7, 2013 12:33 PM To: OfficeofthePremier, Office PREM:EX

Subject: SIA's Toxic Dump Permit - Shawnigan Lake

Christy Clark,

I reside in Victoria but have the privilege of spending part of my time at Shawnigan Lake. I was appalled when I heard about the proposed toxic waste dump, and what further shocked me was the fact that I hadn't heard anything about it earlier, almost too late to do anything. I couldn't help but wonder if it was somehow kept this way on purpose. When you think about the health of families and on going generations and as well the health of the ecosystem even if there were a .00001% chance of contamination, to me that is still a far too high of a risk. You can't put a price on people's lives nor that of the planet. To those of you who would even consider allowing this permit, I couldn't imagine living with that decision.

Please be part of the solution, not the problem, help end this now.

Sincerely;

From: \$22

Sent: Sunday, April 7, 2013 10:33 AM To: OfficeofthePremier, Office PREM:EX

Subject: Shawnigan Lake - Decline SIA's permit to dump contaminated soil.

Christy Clark,

My family has owned property on s22 it currently has s22 that spend quality time together and enjoy the natural beauty. We plan to keep the property in the family for future generations but I can't imagine passing along something to them that may be harmful to their health.

That is not a legacy I want to be part of.

When making decisions for a permit to allow a toxic soil dump near our water supply and that of the lake, you have to ask yourself is that a legacy that you want to be part of, or better yet responsible for? I'm asking you for the sake of my family and all the people in the Shawnigan Lake area please do not allow the permit to be passed, our health and that of our families is far too important.

S22

From: S22

Sent: Saturday, April 6, 2013 11:39 AM To: OfficeofthePremier, Office PREM:EX

Subject: Shawnigan Lake drinking water concerns

short and to the point.

S22

you must stop the South Island Aggregate permit currently being applied for.

as a Liberal member and follower for many years, if this permit is allowed to go through s22 in the next election. please do the right thing and stop the permit application.

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From:

04Z

Sent: Friday, April 5, 2013 8:58 PM

To: OfficeofthePremier, Office PREM:EX

Subject: Southern Vancouver Island Watersheds at risk

Hello.

I am writing to express my concern regarding the proposed contaminated soil dump site in the south Cowichan area. I grew up in Shawnigan Lake and enjoyed the pristine beauty it had to offer whilst I was a child. Through my teens and into my early twenties I have witnessed harsh amounts of environmental destruction from unchecked clear cut logging. The area has become parched and arid and erosion has taken its toll enough on the lake. Now, with this proposed contaminated soil dump site proposal... Is the Provincial government ready to see a community completely inhabitable? But it is not just Shawnigan Lake that would be affected. It is clear that the Sooke Lake watershed would indeed, in time... Receive leeched toxins from this dump site. I urge you and your ministry to protect the lives of all of the South Island residents and put a stop to this ludicrous plan.

I can be reached at szz for further discussion regarding this matter. Or by post mail at



Your urgent action to stop this is your duty for all future generations of South Island residents.

Kind regards,

000

From:

S22

Sent: Friday, April 5, 2013 9:17 AM

To: OfficeofthePremier, Office PREM:EX

Subject: DUMPING CONTAMINATED SOILS

Christie Clark,

Premier of British Columbia,

We would like to protest, in the strongest possible terms, the dumping of Victoria's contaminated soils in neighbouring jurisdictions such as the Cowichan Valley.

This is irresponsible and completely unfair to local residents - fellow BC citizens - who must then deal with the associated costs of contaminated groundwaters and/or soil remediation. Victoria developers who are the ones making large profits turning undeveloped land and old industrial sites into expensive housing projects need to step up and bear the costs of dealing with the waste soil that they produce.

The issue of dumping Victoria's sewage waste into a global commons - the strait of Juan de Fuca - has been a point of contention for many years, and rightly so.

But imagine in Victoria intended instead to pipe its waste into Vancouver harbour, thereby cleaning its own beaches at the expense of Vancouverites.

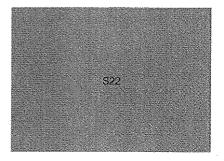
Would not such as act be rightly viewed as a 'gross' injustice?

Similarly, if Vancouver was able to corral the exhaust of the million vehicles clogging its highways, and then to release that polluted air in downtown Victoria, would not Victorians - developers foremost among them- be quick to point out the inequity of such an act?

Yes, remediation of polluted waters, air and soil is expensive, but it is only fair that these costs be borne by those who produce them; every community, regardless of the cost, has an obligation to deal with its own waste.

Therefore, we call upon you and your Ministry to immediately revoke the draft permit that would allow South Island Aggregate to dump toxic soils within the Cowichan Valley, and to pass legislation that would ban this practice throughout the province.

Sincerely,



From: \$22

Sent: Monday, April 8, 2013 8:28 PM To: OfficeofthePremier, Office PREM:EX

Subject: Contaminated Soil Dump in Shawnigan

Dear Premier,

I have been a Shawnigan Lake/Mill Bay resident since [S22] I am very concerned about the possibility of having contaminated soil dumped in our watershed. The risk to ground water, Stebbings creek and Shawnigan lake is very real. People rely on the ground water in the area for drinking. Salmon and trout rely on Stebbings creek and Shawnigan lake for their livelihood. It is inconcievable that we would even consider such an area for a contaminated soil disposal site.

I urge you to do what you can to keep contaminated solis out of the Shawnigan watershed so the people of the comunity and the fish in the water system can all live a healthy life.

Sincerely,



----Original Message----

From:

Sent: Monday, April 8, 2013 10:16 AM To: OfficeofthePremier, Office PREM:EX

Cc: \$22

Subject: SIA toxic waste dump

Premier Christy Clark,

I am writing to express my extreme opposition to South Island Aggregate obtaining a dumping permit allowing large quantities of toxic waste deposited on Stebbings Road in the Shawnigan Watershed.

The risks are far too great to allow this permit to be issued. The risks to our community's drinking water and to the health of our residents and our children are far too great. The damage could be irreversible. No one can promise us that this dump will be 100% safe, that errors will not be made. You cannot promise me that my drinking water will be protected. You cannot promise me that my children's health will not be compromised!

How any marginally intelligent and responsible individual would even consider this is lunacy. As a Shawnigan resident and as a mother of three children, I implore you to do the right thing. Do not provide South Island Aggregate with this soil dumping permit. In doing so, YOU will be holding the smoking gun.

Sincerely,

322

From: \$22

Sent: Friday, April 5, 2013 10:04 PM To: OfficeofthePremier, Office PREM:EX

Subject: Fwd: No Contaminated Waste site! - YouTube

Dear Christi Clark.

This video I am sending you is about a very serious situation happening on Vancouver Island in our Shawnigan Lake and Victoria watersheds. A contamination site in two major water sheds? What are your ministers doing? Aren't you supposed to be protecting the environment and the people. If this goes through you will have a major catastrophie on you hands not to mention a whole lot of sick people with cancer. Please consult with Mr. Lake and find out why he let the first draft go through? Isn't the environment minister supposed to protect the environment not destroy it. This is a very serious situation that threatens our drinking water. Please, please read the letters you have been sent, inform yourself on this situation.

More scientific studies need to be done since other engineers do not agree with SIA studies. But really, why would anyone even contemplate a contamination site for toxic materials in a watershed? It's unthinkable!! There are different and more modern ways of disposing these materials. Please read Mr. Lowen's report that I sent you. This needs to be dealt with apparently By April 9, 2013.

Thank you,

Sent from my I pad

522

Begin	forwarded	message:
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From: \$22

Date: 5 April, 2013 6:20:33 PM PDT

To: "Undisclosed Recipients" \$22

Subject: Fw: No Contaminated Waste site! - YouTube

Reply-To: \$22

You Tube and the facts about the SIA proposed permit...

In community,

522

Check out this video by Paul Manly.

Shawnigan Lake - No Contaminated Waste site! http://www.youtube.com/watch?v=nkhs7xgXPjM&feature=voutu.be From: S22

Sent: Thursday, March 21, 2013 8:29 AM To: OfficeofthePremier, Office PREM:EX

Cc: Bunce, Hubert ENV:EX; Lachance, Luc ENV:EX: Lake, Terry ENV:EX

Subject: Serious Problem in Shawnigan

March 21, 2013

To:

Premier Christy Clark

Minister of the Environment Terry Lake

Mr. Luc Lachance, Sr. Environmental Protection Officer Mr. Hubert Bunce, Head, Environmental Management Business & Standards

It is beyond my comprehension that the SIA application to dump contaminated soil in the Shawnigan Lake watershed has gone this far.

Because the decision reached defies all logic and common sense, and feels as though it borders on criminal negligence, one can only ask the following:

- Does the government feel that the "collateral damage" of poisoning the drinking water source of 7-8000 people is a small price to pay under the circumstances?
- 2) Are the civil servants charged with the risk analysis of this situation incompetent?
- Is corruption rampant in this ministry and is somebody being rewarded for looking the other way?

It has been scientifically demonstrated that there is no way for SIA or its engineers to guarantee that this proposed site will not leak under normal circumstances, let alone under the possibility of earthquakes (there was a recent earthquake centered at location 48.497N, 123.622W. Ironically that's approx 4km as the crow flies from the SIA quarry) or following a one-in-a-thousand-year overwhelming rainfall.

It is also completely ridiculous to even consider self inspections. This has been proven, in this country, to be an inadequate system with regard to water protection or food production. Further, a private company can declare bankruptcy overnight, leave a mess and "walk away", dumping the responsibility, expense and headache on the community.

It is government inaction, such as this, that has moved populations to civil disobedience and violence. There are many people in Shawnigan that are more than angry. They are absolutely incensed that this application is being moved along.

Unless the plug is pulled on this very quickly, the "self imposed" negative fallout, such as illness, dropping property values, lawsuits and possible violence will be a legacy that BC and its government will wear for a long time.

Hello! . . . is anybody listening?

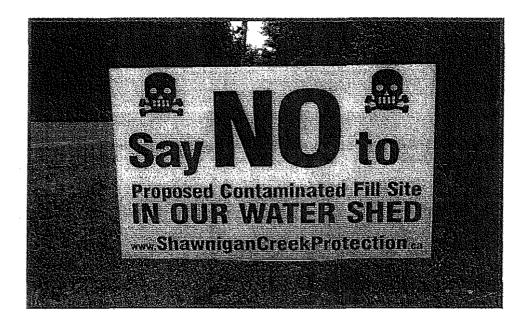
To: OfficeofthePremier, Office PREM:EX; Lake.MLA, Terry LASS:EX Subject: Shawnigan Is Angry

Dear Premier Christy Clark and Environment Minister Terry Lake,

I am a \$22 I drink lake water, so do my parents and children; so do our friends. I realize that contaminated soil has to go somewhere, but our drinking water is not the right location. Please seriously consider the facts before you decide that some people's well being is worth more than others. We are citizens too and we have hopes for our watershed that go well beyond the 50 year life span of the pit. They need to be taken into consideration.

Sent: Wednesday, March 20, 2013 11:09 PM

Shawnigan Is Angry



Despite the Shawnigan community providing ample justification to deny.

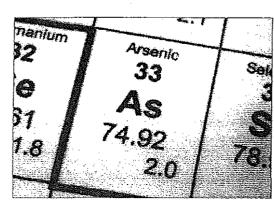
SIA's application to poison our watershed, the Province has every intention of allowing them to do so. We cannot permit this to happen.

Your drinking water is at risk.

Your property value will be lowered.

Shawnigan is being sacrificed for the benefit of the Capital Region.

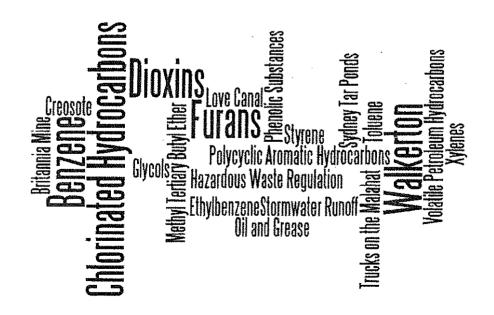




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We all need to wake up and pay attention. Don't assume there is someone in government protecting our interests. Everything is not under control and things will go wrong if this project proceeds. Please contact the Premier and the Environment Minister. Do it now. A draft permit has been issued - the clock is ticking - if we don't act Shawnigan will suffer!

Premier Christy Clark: premier@gov.bc.ca
Environment Minister Terry Lake: terry.lake.mla@leg.bc.ca



From: Dr Mackenzie Brooks [mailto:dr@drmackenziebrooks.com]

Sent: Wednesday, March 20, 2013 10:21 PM

To: OfficeofthePremier, Office PREM:EX; Lake, Terry ENV:EX; Minister, ENV ENV:EX Cc: bruce@fraserforshawnigan.ca; Loren Duncan; Gerry Giles; Routley.MLA, Bill LASS:EX; Kerry Davis; CFAX News; Sandra McCulloch; Tamara Leigh; Rob Hutchins; Tom Anderson; Warren Jones; Dave Hutchison; Shawnigan Focus; Shawnigan Residents Association; CBC Victoria; CBC Vancouver; Judith Lavoie; Mike Walker; Jean Crowder

Subject: Fwd: Shawnigan Is Angry

Hello Premier Christy Clark,

The watersheds and drinking watersheds belong to the present community members and to future generations! Not to some business men who will make double-binned truck loads of money at the expense of our life-source. Water is the life-source for human-beings, fish, insects, birds, animals, flora, and fauna in the present and in the future. WE HAVE A RESPONSIBILITY as citizens, government employees, and elected officials to take a leadership role thinking and acting from future generational equity when policy is being made and permits are being issued.

Premier Clark, I invite you to name one thing that mankind has made that nature does not break down over time - besides contaminated and toxic waste products. That is what will be stored in our community's drinking watershed, like a ticking time-bomb, for all eternity, that is- until the containers start to leak.

This is your legacy to the families in Shawnigan Lake, Premier Clark. Please stop this environmental abomination.

Thank you,
Dr Mackenzie Brooks
Dr@Drmackenziebrooks.com
Http://www.drmackenziebrooks.com

Begin forwarded message:

From:

Date: March 20, 2013, 9:19:19 PM PDT

Daic. Match 20, 2013, 9.19.191 W11 D1

Subject: Shawnigan Is Angry - Please Distribute

From:

S22

Sent: Friday, March 22, 2013 8:09 AM

To: OfficeofthePremier, Office PREM:EX; Lake.MLA, Terry LASS:EX

Cc: Lachance, Luc ENV:EX; editor@shawniganfocus.ca; letters@timescolonist.com; news@cowichanvalleycitizen.com; editor@cowichannewsleader.com; Routley.MLA, Bill LASS:EX; Horgan.MLA, John LASS:EX; Sarah Fraser; Dix.MLA, Adrian LASS:EX;

info@rickmercer.com

Subject: South Island Aggregates Draft Permit

March 22, 2013

Dear Premier Clark and Minister Lake:

Our family has had the privilege of owning property on Shawnigan Lake since the \$22 lt seems inconceivable that the current government would allow the potential poisoning of our watershed from the proposed South Island Aggregates contaminated waste dump. This affects the health of our family and 8000 other residents of this area — a situation that would happen if you owned property in this area.

The process of approval has been flawed and public input has been disregarded. At the public hearing in the summer of 2012, Senior Environmental Protection Officer, Luc LaChance (who also announced the draft permit) told the approximately 300 residents present that all input would be welcomed and thoroughly investigated. This has not happened. Severely critical technical reports of the proposal have been disregarded. The public's overwhelming opposition has seemingly fallen on deaf ears.

The timing of this week's announcement indicates an arrogance from the Ministry and total disregard of the public interest. Even the local Liberal Candidate, Steve Housser, has vehemently rejected the proposal, stating, "Not only is the site above a major aquifer, it is also right beside a stream that flows directly into Shawnigan Lake. This is lunacy."

With the impending election, political leadership is certainly under a microscope. We implore you to use your positions as leaders of the people to make the sensible and right decision: permanently remove the draft permit for SIA and protect the people of Shawnigan Lake.

Why aren't you listening? What's the hurry?

Sincerely.

823

From

3//

Sent: Friday, March 22, 2013 9:35 AM

Subject: correction on previous letter re SIA Permit

March 22, 2013

Dear Premier Clark and Minister Lake:

Our family has had the privilege of owning property on Shawnigan Lake since the early seems inconceivable that the current government would allow the potential poisoning of our watershed from the proposed South Island Aggregates contaminated waste dump. This affects the health of our family and 8000 other residents of this area — a situation that wouldn't happen if you owned property in this area.

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With the impending election, political leadership is certainly under a microscope. We implore you to use your positions as leaders of the people to make the sensible and right decision: permanently remove the draft permit for SIA and protect the people of Shawnigan Lake.

Why aren't you listening? What's the hurry?

Sincerely,

----Original Message----

From: \$22

Sent: Thursday, March 21, 2013 12:48 PM

To: OfficeofthePremier, Office PREM:EX; Lake.MLA, Terry LASS:EX

Cc: cowpress@shaw.ca; coswin@blackpress.ca; letters@timescolonist.com;

editor@shawniganfocus.ca; news@cowichanvalleycitizen.com;

editor@cowichannewsleader.com; news@897sunfm.com; info@sramail.ca; cfuvcad@vic.ca;

director@uvic.ca; editor@sightline.org

Subject: Draft permit to dump toxic soil in the Shawnigan watershed

Premier Clark and Minister Lake,

I am writing to express my shock that the Government of British Columbia through its Ministry of Environment has issued a draft permit, with a token 14 day public comment period, sanctioning South Island Aggregate (SIA) to dump toxic soil within the Shawnigan watershed.

By issuing this draft permit the government has curiously bestowed its blessing upon SIA and its absurd, though likely profitable, proposal while threatening the right of over 7,000 Shawnigan residents to clean drinking water. How did this happen?

Why did the government ignore the chorus of community protest, the objections of the locally elected government and the significant concerns raised by an independent hydrologist and the government's own Provincial Groundwater Protection Officer?

If capable of such blatant disregard for the democratic process, common sense, and basic human decency for that matter, it's obvious that the social contract has been broken and the government has lost its legitimacy to represent the people of this province!

In closing, I ask that the government return to its senses and to also be reminded in the clearest of terms that it exists to serve the citizens of B.C. and not singular commercial interests. The SIA draft permit needs to be revoked and the application denied.

A shocked and outraged resident of Shawnigan Lake,

S22

Sent: Friday, March 22, 2013 10:08 AM To: OfficeofthePremier, Office PREM:EX; Lake.MLA, Terry LASS:EX Subject: South Island Aggregate - dump site application
Dear Ms. Clark & Mr. Lake:
Please step in immediately to cancel the draft permit issued by Government!
No such permit should ever be considered in a watershed. Contaminated soil ought never be moved 'up'. Contamination does not leak 'up'. Moving contaminated soil to higher ground grossly compounds the likelihood of leaching.
At the public meeting held last Summer at Shawnigan Lake, there were just 2 people who spoke in support of the application for this permit. One was a second who it turns out is the second who is the second who it turns out is the second who it turn
This draft permit must be cancelled immediately!
Respectfully,
•

From:

\$22

Sent: Sunday, March 24, 2013 8:24 PM

To: Minister, ENV ENV:EX; OfficeofthePremier, Office PREM:EX; Fleming.MLA, Rob

LASS:EX; Routley, MLA, Bill LASS:EX; Dix, MLA, Adrian LASS:EX

Subject: Don't Moose with Our Lake!

To Whom it May Concern,

Dumping 100 million tons of contaminated soil around Shawnigan Lake is something the members of this community are not about to let happen. As I am sure you are aware the members of the Cowichan Valley reject the SIA's permit. You might as well be dumping this contaminated soil right into our lake, our watershed, our drinking source, because it is inevitable that such contaminants will leach into this beautiful environment. It seems inhumane that we need to fight to keep our drinking water safe and clean, yet here we are. Chemical and microbial contaminants do not belong in our lake. Even if the water is treated prior to drinking, toxic heavy metals will still remain. We won't stand to let these contaminated soils get into our water in the first place. Shawnigan Lake just so happens to be my home. No matter where I am living, Shawnigan Lake will always be my home. My family lives there, my friends families live there. The community's health is of utmost importance and water ties in greatly to the wellbeing of the community. Having the opportunity to spend my childhood living on the lake, I hope for the same opportunity for future community members as well. In this area natural vegetation grows wild and untamed, there are layers upon layers of trees; temperate forest surrounds the lake. All is beautifully nourished. Now Shawnigan Lake needs our protection, and the community members are taking a stand. We can't sit in silence while the waters of our homeland are contaminated. I strongly urge you to help us protect our watershed, home, and community as well.

Regards,

S22

A Shawnigan Lake Resident

----Original Message----

From:

Sent: Saturday, March 23, 2013 11:37 AM

To: Lake.MLA, Terry LASS:EX; OfficeofthePremier, Office PREM:EX;

letters@timescolonist.com; editor@cowichannewsleader.com

Subject: Fwd: SIA contaminated soil application

Please see the attached letter regarding SIA application for Shawnigan Lake. Thank you for your time.

Re: "Minister obligated to consider soil application "March 22 Times Colonist paper. I am responding to the letter Terry Lake wrote regarding the South Island Aggregate application. I live in Shawnigan Lake and I am tired of government(s) not caring what we, the taxpayers say and just doing as they please. I do not believe this ministry has our best interested at heart but those of big business. I would like to know what Terry Lake would say if he lived in Shawnigan and drank our water. I think he would consider it a little more carefully. How is it that Victoria has a water shed that you can not set foot in and our water comes from the lake that many Victoria people use as their summer boating and partying lake. Quite a contrast. As to the letter Mr. Lake wrote saying he will personally commit as minister to "ensure rigorous monitoring and compliance" to protect the environment, I say, only until you are out of office and then the buck gets passed. Once SIA is allowed to dump this contaminated soil and something leaks (because it will) you can not put a plug in it. The health of the residents should trump the profits of SIA. WE DON'T WANT IT.

----Original Message----

From:

S22

Sent: Friday, March 22, 2013 7:44 PM

To: ENV Protection Responses West Coast ENV:EX; Lake, Terry ENV:EX; OfficeofthePremier,

Office PREM:EX

Subject: Poisoning of BC Residents by BC Government and SIA

It is with great disappointment that I hear that the Minister of Environment and the Premiere of this glorious province have moved in the direction of the Conservative Government and decided that Corporate gain is more important than the health and welfare of their constituents.

I left see because I was tired of this being the way government looks after their people. I chose to move to a Province with Liberal values which apparently none of you possess. Even after your own Provincial Ground Water Protection Officer said that South Island Aggregates proposal to dump contaminated soil on an aquifer and in our watershed should be rejected you approved their proposal anyways.

It is these types of actions that are making BC residents reconsider the party that they support and make the population believe you are no better than the Progressive Conservative party or maybe more similar to the corrupt liberals of Quebec. Please prove us wrong be revoking SIAs ability to poison us by revoking permit #105809.

Disappointedly yours,

\$22

Shawnigan Lake citizen

From: McKnight, Valerie PREM:EX Sent: Friday, March 22, 2013 2:29 PM To: OfficeofthePremier, Office PREM:EX

Cc: Ross, Kara L PREM:EX

Subject: RE: SIA Draft Permit Emergency Strategy Meeting

Hi.

Sending back over to you as it is more of an FYI / policy – refer to Minister.

Thanks, Val

From: OfficeofthePremier, Office PREM:EX

Sent: Friday, March 22, 2013 8:14 AM

To: Ross, Kara L PREM:EX; McKnight, Valerie PREM:EX Subject: FW: SIA Draft Permit Emergency Strategy Meeting

From: S22 Sent: Thursday, March 21, 2013 11:16 PM

To: Lake.MLA, Terry LASS:EX; Routley.MLA, Bill LASS:EX; elizabeth.may@parl.gc.ca;

jean@jeancrowder.ca; OfficeofthePremier, Office PREM:EX

Cc: bruce@fraserforshawnigan.ca; Steve Housser; communityrelations@cheknews.ca;

islandcommunityevents@ctv.ca

Subject: SIA Draft Permit Emergency Strategy Meeting

Greetings;

We have a home in Shawnigan Lake, and along with many of our neighbours we are living with a growing fear of what may be in our future, the future of our beautiful lake, the future of the Cowichan Valley, the future of our Island. To our amazement, an application by South Island Aggregate (SIA) to convert their gravel pit into a contaminated waste dump appears to have the support of our government...this is the source of that fear.

A permit granted, the dumping begins, a technical miscalculation, a couple rainy seasons, an over-harvested forest unable to hold back all that rain, a "well-placed" tremor or two down the road, a weak spot in the dump's high-tech lining...that's a scenario that feeds the fear.

The precious watershed that fills our neighbours' wells and fills a magnificent lake thousands play in, that flows through our faucets and into a bowl of homemade minestrone soup, a watershed that provides food and shelter for a variety of animals, that feeds the rain forest that slows down the runoff and sweetens the air, a watershed that quenches the thirst of the Cowichan Valley and attracts visitors from around the world...all this is being threatened...threatened by a neighbour who wants to fill a big hole left behind after selling off all the gravel that used to be in

there. A neighbour who wants to fill that hole with contaminated waste trucked in from other parts of our Island...threatened also by those who are in the position to grant such a permit to SIA.

We all know that contaminated waste exists and that it has to be put somewhere. Surely there are safer, less-threatening means and locations on this big ole Island, locations where a "little oversight" wouldn't potentially contaminate a community. But why would you dump that goop just upstream from a lake? A jewel of a lake? A magnificent lake that is the heart of a community of people and animals who all depend on its life-giving water?! In the middle of numerous community wells that our neighbours draw from? Plopped up there like some "Jabba the Hutt" gorging on truckload after truckload of someone else's waste, potentially releasing its waste into a Paradise?!

Who could possibly think this is a good idea? Who would give serious thought to permit a single private company to hold the keys to the pantry and life blood of an entire community? Who are these people? Do they know Shawnigan Lake? Cobble Hill? Mill Bay? Malahat? The Cowichan Valley? We can only wonder what must be in it for them, to partner in a venture that comes with potential disaster for such a Paradise...one can only wonder. And who will stay to look after this big balloon filled with waste buried over there when SIA is done with it? Ten years after they are done with it? Twenty-five years? For all time after they are done with it?

We need more strong voices to speak with us, to stand with us. We need more strong voices from well-positioned, ethical, compassionate, reasonable and honourable people to stand with us. To stand against, vote against the few who are positioned to profit, and then leave a region to live with an over-fed "Jabba the Hutt" rotting upstream.

There is massive opposition to the SIA permit application among the communities that are dependent on this watershed, and those who come to visit and enjoy its beauty. My guess is that the wildlife community would have some strong words to offer if they were aware of the application. We need you to speak with us, to help us. We invite you to attend a quickly assembled emergency Community Strategy Meeting, 7 PM, Monday, March 25th, at the Shawnigan Lake Community Centre where you can join with us in listening, talking, designing and building an energy that is strong enough to put an end to this notion of plopping a contaminated waste dump in the midst of Paradise. If you are unable to attend...please speak out with us.

Thanks for taking the time to read this note.

Sincerely;

S22

From: \$22

Sent: Wednesday, March 27, 2013 8:53 AM

To: Lake.MLA, Terry LASS:EX; OfficeofthePremier, Office PREM:EX Subject: SOUTH ISLAND AGGREGATE CONTAMINATED SOIL

Dear Mr Terry Lake and Premier Christie Clark. I am asking you as a resident of Shawnigan Lake to stop this insanity of allowing South Island Aggregate to dump contaminated soil in OUR WATERSHED. This is our health you are playing with. I understand you have a responsibility to look at any application you get but in a watershed it should be completely unacceptable to allow dumping. PERIOD. In my opinion, there is NO amount of testing, controlling, or monitoring anyone could do to assure that poison is not going to leach into our water. South Island Aggregate, or more personally, Mike Kelly, is on record as saying (they) do not care about Shawnigan Lake (from an email received by resident \$22\$) They are only in it for the money. Take that contaminated soil and dump it somewhere else that does not directly affect peoples water supply. Thank you, I would appreciate a reply to this letter and the one I sent last week as well.

From:

\$22

Sent: Wednesday, March 27, 2013 8:35 AM

To: OfficeofthePremier, Office PREM:EX; Lake.MLA, Terry LASS:EX

Subject: Shawnigan Lake's future

Greetings,

I'll save you the back story as I assume that anyone reading this will be aware of Shawnigan Lake's struggle against South Island Aggregate. Please see the attached doc for details.

Is seems strange that I have to write my government to ask them to protect my community's drinking water. One would think that water sheds and environmental protection would be part of the portfolio managed my the good people we elect. One would hope that elected officials would put you and your families in our position and try to consider the outrage you would feel if your water was at risk. Intelligent people should be able to see South Islands Aggregate's proposal as a massive risk with no upside for the community. It's not like filling a giant hole with toxic fill this is going to create sustainable jobs for our community.

This is a disgrace! I emplore you to act in your people's interests and listen to our demands. That's the way it is supposed to work...Remember?



From: \$22

Sent: Tuesday, March 26, 2013 3:28 PM

To: ENV Protection Responses West Coast ENV:EX; OfficeofthePremier, Office PREM:EX;

Lake.MLA, Terry LASS:EX

Cc: Routley.MLA, Bill LASS:EX; Dix.MLA, Adrian LASS:EX;

Subject: SIA Proposed permit to dump contaminated soil in the Shawnigan Lake water shed

Dear Sir or Madame;

I am violently opposed to even the thought of having any type of contaminated products including soils dumped in the Shawnigan Lake or any other community water shed.

As a Canadian I believe that the provincial and federal governments have put safety measures in place to protect the people of Canada from such occurrences taking place that would jeopardize the quality of our water.

The question I am asking is how have these regulations been blatantly overlooked and the SIA proposed permit applications gone as far as they have without the BC government stepping up to the proverbial plate and denving their application?

Who in the provincial government will help the people of Shawnigan Lake to put a stop to this potentially dangerous act? Can we appeal to the federal government to override our provincial government's lack of concern for our community and lake's future safety?

Please can this permit be denied and the contaminated soil that has been dumped thus far be removed from our area. I do not want to experience an Exxon Valdez type of disaster on Vancouver Island.

Thank you

S22

From: \$22

Sent: Tuesday, March 26, 2013 2:34 PM

To: OfficeofthePremier, Office PREM:EX; Lake.MLA, Terry LASS:EX; MacDiarmid.MLA, Margaret LASS:EX

Cc: McCammon, Alan W ENV:EX; Bunce, Hubert ENV:EX; Lachance, Luc ENV:EX; Taje, Eddy EMNG:EX; Doug Walton; Barroso, Sylvia L FLNR:EX; Lapcevic, Pat FLNR:EX; ENV Protection Responses West Coast ENV:EX

Subject: Response to ENVIRONMENTAL PROTECTION NOTICE - Notice of a Draft Version of the Permit 105809 for South Island Aggregates/Cobble Hill Holdings Ltd. at 640 Stebbings Road for Review and Comment

Dear Premier Clark, Minister Terry Lake & Minister Dr. MacDiarmid:

I am a resident Shawnigan Lake on Vancouver Island. I am writing to you on the behalf of my children and future children in Shawnigan Lake. These children are being raised to respect and care for the Earth. It is nearly impossible to have them buy in if the leaders of our province show complete disdain for these children and the environment's well being.

Please view these pictures of Shawnigan Lake's Discovery Elementary students singing about how to care for the Earth in an Earth Day Spring Concert on March 13, 2013. http://www2.canada.com/cowichanvalleycitizen/photogalleries/template.html?topic=kidsaudiences&g=3

Now imagine how they felt to find out Minister Lake during World Water Week was going to allow the possibility of contaminating their drinking water, the water that comes out of their school's water fountains. Not the kind of leadership that any child should have to witness.

Can you really in good conscience allow these chemicals listed below anywhere near the children in our community and our drinking water?

The types of soil that can be bio-remediated at the treatment facility are soils contaminated with hydrocarbons, specifically soils contaminated with Benzene, toluene, ethylbenzene, xylenes (BTEX), styrene, Methyl tertiary butyl ether (MTBE), Volatile petroleum hydrocarbons (VPHs), Light and heavy extractable petroleum hydrocarbons (LEPH/HEPH), Polycyclic aromatic hydrocarbons (PAHs), Chlorinated Hydrocarbons, Phenolic Substances, chloride, sodium and Glycols as defined in Schedules 4 and 5 of the CSR.

How can you even suggest in the Times Colonist, Minister Lake that you are more obligated to "a business" and allowing permits than for the health and wellbeing of over 7,000 residents in Shawnigan Lake and our beautiful watershed.

How can you make comments like...

"My personal commitment as minister of the environment is to ensure rigorous monitoring and compliance is in place to protect the environment and I expect that to be the case in this decision."

We don't want your personal commitment to sell our right to clean water (a right to clean water which we are entitled to under international law) to business owners who have made it clear they do not care for our community. Please see this comment made to the Cobble Hill Fair 103rd Celebration Dinner committee when they invited South Island Aggregates' owners to dinner. Mike Kelly's words are full of hate and would do nothing to make anyone feel like he cares for our drinking water source or health.

From: Mike Kelly

Date: Wed, Aug 22, 2012 at 5:34 PM

Subject: RE: Raise the Roof! 25 Mile Celebration Dinner. Help put a new roof on Cobble Hill

Hall

"...to be quite frank with you, I have lost faith in this community, I no longer feel comfortable being a part of it, I truly hope this feeling will pass, but for now, Marty and I are going to step back from all community events, we will be ceasing to support the local functions, and will be passing on all sponsorships, we will continue to conduct our business here, but at 5:00 every night, we will go home, and being a "local" will no longer afford our job applicants any favor when we hire our future employees."

Your personal commitment pre-election is hollow! How do any of you know for certain you will be elected? None of you will be around in 5 years let alone the 50 year life of this backroom deal. I wonder is it a confidence built on contributions or kick backs from South Island Aggregates? If this is the case you have sold us out for chump change as the money needed to clean up their mess will be far higher and would also come with elevated health care costs.

There are a number of professional opinions being ignored and unaddressed including the Lowen Report commissioned by the Shawnigan Residents Association, not to mention local government and residents. Heck even your own BC Liberal Candidate for Cowichan Steve Housser is publicly against this permit calling it "lunacy". In fact all the candidates for our area have stated publicly that this permit must not be approved.

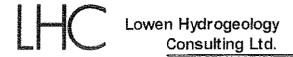
How about the issues raised by your own ministry staff: Sylvia Barroso, Ground Water Protection Officer and Pat Lapcevic, Section Head Water Protection with their Review of Application for an Authorization to Discharge Waste dated September 14, 2012. These questions and requested investigations need to be answered and undertaken. Sylvia Barroso and Pat Lapcevic's final statement in their summary read "The importance of groundwater for both present and future local water supplies and the long term nature of possible impacts related to the site, warrant such a detailed evaluation of site and hydrogeology." Will this important work take place? It will of course reveal that there is no way on this green earth that you can guarantee there is not a risk, therefore you should not approve this permit.

It is ridiculous that this continues... the environment ministry following process blindly, ignoring dangerous outcomes, while residents in our unincorporated territory are denied democratic rights and basic human rights to safe, clean drinking water.

The science and reports are hollow with environmental engineers on both sides benefiting financially while arguing they are right. Residents should not have to face the consequences of scientific opinion that could be only valid until proven wrong. None of these "experts" knows what will happen in 20 years or even 1000 years, it is a best guess situation. If the worst did happen the damage to our drinking water source would not have been worth the risk. Nor will it do much for your place in history.

With all due respect, please do the right thing, the ethical and moral thing, the democratic thing and deny this permit to South Island Aggregates. Shawnigan will not just let you get away with selling out our right to clean water. This is an election year and it is evident that many communities are not to pleased with your governments and party's actions. Deny this permit.

Sincerely,



September 23, 2012 LHC Project File: 1218

Shawnigan Residents Association PO Box 443 Shawnigan Lake, BC VOR 2W0

Attention: Gary Horwood, President

Dear Sir:

Re: Proposed SIA Contaminated Solis Landfill, Stebbings Road, Malahat Land District, BC

As discussed in our July meeting we have reviewed the South Island Aggregates (SIA) proposal for a Contaminated Soils Landfill at the above noted site. Information regarding the landfill development has been obtained from the SIA website. A preliminary assessment of the proposed landfill site and its suitability for the intended purpose has been carried out utilizing existing information. Several environmental and human health risks regarding the landfill have been identified. Our investigations are focused on the site hydrogeology and potential for negative impacts on the local groundwater flow system and those dependant on this system for their drinking water.

Writer's Qualifications

Dennis Lowen, P. Eng., P. Geo. is a geological engineer with 40 years of experience in hydrogeology. He specializes in hydrogeology studies, environmental impacts studies plus groundwater supply projects. Mr. Lowen has worked in hydrogeology in Western Canada and in 10 overseas nations with extensive experience in BC since 1978. He has completed several landfill siting, design and closure projects and numerous landfill leachate studies. Mr. Lowen has provided hydrogeological expert witness testimony before the BC Environmental Review Board and the Supreme Court of BC. Mr. Lowen's company (LHC) has completed at least 6 projects in the south Shawnigan Lake region over the last 10 years. LHC also has extensive experience in aquifer mapping having mapped more than 400 aquifers for the BC Ministry of Environment.

Our comments are provided in the following sections:

→ In italic: SIA information
→ In blue: LHC comments

SIA Website Presentation

Under the "Groundwater" section it is noted that the BC Ministry of Environment (MOE) has mapped two bedrock aquifers in the region, but none below the landfill site.

MOE aquifer mapping is preliminary only and depends on concentrations of existing well information. The reason why there is no aquifer mapped beneath the landfill site is because at the time of the mapping there were too few drilled wells in the site area. There are a sufficient number of wells in the region now to confirm that there is an aquifer beneath the proposed site. This aquifer is used as a drinking water source for local residents, some located less than 300 m, from the site, and the aquifer must be protected.

Also in the Groundwater Section SIA notes that there are two aquifers in the region; one to the north and one east of the site. These two Aquifers # 203 & 208 are described with respect to demand and productivity.

Demand and productivity are only two of the three main descriptors used in the BC Aquifer Classification System used in mapping aquifers in BC. The omitted descriptor is the Aquifer <u>Vulnerability</u> which rates the aquifers' susceptibility to contamination from surface sources. Both aquifers 203 & 208 are rated as <u>highly</u> vulnerable to contamination.

The same or very similar hydrogeologic settings are present in aquifers 203, 208 and the aquifer beneath the landfill site. Hence the aquifer beneath the landfill site is highly vulnerable to contamination from surface sources.

Further more from our work on this site and our experience in aquifer mapping it is apparent that aquifer #203 extends beneath the proposed landfill site. The landfill would pose a risk to aquifer #203 and it is a developed drinking water source. Any contaminated surface water run-off or landfill leachate that escapes the site may reach the aquifer readily and this would constitute a health hazard.

Aquifers #203 and #208 are referred to by name in the SIA presentation namely the Shawnigan Lake/Cobble Hill Bedrock Aquifer and the Spectacle Lake/Malahat Bedrock Aquifer respectively.

The SIA Groundwater section also describes the bedrock beneath the site as having extremely low permeability (more commonly called hydraulic Conductivity or "K") and estimates **K** at 7.6 **x** 10¹⁰ m/s or nearly impermeable. This impermeable rock is quoted to provide "a very high level of protection to the underlying aquifer".

The rock under the site is identified as Wark Gneiss by the Geological Survey of Canada, Map 1553A. This is a fractured metamorphic rock with hydraulic conductivity in the range of 8×10^{-9} to 3×10^{-4} m/sec. (Domenico & Schwartz, 1990) Also wells completed in this rock formation have reported yields up to 6.3 Liters/second or 100 USgallons/minute which indicates a relatively high hydraulic conductivity for a fractured rock aquifer. A more reasonable estimate of K for the rock under the SIA site is 5×10^{-7} m/sec. This is 1000 times higher than the K reported by SIA. The Wark Gneiss rock unit also has inclusions of limestone (or Marble). The on-site well record (well # 86152, Appendix A) indicates fractured limestone beneath the subject site. These fractured rocks provide little protection for the underlying aquifer.

We have assessed several well pumping tests in the local bedrock aquifer. The pumping test data is used to calculate aquifer hydraulic conductivity. One of our pumping tests in the local bedrock aquifer indicates a hydraulic conductivity (K) of 6.9×10^{-7} m/sec. This analysis corroborates our estimated K = 5 x 10^{-7} m/sec. noted above. There is a well located on the SIA Landfill site with well tag #86152 and reported yield of 20 USgallons per minute. This well should be tested by pumping to obtain site specific data.

Lowen Hydrogeology
Consulting Ltd.

2 of 6

SIA further states that measurements indicate that it will take surface water 100,000 years to migrate downwards to the aquifer.

This statement runs contrary to the extensive body of data available from observation wells on Vancouver Island and the Gulf Islands. These observation wells show a relatively quick response in bedrock wells to rainfall events. That is to say water levels rise quickly in bedrock wells following a rainfall event indicating rapid infiltration from surface down to the aquifers. The time lag is usually less than a few days. This phenomenon is due to the fact that the bedrock is fractured throughout from surface to the aquifer. The main water flow from surface to the aquifer occurs in fractures in the rock which are essentially open channels which facilitate flow.

SIA also states that in addition to the 100,000 years travel time for water to reach the aquifer from surface that additional layers of protection will be included to make the disposal site safer.

We assume this refers to a landfill liner system where low permeability soil, plastic sheets or a composite liner are used to contain liquids in the landfill. Many studies have shown that landfill liners eventually leak. In fact they generally leak soon after filling has begun. An engineered liner is no guarantee that contaminated landfill liquids will not escape the proposed landfill. The contaminated flow from the landfill will readily reach the underlying drinking water aquifer and could present a health risk.

Site Hydrogeology

The proposed landfill site is located overlying a fractured bedrock aquifer that extends from the site down to Shawnigan Lake. In our opinion the aquifer appears to have moderate productivity, moderate demand and highly vulnerability to contamination from surface sources. See a listing of the local well records used for this analysis in Appendix A, attached.

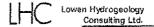
The on-site well record indicates fractured limestone rock beneath the proposed landfill. This rock is fractured and permeable plus limestone is a soluble rock which will be susceptible to solution weathering from acidic landfill leachate. This process will make the rock more permeable.

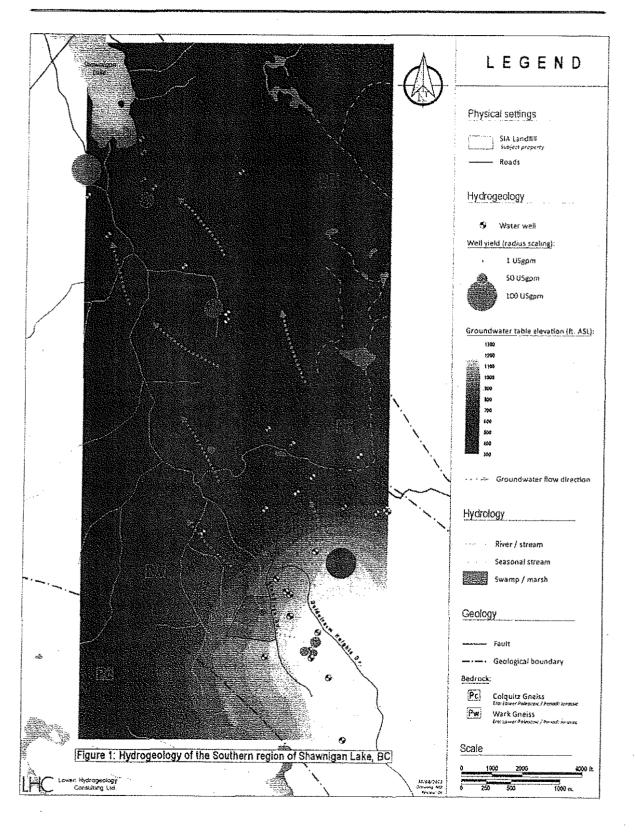
Rainfall that infiltrates the ground at the subject site will flow downward to the aquifer and then flow toward the northwest (toward Shawnigan Lake). See Figure 1 for a graphic representation of the groundwater flow system.

Local rainfall is high = 1,138 mm/year and annual recharge has been estimated at 20% of total precipitation or 228 mm/year. This is a significant rate of recharge = 2,280 m³/Ha./year. There is a large volume of water that can be impacted by the proposed landfill operation.

The water table slope from the proposed landfill site to the lake is 0.05. This slope provides a good driving head to propel groundwater from the site to the lake. The groundwater velocity from the landfill site to the lake is estimated at 5 - 10 m/d. Therefore the 5 Km distance would be traversed within 1.4 to 2.7 years. Any contamination carried by the groundwater flow would reach the lake with little attenuation. There would be little adsorption or filtration in open bedrock fractures and only dilution would reduce contaminant concentrations. Dilution alone may not be enough to prevent contamination of lake water.

Not only Shawnigan Lake water is put at risk with the proposed landfill there are also many drinking water wells nearby and downstream from the site. There are 5 wells within 250 m. of the proposed landfill site. These drinking water wells could draw water from beneath the proposed landfill site. There are up to 10 more wells downstream from the landfill site. All these wells may have water quality impacted by the landfill.





Lowen Hydrogeology Consulting Ltd. An alternate method for evaluating aquifer vulnerability at a specific site has been used for our analysis. The Aquifer Vulnerability Index Calculation (Van Stempvoort, 1992) has been employed using well record information from the site Well Tag #86152. The calculation indicates a high degree of Vulnerability for the aquifer. The calculation is attached at Appendix B.

Further regarding aquifer vulnerability the Vancouver Island University in Nanaimo has completed Intrinsic Vulnerability Mapping, 2010 (Aquifer Vulnerability) for all of Vancouver Island. This study found the proposed landfill site area to have Moderate Vulnerability however the scale of the study was very large and the previous two analyses outlined in this letter are more specific (ie. more valid).

General Comments

Upon reviewing the SIA proposed contaminated soil landfill project one question appears quite obvious. Why was this site selected for disposal? Generally when a landfill site is required the initial effort is spent selecting a suitable site. Landfill siting is a difficult, complex, tedious, sometimes emotional and protracted process requiring evaluation of many different criteria. Geographical information System (GIS) tools are used in conjunction with environment, biophysical, ecological and socioeconomic variables which lead to an analysis and decision-making process. For example one area underlain by a thick layer of impermeable clay which offers natural protection for the underlying aquifer would be preferred over a gravel pit with a water table close to the pit floor. Similarly a site in a rock quarry over a fractured rock aquifer would score very low on the suitability scale. Was there a siting study completed prior to selection of this landfill site?

For comparison when a large scale in-ground wastewater disposal site is approved by the Provincial Government there is a requirement for at least four observation wells, one upstream from the development and three downstream. These wells are installed and monitored before approval and are used for the site analysis. This proposed site should meet or exceed this standard.

We understand some soils are being dumped at the site now. If this is the case what type of soil is it? It seems that the liner and drainage works have not been done as yet so the site is not ready to receive contaminated soil.

Our studies have been focused on underground water flow but the surface hydrology is also an issue. The site borders Shawnigan Creek and any contaminated run-off from the site would quickly flow to the creek and to Shawnigan Lake. Since the lake is a drinking water source this appears to be a significant risk. Containment works are planned but can they eliminate all the risks? How will the containment works be maintained over the long term and after the site is closed?

Recommendations

- 1. A comprehensive Environmental Impact Study must be completed before this site could be approved for disposal. These kinds of studies are mandatory for wastewater disposal which is a smaller risk than contaminated soil.
- 2. Construction of monitoring wells, aquifer testing, water quality sampling and contaminant flow modeling should be undertaken to assess the suitability of this site.
- The site should have a leak detection system and a contamination containment plan. Commonly
 contaminated groundwater is pumped out of the aquifer and piped to a treatment plant. Naturally all
 these necessary risk reduction measures are very costly therefore long-term financing plans would
 also be needed.
- 4. A cost-benefit analysis should be carried out to ensure that this proposal is sustainable.



If you have any questions or require any further information please contact the undersigned.

D. A. LOWEN

D. A. LOWEN

BRITISH

Yours very truly,

LOWEN HYDROGEOLOGY CONSULTING LTD.

Lewis Lowbe

Dennis A. Lowen, P. Eng. P. Geo.

DAL/ MD/hmr

APPENDIX A	
Well Records	

WATER WELLS OF THE SOUTHERN REGION OF SHAWNIGAN LAKE, BC

WELL TAG NO.	COLD IN COLD IN THE SECTION OF	ordinales	ELEVATION	YELD	STATIC WATER	DEPTH TO BEDROCK
	EASTING	NORTHING	ft.	USgpm	EEVEL ft.	ft.
#86152*	455434	5377844	1115	20	10	0
#83527	455458	5377397	1148	3	· -	20
#95485	455713	5377804	1214	4	45	8
#93401	455858	5377454	1247	30	-0.25	0
#85099	455925	5377389	1279	2.5	-	2
#86036	456108	5377190	1279	1.25	-	42
#83531	455955	5377439	1279	20	-	55
#85100	455917	5377464	1279	4		4
#86037	455971	5377547	1312	35	102	3
#89253	455990	5377644	1312	10	60	9
#83528	456257	5376570	1411	0.5		1
#85309	455706	5378020	1214	4	67	6
#96080	455672	5378049	1214	3	95	5
#95480	455573	5378178	1148	6	45	14
#105940	456222	5378338	1247	100	-12	13
#96095	455442	5378868	1000	5	145	118
#97026	456245	5378893	1050	7	100	81
#96127	455919	5379195	919	5	45	70
#96123	456574	5378836	1017	4	45	68
#81952	456665	5378875	1017	3	+	33
#81951	456687	5378858	1017.	10	_	35
#52475	455708	5379521	853	1.5	-	7
#106005	455458	5379672	853	3	-	25
#53806	455039	5380753	787	7		10
#53807	455042	5380823	787	25	· -	15
#80059	454912	5380876	738	60	50	2
#80056	454894	5380916	738	5	70	#
#99931	454610	5381287	607	2.5	80	42
#104661	453836	5381601	443	6	44	3
#84468	454219	5381956	459	50	35	1
#84469	454294	5382078	525	3	-	10
#69093	454184	5382149	459	6	-	9
#84470	455168	5382236	459	5	25	18
#84471	454180	5382427	410	6	20	15
#84472	454162	5382569	410	8	-4	15
#104658	453628	5381993	459	8	42	1
#105772	453600	5382252	426	14	-15	14

^{*} SIA well. See following page for well record details.





Report 1 - Detailed Well Record

```
Construction Date: 2005-10-10 00:00:00.0
Well Tao Number: 86152
                                                Briller: Drillwell Enterprises
                                                Well [dentification Plate Number: 16588
Owner: SOUTH ISLAND AGGRECATES
                                                Plate Attached Sy: PANDY CREAMER
                                                Anere Piste Attached: CASING
Address: STEBBINGS ROAD
                                                PRODUCTION DATA AT TIME OF DRILLING:
Area: MALAHAT
                                                Well Yield: 20 (Driller's Estimate) U.S. Gallons per Minute
                                                Development Method: Air lifting
WELL LOCATION:
                                                Pump Pest Info Flag: N
MALAHAT Land District
                                                Artesian Flow:
District Lot: Plan: DD 1896741 Lot: 23
                                                Artesian Pressure (ft):
Township: Section: Range:
                                                Static Level: 10 feet
Indian Reserve: Meridian: Block:
Quarter:
                                                WATER QUALITY:
Island: VANCOUVER ISLAND
                                                Character: Clear, Fresh
BCGS Number (NAD 27); G928652422 Well: 1
                                                Colour:
                                                Odour:
Class of Well: Water supply
                                                Well Disinfected: Y
Subclass of Well: Domestic
                                                EMS ID:
Orientation of Well: Vertical
                                                Water Chemistry Info Flag: N
Status of Well: New
                                               Field Chemistry Info Flag:
Site Info (SEAM): N
Well Use: Private Domestic
Observation Well Number:
Observation Well Status:
                                               Water Utility: H
Construction Method:
                                               Water Supply System Name:
Water Supply System Well Name:
Diameter: 6 inches
Casing drive shoe: N Y
Well Depth: 325 feet
                                               SURFACE SEAL:
Elevation: 1100 feet (ASL)
                                                Flag: Y
Final Casing Stick Up: 24 inches
                                                Material: Bentonite clay
Well Cap Type: WELDED
Bedrock Depth: feet
                                                Method: Foured
                                                Depth (ft): 16 fest
Lithology Info Flag: Y
Flie Info Flag: N
                                                Thickness (in): 2 inches
                                                                   To:
                                                                              feet
                                                Liner from
Sieve Info Flag: N
Screen Info Flag: N
                                                WELL CLOSURE INFORMATION:
                                               Reason For Closure:
Site Info Details:
                                               Method of Closure:
Other Info Flag:
                                               Closure Sealant Material:
Other Info Details:
                                                Closure Backfill Material:
                                               Decails of Closure:
                                                                        Slot Size
                        to feet
                                                Type
Screen from
                                                                                                Drive Shoe
Casing from
                        to feet
                                                Diameter
                                                                       Katerial
                                                                        firm
                        325
                                                net 11
                                                                       Open hole
GENERAL REMARKS:
LITHOLOGY INFORMATION:
                            Medium 12 Sallons per Minute (U.S./Imperial) FRACTURE 258-260 green limestone Medium 3 Gallons per Minute (U.S./Imperial) FRACTURE 296-297 black granite Medium 5 Gallons per Minute (U.S./Imperial) FRACTURE 107-308 green limestone
         0 to
                 260 Ft.
       260 to
                  297 Pt.
       297 to
                  325 Ft.
```

APPENDIX B	
Aquifer Vulnerability Calculation	

AQUIFER VULNERABILITY INDEX CALCULATIONS*

PROJECT: SIA Contaminated Soils

PROJECT No.: 1218

DATE: 19/08/2012

WELL ID. PLATE No.: 16588

WELL TAG No.:

86152

LOCATION: 460 Stebbings Road, Malahat Land District, BC

Well Tag No. 1	00450
1 V H 1 H 1 H 1 H 1 H 1 H	ากเกร

Layer	Thickness	K value	C**
	(m)	(m/d)	(years)
Limestone	79.2	0.01	21.70
Igneous bedrock	11.3	1	3.10E-02
Limestone	8.5	0.01	2.33

TOTAL 24.06 years High Vulnerability

Hydraulic Resistance, c = Σdi / Ki , for layers 1 to i

The lower the hydraulic resistance (c) the higher the vulnerability:

- c = Less than 10 years extremely high vulnerability
- c = 10 100 years high vulnerability
- c = 100 1000 years moderate vulnerability
- c = 100 10,000 low vulnerability
- c = greater than 10,000 extremely low vulnerability

^{*} Van Stempvoort, D., Ph.D., Ewart, L., and L. Wassener, 1992. AVI: A Method for Groundwater Protection Mapping in the Prairie Provinces of Canada, Prairie Provinces Water Board, Regina, Sask.

^{**} Hydraulic Resistance "c"

DENNIS ARTHUR LOWEN, P. Eng. P.Geo.

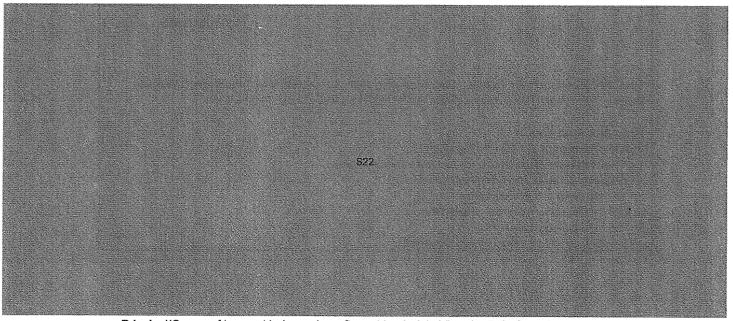
Hydrogeologist

RESUME

P. O. Box 45024 Victoria, B.C Canada V9A 0C3 Tel: 250 595 0624 Fax Toll Free: 1 855 286 8001 Cell: 250 213 3007 E-mail: dl@lowenhc.ca

Expertise:

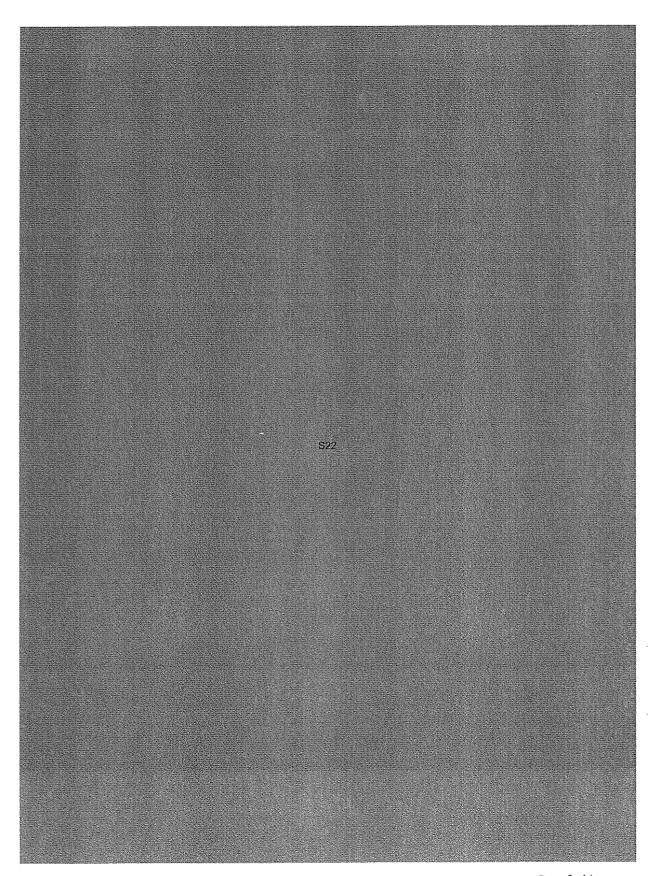
- Project management, design, planning, and cost estimates
- Hydrogeology Studies
- Groundwater Exploration and Development
- Groundwater Studies with Aquifer Mapping and Computer Modeling
- Groundwater Monitoring Well Network Design and Construction
- Environmental Impact Studies for Wastewater Disposal to Ground
- Groundwater supply/aquifer evaluation; pumping test supervision and analysis
- Well Capture zone analysis; aquifer protection plans
- Storm water/wastewater infiltration systems
- Site investigation; surface water groundwater sampling; soil sampling
- Technical report preparation and presentation



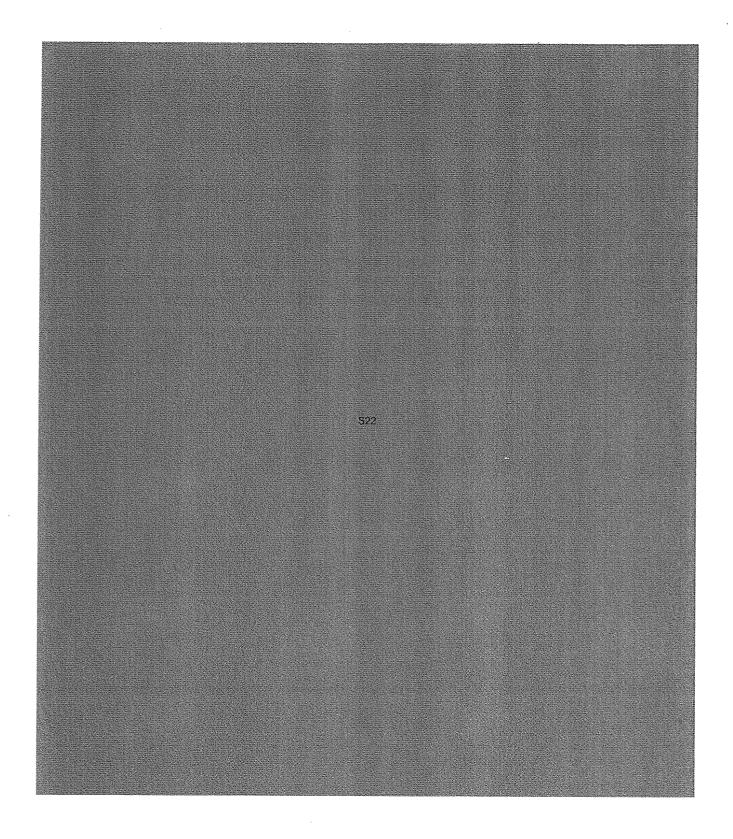
Principal/Owner of Lowen Hydrogeology Consulting Ltd. in Victoria, B.C. Canada.

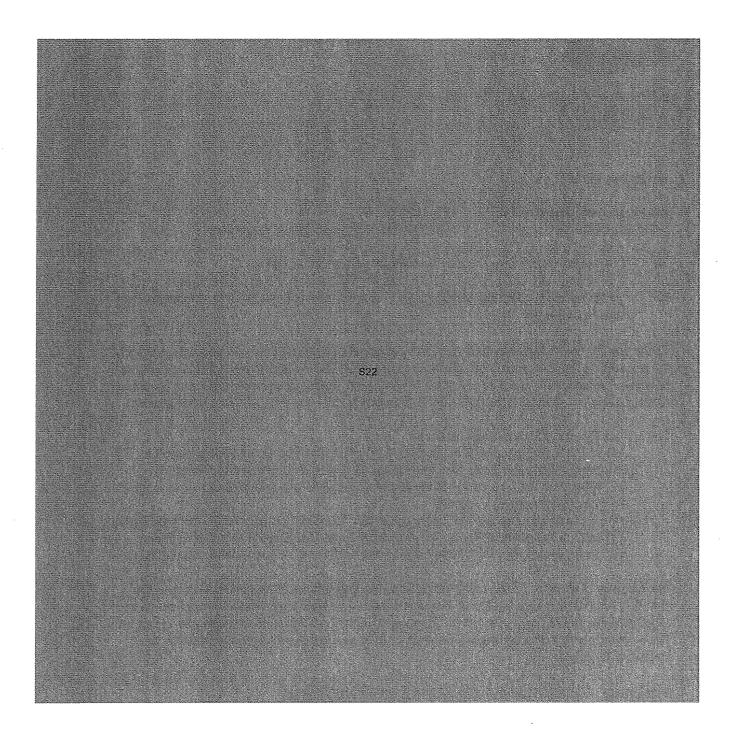
- Private consulting practice specializing in hydrogeology and groundwater resource development.
- Recent projects include Regional Groundwater Management and Development studies for the Comox Valley Regional District and Arrowsmith Water Service Region.

S22



Page 2 of 4







September 14, 2012

Environmental Protection File:

PR-105809

Water Protection File:

38050-40 DUNC South Island Aggregates

To: Luc LaChance, P. Eng., Senior Environmental Protection Officer

Re: South Island Aggregates, Stebbings Rd. - Review of Application for an Authorization to

Discharge Waste

Thank you for the opportunity to review and provide comments on the hydrogeologic aspects of the application for authorization to discharge waste, associated with proposed contaminated soil relocation, remediation and disposal at the South Island Aggregates granite quarry on Stebbings Road, Cowichan (Lot 23, Plan VIP 78459, Blocks 156, 201 and 323, Malahat Land District).

The application and site details are outlined in:

- Active Earth Engineering Ltd. October 2011. "Application for an Authorization to Discharge Waste and Technical Assessment Report, 693 Stebbings Rd. Malahat, BC VOR 2L0." Prepared for South Island Aggregates Ltd. (referred to herein as the Technical Assessment, TA); and
- Active Earth Engineering Ltd. February 2012. "Clarification and Additional Information
 Technical Assessment Report for Authorization to Discharge Waste, 638 Stebbings
 Rd., Shawnigan Lake, BC" (referred to as the Additional Information document, AI).

The Ministry of Forests, Lands and Natural Resource Operations, Water Protection Division review is limited to the evaluation of factors related to hydrogeology within the application and supporting documents, and selected information submitted by objectors to the proposed site use. The review does not include original research or hydrogeologic investigation of the site or neighbouring properties.

Assessment of potential impacts to adjacent groundwater users

Aquifer classification:

The Ministry of Environment (MoE) Water Resources Atlas is referenced as a source of information on mapped aquifers in proximity to the proposed site. The Technical Assessment (p. 9 and p. 22) notes that the Shawnigan Lake/Cobble Hill aquifer (203) is located approximately 2 km north of the site, and the Spectacle Lake/Malahat aquifer (208) is located approximately 1 km east of the site. The lack of a mapped aquifer at a location does not indicate the absence of a water producing geological unit underlying the area. The boundaries of aquifers mapped by the Ministry of Environment reflect the availability of well information, and level of aquifer

development at the time when the classification was completed, therefore actual aquifer boundaries may differ from the published map extent.

The boundary of the Spectacle Lake/Malahat aquifer is not expected to extend to the SIA site, because the western boundary of the aquifer is delineated by the Malahat Ridge, believed to be a groundwater divide.

The Shawnigan Lake/Cobble Hill aquifer boundary may extend beyond its presently mapped extent based on additional information available from wells constructed in the area since the aquifer was initially mapped in 1996; the geologic unit comprised of Wark Gneiss is mapped at the site, and the classified aquifer is considered to be comprised of the same geologic materials. The SIA site is found within the upper, southern reaches of the Shawnigan Creek watershed (~11,000 hectares in area), which is a potential recharge zone for the Shawnigan Lake/Cobble Hill aquifer. The classification of aquifer 203 as a IIA aquifer indicates that it is considered to have a moderate level of development (relatively low productivity and moderate well density) and a high vulnerability. The vulnerability assessment is qualitative based on the fact that groundwater levels are shallow, and the confining layer overlying the aquifer is relatively thin and absent in some areas (median depth to bedrock is 2.4 m, and median thickness of the confining layer is 0.3 m, with 49% of wells used to classify the aquifer report no confining layer present).

Inventory of adjacent wells and water supply systems:

The TA provides an inventory of wells that are located on adjacent properties within a 1 km radius of the site. This listing may not include all proximal wells. A proximity search completed for this review suggests a minimum of 15 known wells located within a 1 km radius of the SIA site, however, TA Table D lists only 11 (see also WTN's 85100, 85309, 96126 and 105940).

The TA states that the Contaminated Sites Regulation (CSR) drinking water standards do not apply to the site due to the low permeability of the upper bedrock unit, and considering that there are no drinking water wells in proximity to the site. In the Additional Information document (p. 6) further clarification is also provided, stating that there were no drinking water wells in a down-gradient orientation within a 1 km search radius (excluding the on-site well because it is not used for potable purposes). Note that WTN 96095 is located ~900 km due north of the property boundary (MoE WELLS database, 2012). WTN 83568 is located ~800 m northeast of the property boundary, and reported to have a depth of only 53 ft and a high estimated yield of 40 gpm, suggesting a moderate permeability of the shallow bedrock in that area (see comments on hydrogeologic characterization of the site, below). The assessment of potential impacts to adjacent users does not consider future uses of the aquifer, including development of new wells and groundwater supplies prior to starting the soil relocation activities in the area when the quarry activities cease.

The MoE WELLS database may not include records for all wells in an area. Furthermore, many of the well locations listed in the Water Resources Atlas are approximated e.g. to centre of lot. A door to door survey of neighbouring properties should be conducted to quantify the number,

¹ Gallo, M. 1996. Aquifer 203-Classification Worksheet. B.C. Ministry of Environment. (Unpublished).

location and status of use of wells that could be impacted by off-site contaminant migration (a direct survey is considered more reliable that using the MoE WELLS database on its own).

In addition to the general inventory of wells, the proponent should identify points of diversion and water supply system sources proximal to the site and assess whether they may be impacted by the activities. The proponent should contact the Vancouver Island Health Authority to determine whether there are any water supply system wells and/or surface water intakes proximate to the site that could be impacted by offsite contaminant migration. There are also reported adjacent surface water users that should be considered. For example, the BC iMap online mapping reference currently shows drinking water point of diversion on Stebbings Creek and Stebbings Lake upstream of the site (Licence numbers C126146 and C126047), and one drinking water point of diversion on Shawnigan Creek (Licence F014946) approximately 4 km downstream of the site.

Assessment of site hydrogeology

Limestone deposits, including fault exposures and karst topography have been reported in the surrounding area, including in the lands to the south of the SIA site, and northwest of Devereux Lake². The South Island Aggregates on-site well (WTN 86152), perhaps erroneously, reports limestone intersected at 258 and 307 ft below ground (bgs). Similarly, WTN 95485 in the TA Appendix D describes "frequent white calcite layers" starting at 265 ft bgs. The SIA technical assessment should provide more details regarding the presence of limestone within the local or regional geology, and its affect on hydrogeologic conditions.

The hydrogeologic properties of the shallow and deep geologic units (hydrologic conductivity values, TA Table C, p.18) are provided based on a limited number of hydraulic response tests, specifically rising head slug tests, within the on-site monitoring wells. For example the conductivity value for the deeper bedrock unit is based on one rising head test. The recognized limitations of these types of tests include that the results are representative of properties of the zone immediately surrounding the well bore, compared to longer duration pumping tests or other methods appropriate to fractured rock e.g. packer tests. Slug tests can also underestimate the hydraulic conductivity of a unit for various reasons^{3,4}. In general, the references, numeric values and assumptions used for analysis of the hydraulic response testing are not sufficiently described in the TA (Appendix E).

The proponent has not utilized test results from the on-site quarry water supply well-(WTN 86152), that could provide an additional source of data on formation permeability, particularly if tested in conjunction with monitoring of adjacent on-site and off-site wells.

The TA (p. 18) indicates that a third monitoring point is required to determine with precision the gradient and direction of groundwater flow based on on-site monitoring well static water levels.

² Gulf Island Geotechnical Services. November 19, 2007. Review of groundwater resource, Prepared for Living Forest Communities, Devereux Lake Project, Cowichan Valley Regional District.

Weight, W.D. and J.L. Sonderegger. 2001. Manual of applied field hydrogeology. McGraw-Hill.608 pp.
 Butler, J.J., C.D. McElwee, and W. Liu. 1996 Improving the quality of parameter estimates obtained from slug tests. Ground Water, 34(3): 480-490.

More information should be provided on the direction of groundwater flow. The time of travel to neighbouring down-gradient wells should be estimated.

On TA p. 18 a hydraulic gradient estimate of 5.2% is based on an inference that Devereux Lake is connected with the deep bedrock aquifer. However, there may be a connection between the lake and shallower water systems (i.e. it is not clear why the lake is considered to be connected only to the 'deeper' regional groundwater system). The local topography, presence of other wetlands and the headwaters of two tributaries on the SIA site (e.g. TA Figure 4 and B.C. TRIM mapping) suggest that there may be a confluence of surface water at the margins of the site, with the potential to interact with the shallower bedrock unit.

The technical assessment describes the existence of an upper confining layer of low permeability bedrock overlying a more permeable bedrock unit through which the regional groundwater flow occurs. The conclusion that permeability would increase with depth within a bedrock unit is contrary to hydrogeologic theory that finds permeability commonly decreases with depth due to increased hydrostatic and lithostatic pressure from the overlying materials.

The technical assessment does not provide detailed hydrogeologic data based on drill core or well-bore caliper surveys of fracture locations in the on-site monitoring wells or water supply well (TA p.17), therefore the reported fracture detail for all wells (including offsite wells and monitoring wells), is based upon the limited understanding provided from (air rotary) drill logs. No data (with the exception of one record) are included on fractures intercepted by the monitoring wells within the drill logs in the TA Appendix D. Core drilling and caliper surveys provide more useful and detailed information on fracture distribution in bedrock units. A more robust data set may also be provided from utilizing core to construct additional planned monitoring wells on the site, in addition to completing hydraulic tests of the new monitoring wells. A greater distribution of monitoring well locations across the site is also important, considering the heterogeneous nature of bedrock formations.

The groundwater flow velocities reported for the upper and lower bedrock unit, and subsequent calculations of horizontal travel times to down gradient water bodies (TA p. 19-20), are based on the assumption that "the fractures are sufficiently interconnected that they emulate porous media" (p. 18, TA). This is in contrast to the description of the primary geologic unit underlying the site as being highly impermeable. By treating the unit as equivalent to porous media the inference is that contaminants would travel via diffusion into the bedrock matrix (essentially assuming no fractures), hence the travel times are exceptionally large e.g. 3×10^6 years time of travel to Shawnigan Lake through the upper bedrock unit. A more conservative approach would consider that groundwater flow and contaminant transport is likely to be much higher in a bedrock unit due to preferential flow through fractures. This highlights the importance of characterizing the fracture system to a greater extent such as utilizing core for bedrock monitoring well construction, and utilizing methodologies to estimate time of travel that consider contaminant flow through fractures.

The TA p.21 states that water wells within the area are "drilled to the minimum depth required to produce necessary yield," therefore based on inferences from the reported fracture depths in selected well logs there is a low permeability layer from the surface to approximately 75 m below present ground surface. To provide more information on fracture depths from drill logs, Table D (p. 21) could include the reported depth to fractures for wells within 1 km of the site; as

an example, WTN 93401 approximately 600 m to the southwest reports 20-40 gpm producing fractures at 23-24 m below ground surface, much shallower than the 75 m inferred depth of low permeability bedrock. The Al document states that WTN 93401 is constructed in the lower geologic unit, however, this suggests that the overall thickness of the low-permeability "shallow" unit is diminished up-gradient of the site.

In general, it should be noted that the well records in the MoE WELLS database provide approximate information from the driller notes at the time of well construction and cannot reasonably be relied upon for a high degree of technical detail, for example there may be unreported shallow fractures (either dry or low water-bearing) that could be conduits for groundwater and contaminant flow. Additionally, since the WELLS database primarily has records of wells constructed for water supply there is an inherent bias to higher permeabilities.

Figures 6 and 7 show the potentiometric surface based on available water levels, including the on-site monitoring wells. It is noted that there is no substantial difference between water levels within the wells screened in the "shallow" aquifer (MW1S, MW2, MW3S, MW3D) compared to the well screened into the "regional" aquifer, MW1D. If the two layers are separate units with distinct hydrogeologic properties, one might expect a difference in the groundwater levels rather than the monitoring wells exhibiting similar potentiometeric head. In the case of MW3D and MW3S the wells were artesian and the water levels in MW 1S, 1D, and MW2 were shallow and close to the current pit bottom (TA, Table C, p.17). The final pit bottom is projected to be at an elevation of 313.5 m above sea level; the proponent should evaluate whether there will be an intersection of the quarry extent with the regional groundwater levels, as is inferred by Figures 6 and 7, such that pit dewatering may be required. Monitoring wells constructed to the elevation of the final pit bottom would be useful in this regard; additional nested wells and transducer monitoring of groundwater levels at selected sites would also provide confirmation of the vertical groundwater gradient and possible seasonal variation of groundwater levels that might occur.

If an interception with the water table is likely to occur during the quarry excavation phase, the proponent should provide more information on how possible presence of groundwater seepage at the pit bottom might affect the integrity of the soil storage cells, and potential dispersal of contaminants, and should include more information on the plan for dewatering and managing the water that is generated. Presently the TA (p. 40) states that "minor amounts of shallow groundwater seepage may occur from fractures in the bedrock side slopes and from the base of the permanent soil containment area." Within the TA this was proposed to be discharged unfreated to the surface water containment area and to Shawnigan Creek. The TA p. 25 notes that MW3-D and MW1-D are stated to exceed Contaminated Sites Regulation Aquatic Life standards for cadmium. It is not clear if water quality impacts to surface water bodies might arise if deep groundwater discharge to the adjacent creek(s) is to occur. From the AI it is not clear if groundwater seepage from the site will be treated, similarly to the leachate collected.

The laboratory results for sampling of the monitoring wells (Table 1 and Appendix F) indicate that for MW3S there were E. coli 10 MPN/100 ml and Total coliform 1940 MPN/100 ml, which suggests the influence of a surface water source on the well. The proponent should evaluate the possible source of the high bacterial counts and the implications with respect to well construction and permeability of the shallow geologic unit.

Environmental Monitoring Plan

The TA (p. 25) states that the environmental monitoring plan will include groundwater monitoring well sampling twice per year. The groundwater monitoring plan is further detailed in the AI, p. 24, including locations, parameters and timing of sampling. It is recommended that additional monitoring be considered if changes occur from baseline quality.

Closure Plan

Table F (P. 73. TA) indicates that monitoring will be conducted once per year in down gradient perimeter wells. It is recommended that the groundwater monitoring frequency be increased to a minimum of twice annually (quarterly sampling is more typical for landfill sites) in keeping with the monitoring of surface water, leachate and other sources.

Summary

The present application for establishment of a contaminated soil disposal site at the South Island Aggregates quarry has been reviewed with respect to technical detail in the hydrogeologic characterization of the site. Additional data and site characterization are required prior to this permit application being considered further. The specific areas of concern are as follows:

- 1. Assumptions related to the thickness and very low permeability of the underlying bedrock unit are not sufficiently validated by the field investigations and data presented. In some cases they are counter to prevailing opinion, and hence need to be properly substantiated. Additional data, including construction of monitoring wells using core drilling and distributing the monitoring sites more widely over the site should be undertaken to better characterize the formation permeability and location/density of shallow fractures. The proponent should also include the onsite water supply well as a part of their site characterization.
- 2. The occurrence of limestone and karst formations in the local area should be investigated and the importance of this to the hydrogeology of the site must be better understood.
- The cause of high bacterial counts observed in onsite monitoring well MW3S should be investigated with respect to implications related to permeability of the shallow bedrock formation.
- 4. Additional field investigations are required to identify adjacent water users (surface and groundwater) rather than relying solely upon data from the MoE Water Resources Atlas and WELLS database.
- 5. The characterization methods and calculation of travel times to adjacent water sources (wells and streams) should utilize, in part, methods that consider the preferential flow and heterogeneity of bedrock systems (i.e. presence of fractures), which is a more conservative and realistic approach compared to treating the rock aquifer as equivalent to porous media.
- 6. Insufficient information is provided to understand whether the pit bottom will intercept the water table, and whether dewatering, collection and treatment of groundwater will be required as part of the operational plan.

The importance of groundwater for both present and future local water supplies and the long-term nature of the possible impacts related to the site, warrant such a detailed evaluation of site hydrogeology.

Submitted for your consideration,

Prepared by:

Reviewed by:

Sylvia Barroso, B.Sc., G.I.T.

Ground Water Protection Officer

Pat Lapcevic, M.Sc., P.Geo. Section Head- Water Protection (Hydrogeologist)

cc:

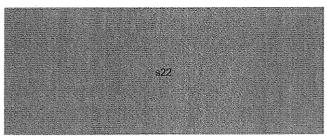
Marty Block, South Island Aggregates Ltd., P.O. Box 282, Malahat, B.C. VOR 2L0 Warren Jones, Chief Administrative Officer, Cowichan Valley Regional District Brian Dennison, General Manager, Engineering and Environment, Cowichan Valley Regional District



From

Sent: Tuesday, March 26, 2013 10:55 AM To: OfficeofthePremier, Office PREM:EX Subject: Letter to Environment Minister

Importance: High



March 26, 2013

Honourable Terry Lake Minister of Environment Province of BC

Dear Minister:

Re: Permit to Haul and Dump Contaminated Soil in Shawnigan Lake Watershed

I urge you to cancel the above referenced permit for the following reasons:

- It is opposed by 100% of Shawnigan Lake residents, including the MLA and candidates from all political parties (including your own party), regional government representatives, volunteer area associations whose mandate is to protect the watershed and all other community interests, including First Nations.
- The science offers no guarantee that the leachate from the contaminated soil will not find its way into our drinking water and air shed.
- The hauling of the contaminated soil itself presents environmental and safety risks to Shawnigan and area residents.
- The granting of such a permit violates your Ministerial mandate and responsibility [see quote from a recent ministry service plan, below.]

"The mandate of the ministry is to protect human health and safety, and maintain and restore the diversity of native species, ecosystems and habitats. Through partnerships across government, and with First Nations, the private sector and communities, we work to enhance the protection and stewardship of water and air resources, advance sustainable use of environmental resources, and provide exceptional outdoor park and wildlife services and opportunities."

The trampling of democracy over the greed of two businessmen will result in an embarrassment to the Ministry, lawsuits, citizen boycotts against the business involved and further civil action that will flood environmental bodies with hundreds of appeals.

Please protect our environment, protect democracy and fulfill your ministerial mandate. Sincerely,

s22

Sent: Tuesday, April 2, 2013 5:21 AM To: Bunce, Hubert ENV:EX; Lachance, Luc ENV:EX; Lake.MLA, Terry LASS:EX; Minister, ENV ENV:EX; Taje, Eddy EMNG:EX; OfficeofthePremier, Office PREM:EX; crowder.j@parl.gc.ca; Routley.MLA, Bill LASS:EX; jean@jeancrowder.ca; steve.housser@bcliberals.com; Fleming.MLA, Rob LASS:EX; office@bcconservative.ca; kerry.davis@greenparty.bc.ca; \$22 XT:Evans, Carollyne HLTH:IN; letters@timescolonist.com; smcculloch@timescolonist.com; cfaxnews@cfax1070.com; jlavoie@timescolonist.com; Shane.Woodford@corusent.com; vpalmer@vancouversun.ca; editor@cowichannewsleader.com; news@cowichanvalleycitizen.com; editor@shawniganfocus.ca; editor@thetyee.ca; scoop@huffingtonpost.com; newswatch@bbc.co.uk; nature@natureconservancy.ca Subject: April 2 edition - Shawnigan Lake Watershed protection
Good morning folks, s22 emailing you again! On Saturday, March 30 we attended a street rally in the Village to protest the plan to dump toxic waste in our Shawnigan Lake watershed, it was very inspiring. We all wish you could have been there!
I hope you had a terrific long weekend with your families. The weather at Shawnigan Lake was as perfect as could be, showcasing our lovely lake. Let's work together to keep it that way, and prevent SIA and the Provincial Government from destroying it. Here's another picture of our Lake, enjoy!
I'll be in touch tomorrow, sincerely, \$22
From: S22
Sent: Monday, April 1, 2013 8:25 AM
To: Bunce, Hubert ENV:EX; Lachance, Luc ENV:EX; Lake.MLA, Terry LASS:EX; Minister,
ENV ENV:EX; joe.sequin@gov.bc.ca; Taje, Eddy EMNG:EX; OfficeofthePremier, Office PREM:EX; crowder.j@parl.gc.ca; Routley.MLA, Bill LASS:EX; jean@jeancrowder.ca;
steve.housser@bcliberals.com; Fleming.MLA, Rob LASS:EX; office@bcconservative.ca;
kerry.davis@greenparty.bc.ca; S22 XT:Evans, Carollyne HLTH:IN;
letters@timescolonist.com; smcculloch@timescolonist.com; cfaxnews@cfax1070.com;
jlavoie@timescolonist.com; Shane.Woodford@corusent.com; vpalmer@vancouversun.ca;
editor@cowichannewsleader.com; news@cowichanvalleycitizen.com;
editor@shawniganfocus.ca; editor@thetyee.ca; scoop@huffingtonpost.com;
newswatch@bbc.co.uk; nature@natureconservancy.ca
Subject: Shawnigan Lake Watershed protection

The proposal to transport contaminated soils and residue from the Capital Region District, and dump it at the top of the Shawnigan Lake Watershed is the most ridiculous idea I've come across in my life. Why should toxic residue be driven all the way up the Malahat (dangerous in itself) to Shawnigan? Shawnigan Lake is not the dumping ground for other communities' waste material; our water source will be damaged, if not destroyed. If it's too dangerous to dump in their own

locale, why is it acceptable to dump it in ours? Other locations have been offered up, and rejected.

Why is the Provincial Government even considering this when so many, (including industry experts, other MLAs, the Opposition, and most importantly, those who live here and will be impacted) are opposed? I'm concerned about how few people in my own community know about this. It smacks of sneaky underhanded attempts by SIA and the Provincial Government to hide the truth from us. And where is the money going? You just know there've been financial implications attached to this.

I don't believe assurances there will no repercussions for our lake, our children, our water, our soils, our wildlife and ourselves. Would this be allowed near the Sooke Lake Reservoir, which supplies Victoria with water? Of course not! Once the contaminants are in our watershed, they can't be removed. Pandora's box will be open forever.

On the road close to where they plan to dump these toxins, there is a sign which says, "Welcome to Shawnigan Lake ... Protect our Ground Water". SIA and the Provincial Government are absolutely disregarding Area Residents, and are being completely disrespectful to us and our future generations! This dump won't be located in the back yards of those making the decisions, they don't live here and they don't care. They might be in power now, who knows what will happen after the next election. They have nothing to lose; we have everything to lose, and we need to respond accordingly.

We ABSOLUTELY HAVE to STOP THIS. WE WILL NOT ALLOW THIS TO HAPPEN! There are many examples of such projects going very wrong! There are always workarounds and safer options. Let's work together to find them.

I really appreciate you reading this. Please let us know you are opposed, and what you can do to help us! I plan on asking you every day. Let's keep in touch! :-)

Sincerely	522

From: \$22
Sent: Saturday, March 30, 2013 9:46 AM
To: Bunce, Hubert ENV:EX; Lachance, Luc ENV:EX; Minister, ENV ENV:EX;
joe.sequin@gov.ba.ca; Taje, Eddy EMNG:EX; OfficeofthePremier, Office PREM:EX;
crowder.j@parl.gc.ca; jean.crowder.clc@parl.gc.ca; jean@jeancrowder.ca; Routley.MLA, Bill
LASS:EX; steve.housser@bcliberals.com; rob.flemming.mla@leg.bc.ca;
office@bcconservative.ca; kerry.davis@greenparty.bc.ca; \$22
XT:Evans, Carollyne HLTH:IN; letters@timescolonist.com; smcculloch@timescolonist.com;
cfaxnews@cfax1070.com; jlavoie@timescolonist.com; Shane.Woodford@corusent.com;
vpalmer@vancouversun.ca; editor@cowichannewsleader.com;
news@cowichanvalleycitizen.com; editor@shawniganfocus.ca; editor@thetyee.ca;
scoop@huffingtonpost.com; newswatch@bbc.co.uk; newsroom@globeandmail.com;
mayor@saanich.ca; mayor@victoria.ca; malto@victoria.ca; ccoleman@victoria.ca;
sgrudgeon@victoria.ca; bisitt@vicotria.ca; lhelps@victoria.ca; pmadoff@victoria.ca; cthornton-
joe@victoria.ca; gyoung@victoria.ca; mayor@centralsaanich.ca; mayor@northsaanich.ca;
oakbaymayor@oakbay.ca; taraney@shaw.ca; bdesjardins@shaw.ca; mayor@colwood.ca
Cc: S22 fraser@islandnet.com; georgia@shawniganwatershedroundtable.ca
Subject: Fwd: contact info for convenience

To all of you;

Why would...how could a government even consider granting a permit to South Island Aggregate, allowing it to truck in and store thousands upon thousands of tons of contaminated waste in the hole in the ground they are left with after selling all their gravel?

When that hole happens to be located upstream from pristine Shawnigan Lake...the main source of drinking water for vast wildlife, for our community and for much of the Cowichan Valley?

A hole that sits on top of the watershed that fills the wells of numerous neighbours of ours? A hole that is to be filled with SIA's giant balloon of contaminated waste, and then left for us to watch as nature breaks it down.

Is it money? Is it to sweep a problem under a rug located in someone else's home? Is it because we're a small community that would have difficulty turning back such an invasion sanctioned by our government? Is it because we're close? Why does our Liberal government feel that moving someone else's contaminated material to our neighbourhood would be acceptable? Years of truckloads of dangerous waste moving up and down the scenic Malahat highway? Please, look at it through our eyes, this is where we live...this is our water, our drinking water...the water we bathe our children in...the water we cook our food in. How can you possibly see this as being acceptable, as being responsible, as being anything close to what a parent would allow for their children? How can you be so sure that SIA's experts are right, and that ours are wrong?

Please do not allow the South Island Aggregate permit application to be approved. Find a better way to dispose of contaminates rather than move one area's toxic problem into another neighbour's home.

You must know that this would be very wrong. South Island Aggregate and the Liberal Party would become the most-hated names on Vancouver Island, and the neighbouring communities that are sending their contaminated waste into our beautiful watershed would have to live with the terrible legacy of being accomplices in such a toxic invasion on Paradise.

We will talk this up constantly and fight as best we can. We will not stop talking about this invasion. We will never forgive or forget South Island Aggregate's attack on us, and we will never forgive or forget the Liberal Party and its allies for approving and taking part in such an attack on our community, our homes, our children, our Paradise. Our property values will be affected, so we will be forced to consider joining forces with those that are exploring acquisition of legal representation to seek compensation for being sold out, for devaluing our properties and our homes.

Again, how could such a decision be considered? How could those with their "finger on the switch" think that we would not stand up for our water...our wildlife...our children...our homes? Why are you invading Paradise? What country is this? Who are these people? Please find a better way to dispose of this toxic, contaminated waste, rather than pass it on to your neighbour to deal with. Many of you come up to Shawnigan Lake and the Cowichan Valley region to relax in your cottages or for the day, to swim, to boat, to watch an osprey dive for it's dinner, to visit our vineyards, to dine in our unique cafes, to shop for fresh seafood, our delicious lamb and our wonderful produce. You are welcome to continue to come and share this wonderful, diverse gift that we are so fortunate and grateful to be able to live in. We only ask you to respect and help us to be good stewards of the region. Those of you who support, allow and take part in such an offensive and heinous attack on your Cowichan Valley neighbours are not welcome here...but you better get back up here to clean this mess up if your balloon filled with contaminated waste pops a seam after an earthquake, or leaks into our watershed after another rainy season.

Sincerely;

S22

"No one cares how much you know, until they know how much you care." ~ Theodore Roosevelt

----Original Message----

From:

Sent: Saturday, March 30, 2013 5:30 PM

To: Kentp@parl.gc.ca; OfficeofthePremier, Office PREM:EX; Minister, ENV ENV:EX; letters@timescolonist.com; cfaxnews@cfax1070.com; smculloch@timescolonist.com;

cknw.news.radio@spruce.itsd.gov.bc.ca

Subject: NO TO THE TOXIC WASTE DUMP UPSTREAM FROM SHAWNIGAN LAKE

Unprecedented Shawnigan Meeting

March 27, 2013

Shawnigan Community rejection of SIA Contaminated Soil Application

Well over 200 Shawnigan residents gathered on March 25th to show their disapproval of the South Island Aggregates proposal to reclaim their rock quarry, located in the headwaters of the Shawnigan watershed, with contaminated soil. What they witnessed was one of the rarest political events ever seen in British Columbia.

The sitting NDP MLA for Cowichan, the nominated candidates of the Liberals, Conservatives and Greens, the elected Area Director for Shawnigan and the Regional District Board are now on public record as rejecting the SIA proposal. This remarkable consensus is made more stunning because it has been crafted on the eve of a provincial election in which the four provincial candidates will be squaring off over the many hot issues that separate their party platforms. All have declared that the threat to the Shawnigan Watershed is a non-partisan issue, a matter of common environmental concern.

What is truly perplexing is that the current provincial government is persisting with formalizing the offending permit, now in draft form, but soon to be allocated in final form. All who have submitted comments to the Ministry of Environment have been given three short weeks to review the conditions of the complex permit but the ministry has indicated that the permit itself is not in question. The Minister of Environment has made it clear that the ministry has a legal obligation to review the SIA application and that he will defer to the technical judgment of staff. The Shawnigan community cannot believe that this also means an obligation to actually allow a contaminated soil facility to be placed in a major drinking water source against universal opposition. They certainly cannot understand how the most senior elected leadership in the province can avoid acting to protect such a crucial resource, clearly the most central responsibility of a Ministry of Environment.

The big story of the SIA project is surely about allowing a corporation to take the lucrative risk of contaminating a community watershed with a brew of industrial chemicals. It is also about dropping such a bomb a few short weeks before a provincial election when a government dissolves and elected leadership lapses. It is most certainly about the rejection of the consensus of every elected and aspiring leader of the Shawnigan community, The Cowichan Regional

District and Cowichan provincial riding. This is about to become a spectacular miscarriage of democracy that should make the blood run cold in communities throughout the province. It is a situation that desperately needs to be corrected immediately by the Premier and her Cabinet before the opportunity is lost to create a truly inspiring and creative democratic response to a vulnerable community.

Madame Premier, carpe diem, do the right thing.

Sent: Saturday, March 30, 2013 5:23 PM To: OfficeofthePremier, Office PREM:EX

Cc: bruce@fraserforshawnigan.ca; Dix.MLA, Adrian LASS:EX; Routley.MLA, Bill LASS:EX Subject: Fwd: TOXICOLOGIST AND RESISDENT OPPOSED TO TOXIC WASTE NEAR

SHAWNIGAN LAKE

DEAR CHRISTIE CLARKE

I am forwarding my concerns on to you, that i sent to Mr TERRY Lake . I sincerely hope you will do all you can to stop this

outrageous plan to make our watershed a toxic dump. If you are for families then this is where you come in

because you need to stop this crazy idea of dumping toxins into our drinking water .

GROUND WATER FROM THE UPPER SLOPES goes into the lake

and our babies and children have to drink the water THAT YOU PROPOSE TO POISON.

Mr Lake should resign,

HI S LAST EPISODE should have brought his resignation, him being a veterinarian and picking

on 522 522 522

that made international attention....AGAINST YOUR GOVERNMENT so glad he backed down

now tell him he better back down again

If you think you can get away with dumping toxic soil in our watershed you better look out there is a whole community behind stopping this insanity.

I appeal to you human decency AND COMMON SENSE to stop this Just for dollars over the health of a whole growing community here.

Political will is here across all party lines to prtect our drinking water.

How hypocritical, you cannot even walk into the Sooke Watershed or drive because its blocked ON SOOKE RD HERE IN SHAWNIGAN

beside shawnigan lake

but you arE considering dumping toxins in our ground water ABOVE THE LAKE

SHAME SHAME SHAME

how can your government be so blind. and I am not too impressed with mr lake

even having a draft proposal its outrageous.

i invite you to visit here and look at all the clear cutting and damage you have done here

in south shawniganyou need to rezone the area in south shawnigan as the idea of industry abouve a community bigger than duncan be doesn't work if you put poisons into its groung water. it just has to stop.WE ARE A SATELLITE COMMUNITY OF VICTORIA many many people contribute to the workings of VICTORIA with neighbours for example who run the CRD water engineering close by. CRD would never allow this and neither will CVRD.

and we need some respect here from your office IMMEDIATELY DO NOT let this drag on to your further detriment please. act today to stop mr lake and the companies that dont have any grandchildren drinking our water.

SINCERELY



Begin forwarded message:

From: \$22

Date: March 21, 2013 12:44:43 PM PDT

To: EnvProtectResponseWestCoast@gov.bc.ca

Cc: bruce@fraserforshawnigan.ca, adrian.dix.mla@leg.bc.ca, "Office PREM:EX

OfficeofthePremier" <Premier@gov.bc.ca>, "Bill Routley.MLA" <bill.routley.mla@leg.bc.ca>

Subject: TOXICOLOGIST AND RESISDENT OPPOSED TO TOXIC WASTE NEAR

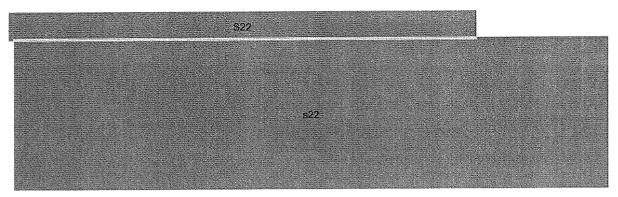
SHAWNIGAN LAKE

ATTENTION TO DIRECTOR:

I am a resident of SHAWNIGAN LAKE which is my water source.

I am strongly oppose to any dumping in the SHAWNIGAN LAKE WATERSHED.

My background is in	S22 , having S22
	\$72
In the	that made into making a madical of
In the S22	that made international medical science
instory	



There is way too much at stake for the little gained by helping a small company make money when it comes to the health and welfare of a whole community, there should be no gambling here

as the capping off of TXINS IN THE GROUND IS FAULTY LOGIC and puts us all at risk.

WE MUST STOP ANY DUMPING OF TOXIC MATERIAL IN THE SHAWNIGAN LAKE WATERSHED and I support my local representative efforts BRUE FRASER for SHAWNIGAN LAKE.

I hope that you will never allow toxic dumping permits like what we are hearing about on STEBBINGS ROAD and other sites in our watershed from being approved or you will be on the hook for MILLIONS UPON MILLIONS OF DOLLARS IN DAMAGES, as well as destroying the communities need for CLEAN WATER. ...and also destroying the health of people that

dollars cannot remedy.

SINCERELY

222

From: S22
Sent: Saturday, March 30, 2013 4:42 PM
To: Bunce, Hubert ENV:EX; Lachance, Luc ENV:EX; Lake.MLA, Terry LASS:EX; Minister,
ENV ENV:EX; joe.sequin@gov.bc.ca; Taje, Eddy EMNG:EX; OfficeofthePremier, Office
PREM:EX; crowder.j@parl.gc.ca; jean@jeancrowder.ca; Routley.MLA, Bill LASS:EX;
steve.housser@bcliberals.com; Fleming.MLA, Rob LASS:EX; office@bcconservative.ca;
kerry.davis@greenparty.bc.ca; \$22 XT:Evans, Carollyne HLTH:IN
Subject: Contaminated Soil dump at Shawnigan Lake

March 30, 2013

Decline SIA's permit to dump contaminated soil in Shawnigan Lake. This is my community. This is my family's drinking water. Is there a guarantee from government officials that my water will not be contaminated when (not if) this site starts to leak. It is difficult to believe it's 2013 and we're even looking at this as an issue, especially weeks before an election!

Whose pockets are getting lined this time? How can the profit for a few be allowed to negatively impact so many??

This permit must be declined!!

Sincerely,

S22

Sent: Friday, March 29, 2013 7:38 PM To: Officeofthe Premier, Office PREM: EX Cc: BC NDP; Media - TC Letters (2012)

Subject: Fwd: Save Shawnigan Lake Watershed deserves RESPECT!!! NO to dumping mine

waste in watershed!!

Forwarded to BC Liberals by

522

Confucius reminds us...the superior mind understands moral goodness while the inferior mind understands only profit.

From: People's Assembly of Victoria <info@paov.ca>

Date: March 29, 2013 6:02:43 PM PDT (CA)

To: \$22

Subject: Save Shawnigan Lake Watershed this Saturday Reply-To: People's Assembly of Victoria <info@paov.ca>

SAVE THE SHAWNIGAN LAKE WATERSHED PROTEST RALLY STOP THE GOVERNMENT APPROVED DESTRUCTION OF OUR ENVIRONMENT AND DRINKING WATER

1pm

4-way STOP

Shawnigan Lake Village

South Island Aggregates is being handed a permit to accept thousands of tonnes per year of contaminated fill to the mine site located at the headwaters of Shawnigan Lake.

We have attempted the collaborative approach, we've attended the propaganda filled meetings, we've sent endless emails to our government representatives, this approach clearly isn't working. So let's be seen and heard, our presence as a concerned community is very important.

Media is interested, politicians are buzzing, this is our chance to make it clear we do NOT want a contaminated fill dump in our watershed! We need every man, woman and child that opposes this permit to please come join us and stand up for our environment!

March 2013 30

LETS MAKE CHANGE TOGETHER

SHAWNIGAN CREEK PROTECTION ASSOCIATION

WRITE A LETTER

FORWARD TO A FRIEND

You are receiving this email because the Peoples Assembly of Victoria thought you might be interested about this Special Announcement, Please forward this email to anyone you think may be interested and we hope you have an exceptionally grand day.

Unsubscribe • Update subscription preferences

Peoples Assembly of Victoria 1 Centennial Square Victoria, BC V8W 1P6

Sent: Thursday, March 28, 2013 8:04 PM

To: OfficeofthePremier, Office PREM:EX; Lake.MLA, Terry LASS:EX

Subject: Shawnigan Lake, SIA Dumpsite

These are a few of the tasty morsels proposed to be dumped here in the Shawnigan Lake water shed: benzene, Clorinated hydocarbons, dioxins, petroleum hydrocarbons, xiylenes, melbyl gertiary butyil ether, shyrene, ethiylbensene stormater runoff, oil and grease, pollcyclic aromatic hydrocarbons furans, and others. Think Waterton, think Love Canal. Think, think, think. Our future, our children and grandchildren futures, your futures. Please think again. Do not let this permit go through.

Yours sincerely,

S22

From:

Sent: Thursday, March 28, 2013 7:46 PM

To: OfficeofthePremier, Office PREM:EX; Lake.MLA, Terry LASS:EX

Subject: Shawnigan Lake Watershed

I consider myself fairly well informed, not one to leap at shadows in the dark (so to speak). What SIA is proposing to do do at Shawnign Lake is insane. How can this even be considered? If this goes through, you can consider yourselves, the maimers, the murderers of the year 2013. Have you read the chemicals that are being consider for this site? have already been accepted for this site? Please think with your conscience, your brain and your heart, and your pollitical futures. This is a very wrong thing to allow to happen. This will affect Shawnigan Lake (water supply and eco-culture), aquifers that affect many unknowns, perhaps Victoria's water shed as well. Even if we are not talking about ground waters, there are the air-borne contaminents to consider. Please have a second look at the list of toxic chemicals that are being considered here and give us more time to do more studies and come up with more diffinitive answers ourselves on the longevity of these chemicals and the longevity of the containments. We have done independent studies that need to be looked at seriously. You owe yourselves and us that much. This is a very grave matter and is due grave consideration.

Thank you sincerely,

of Cobble Hill/Shawnigan Lake

From: \$22

Sent: Wednesday, March 27, 2013 12:33 PM

To: OfficeofthePremier, Office PREM:EX; Lake.MLA, Terry LASS:EX

Subject: STOP S.I.A. CONTAMINATED WASTE SITE IN SHAWNIGAN LAKE!!!!!

Stop this insanity in the Shawnigan Lake Watershed!!! Don't sell off our potable water supply to line your political war chest!!

S22 From:

Sent: Tuesday, April 2, 2013 10:45 PM

To: Bunce, Hubert ENV:EX; Lachance, Luc ENV:EX; Lake.MLA, Terry LASS:EX; ioe.sequin@gov,bc,ca; eddt.taje@gov.bc.ca; OfficeofthePremier, Office PREM:EX; crowder.i@parl.gc.ca: Routley.MLA, Bill LASS:EX; steve.housser@bcliberals.com; Fleming.MLA, Rob LASS:EX; office@bcconservative.ca; kerry.davis@greenparty.bc.ca; carrollyne.evans@viha.ca; letters@timescolonist.com

Subject: Letter SIA

I am appalled by the lack of respect the Liberal Government have showed for our watershed with this Contaminated Soil scheme SIA has put forward! The callous disregard for our community water supply is just pure GREED. The fact that you tried to sneak this through on spring break shows you have total disregard for our watershed and community. The thought that a Contaminated Soil Dump in our watershed is insane! Our Shawnigan Lake is connected to Sooke via underground aquifers so you will be poisoning Sooke Lake too. Every liner has leaked...every one! This is like putting a ticking time bomb in our watershed. The trucks travelling up the Malahat through Goldstream will spread the poison through their tires and possible crashes....are you prepared to poison the southern half of Vancouver Island for Greed and Convenience? I'm not going to allow this insanity to continue! Is there no one in Government with half a brain? This Dump site is wrongly located and threatens 2 major watersheds and hundreds of wells and underground aquifers!

There is a vein of Limestone called Cheese that runs through the SIA quarry and will spread the poison quickly! Are you prepared to deal with people dying? There is blasting that will cause cracks in the rock that poison will drip into. These poisons do not belong on the top of a mountain above 2 watersheds. I took grade 4 science and learned about gravity...all water heads downhill and will pollute our lake silently. We in Shawnigan are not going to become Victoria's dumping ground! Pull you heads out of your pocketbooks and say this out loud...

Contaminated Soil on a Mountain above 2 watersheds!

Does that not sound like the definition of insanity? It does to me! Deny this permit and work with communities to find another spot away from our watersheds!

Act responsibly and stop this insanity!

822

From:

Sent: Wednesday, April 3, 2013 7:42 AM

To: Bunce, Hubert ENV:EX; Lachance, Luc ENV:EX; Lake.MLA, Terry LASS:EX; joe.sequin@gov.bc.ca; eddt.taje@gov.bc.ca; OfficeofthePremier, Office PREM:EX; crowder.j@parl.gc.ca; Routley.MLA, Bill LASS:EX; steve.housser@bcliberals.com; Fleming.MLA, Rob LASS:EX; office@bcconservative.ca; kerry.davis@greenparty.bc.ca; carrollyne.evans@viha.ca; letters@timescolonist.com

Subject: Sia

Contaminated Soil above 2 watersheds is the definition of insanity. Give your head a shake!

From: S22

Sent: Tuesday, April 2, 2013 4:34 PM
To: OfficeofthePremier, Office PREM:EX

Cc: Minister, ENV ENV:EX

Subject: Contaminated Fill Site - Shawnigan Lake

Dear Premier Clark and Minister Lake.

I live in Shawnigan Lake, BC.

I am sure you are aware of the controversy surrounding the issuance of a draft permit for South Island Aggregates to dump contaminated soil at their site at Stebbings Road at Shawnigan Lake. I am writing you today to ask you to PLEASE do the right thing and intervene and stop the permit from being issued. Our community is almost unanimously opposed to a contaminated fill site in our watershed. Every candidate (of all political affiliations) for MLA in the upcoming election is opposed, and the area director is also opposed. We use the ground and lake water for drinking, cooking, bathing, and more. If the citizens of Shawnigan Lake do not want a contaminated fill site in our watershed, then the government should listen and deny the application. I realize that the applicant, SIA, has gone through the proper channels in the application process. But in this case, the risk is just too large! Our drinking water is at risk of serious contamination if something were to go wrong. 7,000 people get their drinking water from the area that will be at risk, many of these people draw their water directly from lake - a lake which is fed by a creek that originated on the property where the contaminated soil will be dumped. The property is also higher in elevation than the lake, meaning if there is runoff, the water will flow downhill toward the lake.

One of the many contaminants allowed under the conditions of the draft permit issued is Benzene - a known carcinogen. Health Canada has documented the dangers of Benzene in drinking water on their website: http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/benzene/index-eng.php

Please do the right thing and intervene in the issuance of this permit - my children drink the water that is at risk of contamination by cancer causing chemicals. I also urge you to consider what you would do if a similar project was being proposed for a site within the watershed where you drew the drinking water for your children.

Thank you,



Sent: Tuesday, April 2, 2013 5:46 PM

To: Minister, ENV ENV:EX: OfficeofthePremier, Office PREM:EX

Subject: Fwd: Contaminated Fill Site - Shawnigan Lake

Hello Premier Clark and Minister Lake.

I forgot to add an important point to my email voicing my concern about the contaminated fill site at Stebbing Road in Shawnigan Lake.

Could you please enlighten me as to how issuing this permit could possible support BC's Water Plan - Living Water Smart?

"It is the Province of British Columbia's vision and commitment to ensuring that our water stays healthy and secure. Living Water Smart is a comprehensive plan for sustainable management of all freshwater (surface and groundwater), protection of aquatic ecosystems and encouraging water smart behaviour and community development practices. The plan commits to new actions and targets and builds on existing work underway in the province to protect and keep our water safe."

http://livingwatersmart.ca/faq.html

Issuing a permit to dump soil contaminated with carcinogens within a watershed that is the source of drinking water for 7,000 people cannot possibly support the BC Government's Living Water Smart Plan. The site is very close to the lake and aquifer that we rely on.

PLEASE put aside whatever politics may be involved, and do what is best for the people of Shawnigan Lake. PLEASE intervene, there is just too much at risk for those of us who drink the water at Shawnigan Lake.

Thank you,



----- Forwarded message -----

From: \$22

Date: Tue, Apr 2, 2013 at 4:34 PM

Subject: Contaminated Fill Site - Shawnigan Lake

To: premier@gov.bc.ca Cc: env.minister@gov.bc.ca Dear Premier Clark and Minister Lake,

I live in Shawnigan Lake, BC.

I am sure you are aware of the controversy surrounding the issuance of a draft permit for South Island Aggregates to dump contaminated soil at their site at Stebbings Road at Shawnigan Lake. I am writing you today to ask you to PLEASE do the right thing and intervene and stop the permit from being issued. Our community is almost unanimously opposed to a contaminated fill site in our watershed. Every candidate (of all political affiliations) for MLA in the upcoming election is opposed, and the area director is also opposed. We use the ground and lake water for drinking, cooking, bathing, and more. If the citizens of Shawnigan Lake do not want a contaminated fill site in our watershed, then the government should listen and deny the application. I realize that the applicant, SIA, has gone through the proper channels in the application process. But in this case, the risk is just too large! Our drinking water is at risk of serious contamination if something were to go wrong. 7,000 people get their drinking water from the area that will be at risk, many of these people draw their water directly from lake - a lake which is fed by a creek that originated on the property where the contaminated soil will be dumped. The property is also higher in elevation than the lake, meaning if there is runoff, the water will flow downhill toward the lake.

One of the many contaminants allowed under the conditions of the draft permit issued is Benzene - a known carcinogen. Health Canada has documented the dangers of Benzene in drinking water on their website: http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/benzene/index-eng.php

Please do the right thing and intervene in the issuance of this permit - my children drink the water that is at risk of contamination by cancer causing chemicals. I also urge you to consider what you would do if a similar project was being proposed for a site within the watershed where you drew the drinking water for your children.

Thank you,



522

Sent: Tuesday, April 2, 2013 3:45 PM

To: OfficeofthePremier, Office PREM:EX; Lake.MLA, Terry LASS:EX

Subject: Toxic Waste

I am writing to plea with you to stop the madness! We do not want you to be responsible for another Love Canal. The draft permit issued to SIA allowing them to handle contaminated soil must be rescinded and stopped. It is unthinkable to allow benzene, dioxins, hydrocarbons, oil, creosote, xylenes and styrenes to be dumped in a watershed that will affect, not only Shawnigan Lake area, but ground water supplies and any waterways that this water will run into. (for example Saanich Inlet and the Victoria watershed)

I cannot believe this insanity has gotten this far, and I'm sure its been going on long before this draft permit came into being.

Please act stongly and act NOW.

Thank you,

322

of Cobble Hill/Shawnigan Lake

Sent: Wednesday, April 3, 2013 1:58 PM To: OfficeofthePremier, Office PREM:EX

Cc: Lake, MLA, Terry LASS: EX

Subject:

Christy Clarke

I have resided in Shawnigan Lake BC with my family for the and now the community that we call home and the lake we all enjoy and rely on as our water source is being threatened by South Island Aggregate who has been issued a draft permit by YOUR GOVERNMENT to dump contaminated soil full of the worst poisons and toxins on the planet in our WATER SHED! Terry Lake your Environment Minister seems to be ignoring the fact that this is a disaster waiting to happen. This is basically a bowl of blasted rock with a creek running right through it draining into the lake! We have a right to clean drinking water and by granting this permit your government is denying us that right> this permit you. This must be stopped and you have means to do so.

\$22

S22

Sent: Thursday, April 4, 2013 10:17 AM

To: Minister, ENV ENV:EX; Fleming.MLA, Rob LASS:EX; bruce@fraserforshawnigan.ca; Dix.MLA, Adrian LASS:EX; OfficeofthePremier, Office PREM:EX; Routley.MLA, Bill

LASS:EX

Subject: Shawnigan Lake - No Contaminated Waste site!

Hon. Minister T. Lake, Minister of the Environment Rob Flemming, BC opposition critic for the Environment Bruce Fraser, CVRD Area Director Wes Shoemaker, Deputy Minister of the Environment [no email available] Adrian Dix, Official Leader of the Opposition Hon. Christy Clark, Premier of BC Mr. Bill Routley, MLA

Decline SIA's permit to dump contaminated soil in Shawnigan Lake.

Sincerely,

S22

Former Resident of Shawnigan Lake, BC

27

From: \$22

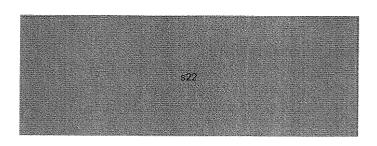
Sent: Thursday, April 4, 2013 10:02 AM

To: S22; South Cowichan Chamber; L. Patrick Hrushowy; OfficeofthePremier,

Office PREM:EX; Rebecca Day Reynolds

Subject: FW: Shawnigan Water

Importance: High



---- Forwarded Message

From: S22

Date: Thu, 4 Apr 2013 09:54:35 -0700

To: <undisclosed-recipients:;> Subject: Shawnigan Water

Hi everyone, apologies again for using my email as a soap box but our deadline of April 9 is looming. We must get the SIA permit to dump contaminated soil in the Shawnigan Watershed cancelled or at the very least post-poned. If you're not entirely familiar with the situation, please take a few minutes to watch this video:

https://www.youtube.com/embed/nkhs7xgXPjM

If you haven't signed the petition yet (there are 3,000+ signatures to date), please visit the link below:

http://www.change.org/petitions/the-government-of-british-columbia-decline-sia-s-permit-to-dump-contaminated-soil-in-shawnigan-

lake?fb_action_ids=10200450137148620&fb_action_types=change-

org%3Arecruit&fb_ref=__efcYWFrcrH&fb_source=other_multiline&action_object_map=%7B %2210200450137148620%22%3A379300368852582%7D&action_type_map=%7B%22102004 50137148620%22%3A%22change-

org%3Arecruit%22%7D&action_ref_map=%7B%2210200450137148620%22%3A%22__efcYWFrcrH%22%7D

Letters can also be sent to the following:

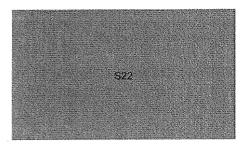
Premier@gov.bc.ca (Premier of BC)
Terry.lake.mla@gov.bc.ca (Minister of the Environment)

wes.shoemaker@gov.bc.ca (Deputy Min of Environment)
Perry.kendall@gov.bc.ca (Prov. Health Officer)
Barry.boettger@gov.bc.ca (Prov. Drinking Water Officer)
Adrian.dix.mla@gov.bc.ca (Leader of the Opposition)
Bill.routley.mla@gov.bc.ca (NDP MLA)

If you would like a draft letter with the facts that you can cut and paste and edit to make your own, please let me know, we would be happy to share what we've sent. You're also welcome to use our fax machine.

This issue effects everyone in South Cowichan as our water interconnect via underground aquifers, so if you're in Mill Bay, Cobble Hill or even Victoria, please sign, write and share with your friends.

Thanks again!



----- End of Forwarded Message

From: S22
Sent: Thursday, April 4, 2013 5:48 AM
To: Bunce, Hubert ENV:EX; Lachance, Luc ENV:EX; Lake.MLA, Terry LASS:EX; Minister,
ENV ENV:EX; Taje, Eddy EMNG:EX; OfficeofthePremier, Office PREM:EX;
crowder.j@parl.gc.ca; Routley.MLA, Bill LASS:EX; jean@jeancrowder.ca;
steve.housser@bcliberals.com; Fleming.MLA, Rob LASS:EX; office@bcconservative.ca;
kerry.davis@greenparty.bc.ca; s22 XT:Evans, Carollyne HLTH:IN;
letters@timescolonist.com; smcculloch@timescolonist.com; cfaxnews@cfax1070.com;
jlavoie@timescolonist.com; Shane.Woodford@corusent.com; vpalmer@vancouversun.ca;
editor@cowichannewsleader.com; news@cowichanvalleycitizen.com;
editor@shawniganfocus.ca; editor@thetyee.ca; scoop@huffingtonpost.com;
newswatch@bbc.co.uk; nature@natureconservancy.ca
Subject: April 4 edition - Shawnigan Lake Watershed protection

Good morning, folks, are any of you wondering what you can do to prevent the dumping of Victoria's toxic waste in our Shawnigan Lake watershed? Communication is what it's all about. That's why I continue to send you emails, in the hope that someone will pick up the ball and run with it. Sometimes it only takes one person to make a difference, are you that person?

I encourage you to look into this issue fully to understand the different standpoints. You might be interested in this site: http://www.fraserforshawnigan.ca/ It also contains the complete draft proposal between the Provincial Government and SIA.

I'm also including an attachment, the plan is to post it around our community.

Have a good day everyone. Sincerely, S22 Shawnigan Lake

Good morning everyone, happy Friday to you and your families. Well, it's been raining for more than 24 hours here in Shawnigan. Fresh, clean water has been falling down on our Watershed and Lake. It doesn't taste of anything except of Nature's promise. Its pristine beauty is draining into our Watershed, and all the way down into our aquifers, wells and Lake. Do you think we will still have drinkable water in a year, after the Provincial Government's sponsored SIA dumping starts (if it hasn't already...)? Do you think it will still be drinkable after 2, 10, 20 years, when our children's children are having kids of their own? The statistics will not guarantee it. Do you care?

I pose these questions to you. Would you accept an activity such as this in your area, if it could so detrimentally affect your water, soil and air? Where do you, your kids, relatives and friends live, work and play? We, our kids, relatives and friends work here, live here, and play here. Let's not forget to mention our visitors. We care!

This issue isn't just about the residents of Shawnigan Lake, it's about all of us in our Beautiful Province of BC. The arrogance of our elected officials (as in this case, to name only one) affects everyone. It will affect you, too, sooner or later. Let's make a difference, let's all say WE CARE!

There are alternative locations for this dump. They were offered to the Provincial Government, and were rejected. Why? What's so special about Shawnigan Lake that it's the "best place to dump Victoria's waste"? Signage on the way in says "Welcome to Shawnigan Lake.... Protect our Groundwater". Unless you're the Provincial Government, I guess. Why is that, exactly?

Please communicate this to others. One person can make a difference, and that one person could well be you, if you care!

I hope you all have a good weekend! I'll be thinking of you and wishing you only the best. I'm attaching a photo for your enjoyment.

With all sincerity, \$22 Shawnigan Lake

From: \$\frac{\text{S22}}{\text{Sent: Thursday, April 4, 2013 10:34 PM}}\$ To: OfficeoffhePremier, Office PREM:EX; Bunce, Hubert ENV:EX; Lachance, Luc ENV:EX; Minister, ENV ENV:EX; joe.sequin@gov.bc.ca; carrollyne.evans@viha.ca Subject: Please Save our Watershed
Re:/South Island Aggregate's Draft Waste Discharge Permit (PR105809)
I am writing as a concerned citizen of Shawnigan Lake to ask you to intervene in stopping the granting of this permit source of all of our water. To have the quality of this water and the health of our children and grandchildren jeopardized is shocking to us. We simply cannot understand how the process in place and our elected Government would support a private company dumping hundreds of tons of contaminated waste into a watershed that impacts so many people. The only winner here is the SIA, which stands to make a great deal of money at the expense of our and our neighbours' well-being. Surely this kind of environmental risk is unacceptable?
We have deep roots here and have been good stewards of the lake and adjacent forest, hoping to hand it on to our children and our grandchildren, all of whom love it as much as we do. I'm sure, then, that you will understand that we see this as a most serious issue, indeed!
We have carefully read all the reports (both pro and con) and are convinced that this is a most serious issue and that to allow the permit to move further would be a great miscarriage of government management and responsibility. We count on you to protect us. Please do not continue to tell us that your hands are tied. There has to be a way forward and I am entrusting you to find the solution.
Thank you.
Sincerely,

S22

Sent: Monday, April 8, 2013 7:33 AM

To: Bunce, Hubert ENV:EX; Lachance, Luc ENV:EX; Lake.MLA, Terry LASS:EX; Minister, ENV ENV:EX; Taje, Eddy EMNG:EX; OfficeofthePremier, Office PREM:EX; crowder.j@parl.gc.ca; Routley.MLA, Bill LASS:EX; jean@jeancrowder.ca; steve.housser@bcliberals.com; Fleming.MLA, Rob LASS:EX; office@bcconservative.ca; kerry.davis@greenparty.bc.ca; s22 XT:Evans, Carollyne HLTH:IN; letters@timescolonist.com; smcculloch@timescolonist.com; cfaxnews@cfax1070.com; jlavoie@timescolonist.com; Shane.Woodford@corusent.com; vpalmer@vancouversun.ca; editor@cowichannewsleader.com; news@cowichanvalleycitizen.com; editor@shawniganfocus.ca; editor@thetyee.ca; scoop@huffingtonpost.com; newswatch@bbc.co.uk; nature@natureconservancy.ca; Go public Subject: April 8 edition - Shawnigan Lake Watershed protection

Pandora's box.

You know, if this project goes through, and something goes wrong, it will be too late to fix it, the effects will be too far-reaching. We won't even know there's a problem until the toxins are streaming into Shawnigan Creek, into Shawnigan Lake, and downstream to the ocean.

There's a very strong possibility of an aquifer link between the Shawnigan Watershed and the Sooke Lake Watershed. This means there's a very strong possibility of contamination in both Watersheds. The public is banned from even seeing the Sooke Lake Watershed, not allowed anywhere near it, as if it's somehow sacred. In comparison it seems strange to me how little respect is paid to the Shawnigan Watershed.

I ask that the Provincial Government react accordingly by rejecting this Project. Respect for all is a good thing.

Sincerely, 822 Shawnigan Lake

From: \$22 Sent: Sunday, April 7, 2013 7:22 AM

To: Bunce, Hubert ENV:EX; Lachance, Luc ENV:EX; Lake.MLA, Terry LASS:EX; Minister,

ENV ENV:EX; Taje, Eddy EMNG:EX; OfficeofthePremier, Office PREM:EX;

 $crowder.j@parl.gc.ca; \ Routley.MLA, \ Bill\ LASS:EX; jean@jeancrowder.ca;$

steve.housser@bcliberals.com; Fleming.MLA, Rob LASS:EX; office@bcconservative.ca;

kerry.davis@greenparty.bc.ca; S22 XT:Evans, Carollyne HLTH:IN;

letters@timescolonist.com; smcculloch@timescolonist.com; cfaxnews@cfax1070.com; ilavoie@timescolonist.com; Shane.Woodford@corusent.com; vpalmer@vancouversun.ca;

editor@cowichannewsleader.com; news@cowichanvalleycitizen.com;

editor@shawniganfocus.ca; editor@thetyee.ca; scoop@huffingtonpost.com;

newswatch@bbc.co.uk; nature@natureconservancy.ca

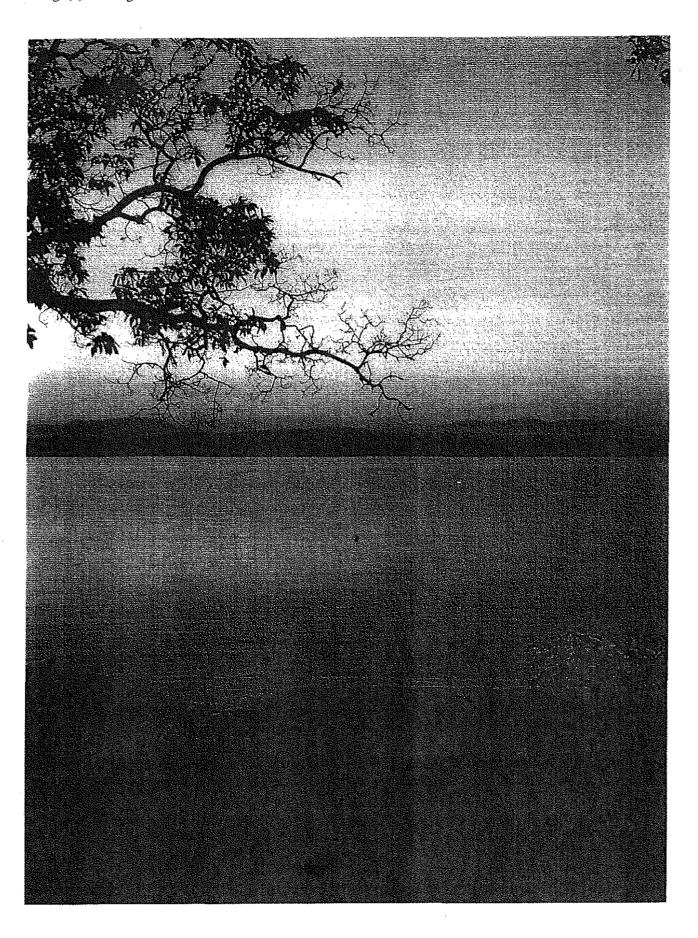
Subject: April 7 edition - Shawnigan Lake Watershed protection

Hi, good morning! Today's photo shows a view of the Shawnigan area and the lovely Cowichan Valley, from North Saanich.

We are short-term stewards of this planet, and the choices we make now should not adversely affect our future. I understand the need to remove and treat contaminated soil, freeing up land for improvement and development. I do not undertand the logic of dumping it in our fragile Shawnigan Lake watershed where it will impact the next generations for decades, perhaps an entire century or more.

To the Provincial Government: Please, please, won't you consider the alternative sites offered up, or find one yourselves? The Shawnigan Lake Watershed is not Victoria's garbage can, it leaks!

Thank you for your consideration, \$22 Shawnigan Lake



Page 221 http://cliff-prem.gov.bc.ca/images/view.htm?rsn=918870&log_rsn=586015&log_id=578... OOD 2013-04295

822

Sent: Friday, April 5, 2013 4:41 PM

To: Lake.MLA, Terry LASS:EX; OfficeofthePremier, Office PREM:EX

Cc: Minister, ENV ENV:EX; crowder.j@parl.gc.ca; Routley.MLA, Bill LASS:EX;

steve.housser@bcliberals.com; Fleming.MLA, Rob LASS:EX; office@bcconservative.ca;

kerry.davis@greenparty.bc.ca; XT:Evans, Carollyne HLTH:IN; lynne.magee@viha.ca;

letters@timescolonist.com; editor@cowichannewsleader.com;

news@cowichanvalleycitizen.com; editor@shawniganfocus.ca;

georgia@shawniganwatershedroundtable.ca

Subject: Draft Permit PR105809: Zero Margin of Error = Zero Acceptable Risk

To Minister Terry Lake and Premier Christie Clark:

Re: Draft Permit, PR105809 issued under the Environmental Protection Act, Cobble Hill Holdings Ltd (BC075488), Discharge refuse to ground and effluent to an ephemeral stream from a contaminate

soil treatment facility and a landfill facility located at 640 Stebbings Road, Shawnigan Lake, BC No guarantee from any political, business or scientific entity will eliminate the catastrophic environmental, social and economic risk inherent in dumping contaminated anything -- ever -- on a watershed. Seven thousand (plus) people whose lives in all aspects revolve around the safety of Shawnigan Lake is not an acceptable risk.

If there is no law or policy to enable the stopping of the above permit, then the law is not serving the people; and when the law is not serving the people, it is the job of you, agovernment, to serve the people and preserve our rights.

The provincial government's lack of regard or response to the communications from Shawnigan residents and political candidates is creating a complete loss of face for the BC Government, and for each of you, personally.

Clean water is at a premium, planet wide, with bodies of water becoming polluted one community at a time; and the residents of Shawnigan Lake refuse to be another one.

All peoples and governments urgently need to be working together towards finding a solution to the increasing amount of toxic waste materials being produced, by a human population larger than anything the Earth has ever sustained.

Ignoring one another divides and further distracts everyone from the real problem that affects all of us, and most-importantly, from finding a sustainable and humane solution to it.

I call on you to lead and encourage all people of BC in an inclusive, transparent and solution-focused dialogue around what to do with toxic waste. We are all on the same boat; we are all on the same planet.

I urge you to act quickly and effectively in each of your positions to rescind this permit, and to find a better solution than endangering the lives and community of Shawnigan Lake and the

many others in BC currently facing similar threat. The world has not come to this; your government has. This is on your hands.

No one has control over accidents -- the coffee spills, the car swerves, the oil-tanker runs aground, the tarp leaks; and when the margin for error is zero, there is no such thing as an acceptable risk.

Something different must be done.

Sincerely,

S2

Shawnigan Lake, BC

822

Sent: Tuesday, April 9, 2013 8:28 AM

To: Minister, ENV ENV:EX; councillors@victoria.ca; Blissit@vicotria.ca; OfficeofthePremier,

Office PREM:EX

Subject: South Island Aggregates' Permit Application

s22

retirement years. That precious piece of the planet for us, turned out to be on Shawnigan Lake.

We are among the many who draw their drinking and cooking water from the lake. We are neighbours to many in the region who draw their drinking water from wells fed by the aquifer located below South Island Aggregates. Sitting on our dock we have watched osprey and eagles dive into the lake for a trout dinner to feed their young, mink and river otters swimming through the shoreline brush, deer and racoons bent over for a drink, seniors kayaking past, and children splashing and laughing nearby.

Who could possibly think that after selling all the gravel on their property, it would be acceptable to permit a company to fill and cover the enormous hole left behind with contaminated waste? Contaminated waste created primarily in the Greater Victoria region? An enormous hole located on top of a vast aquifer that fills the wells of many of your neighbours, above our precious Shawnigan Lake, and in close proximity to the Sooke aquifer? In a watershed that is life for a vast wildlife population? An enormous hole to be filled with contaminated waste delivered by thousands of trucks traveling up and down the Malahat Highway for many years to come? A covered hole everyone below will watch with fear, as Nature slowly breaks it down? Will all those who support such an invasion on Paradise be around to cleanup when that happens?

Do you really think that it won't happen?

Does the Minister of the Environment, the City of Victoria, the surrounding cities, the Premier, the Liberal Government, South Island Aggregates and all those who would benefit by supporting such a permit, feel just fine with having this covered hole of contaminated waste attached to your legacy? With your names connected to it for generations to come?

Please, do not devalue the homes so many of us worked so hard for. Please do not allow South Island Aggregates permit application. Please do not choose to be part of such an obscene assault on Paradise.

Sincerely;

999

(some of your neighbours)

S22

Sent: Tuesday, April 9, 2013 8:25 AM

To: Bunce, Hubert ENV:EX; Lake.MLA, Terry LASS:EX; Minister, ENV ENV:EX; OfficeofthePremier, Office PREM:EX; joe.sequin@gov.bc.ca; Taje, Eddy EMNG:EX;

Fleming, MLA, Rob LASS: EX; councillors@victoria.ca

Subject: South Island Aggregate

Please look at the conflicting reports with regard to the suitability of the SIA lands as a site for the dumping and treating of contaminated soils. Any risk to Shawnigan Lake's water quality is a risk that should not be taken. Activity in the Shawnigan Lake watershed has continually posed a threat to the lake's water quality and the SIA project has the potential to be catastrophic, not just now, but for generations to come. Clean drinking water is the world's most valuable resource and it is our duty to protect it. Please say no to SIA and take the time to find a site that will be safe, with no potential impact on its surroundings.

Thank you for your time,

S22

Sent: Tuesday, April 9, 2013 7:15 AM

To: Lake.MLA, Terry LASS:EX; Minister, ENV ENV:EX; OfficeofthePremier, Office

PREM:EX

Cc: georgia@shawniganwatershedroundtable.ca; Bunce, Hubert ENV:EX; joe.sequin@gov.bc.ca; Taje, Eddy EMNG:EX; Fleming.MLA, Rob LASS:EX; councillors@victoria.ca

Subject: Shawnigan Water Shed Dumping grounds

Dear Mr. Lake and Ms. Clark

I live in Shawnigan Lake and although you have received many such letters I want add my comments and views to ensure you fully realize the impact this decision is having on our community in this watershed.

I am not opposed to development, far from it I think it is essential for us to have logical well thought out developments within the region. There are many benefits from such developments which support the community with tax dollars, jobs and maintenance of our services. Development must serve a logical end and that is enhancing our community and contributing to our well being as well as be value add to the community.

This latest initiative, to bring in millions of tons of contaminated waste to our region is totally oppositional to any logical person's thinking about development. I cannot see any benefit what so ever in this venture. There maybe some jobs hauling the dirt, compacting it etc. but beyond that it appears to be more negative if anything at all.

We know these berms will fail in the future, it has happened in many places in the world the tar ponds in Nova Scotia, tailing ponds in mining communities around the world. All of those were guaranteed and we were assured no risk to us. This operation is the same. I am sure the proponents believe what they are telling us about the current technology. But it will fail and the consequences will be felt and suffered by us living in Shawnigan Lake now and in the future, not those people in Victoria who are disposing of the contaminated soil or those in government making the decision. The resource at risk is just too critical to threaten with this type of dumping.

Mr. Lake you say you have no power to stop this, I do not believe that. You can and must put a stop to it, there is a need for serious intervention to prevent this from going ahead. I am not a big fan of political interference with the administration of the legislation. However when so many people are impacted and the consequences of the failure when it happens will be catastrophic for generations to come. You must find a way to stop this from proceeding.

I do a lot of hiking in this area, and one only needs to go to the top of Mt Baldy and look across at the watershed of the Sooke Reservoir to see how a water supply water shed needs to be protected. Our watershed is already subject to many stressors including boat traffic, septic and agricultural run off. We do not need another stressor, the contamination that will occur with the disposition of contaminated soil in the water shed will create an enormous health risk for this community. The consequences of the failure when it happens, will result in thousands of lives being impacted let alone the ongoing impact of then small seepages occurring prior to the failure.

I look forward to your response

Please stop this folly now.

Sincerely



Courage is resistance to fear, mastery of fear, not absence of fear. Mark Twain

From:
Sent: Tuesday, April 9, 2013 6:01 AM
To: Bunce, Hubert ENV:EX; Lachance, Luc ENV:EX; Lake, MLA, Terry LASS:EX; Minister,
ENV ENV:EX; Taje, Eddy EMNG:EX; OfficeofthePremier, Office PREM:EX;
crowder.j@parl.gc.ca; Routley.MLA, Bill.LASS:EX; jean@jeancrowder.ca;
steve.housser@bcliberals.com; Fleming.MLA, Rob LASS:EX; office@bcconservative.ca;
kerry.davis@greenparty.bc.ca; s22 XT:Evans, Carollyne HLTH:IN;
letters@timescolonist.com; smcculloch@timescolonist.com; cfaxnews@cfax1070.com;
jlavoie@timescolonist.com; Shane.Woodford@corusent.com; vpalmer@vancouversun.ca;
editor@cowichannewsleader.com; news@cowichanvalleycitizen.com;
editor@shawniganfocus.ca; editor@thetyee.ca; scoop@huffingtonpost.com;
newswatch@bbc.co.uk; nature@natureconservancy.ca; Go public
Subject: April 9 edition - Shawnigan Lake Watershed protection

Good morning, everyone.

This is not fear-mongering. It's true, I am afraid for the health of the Shawnigan Lake Watershed, for the Sooke Lake Watershed and all the other watersheds across our Province, for all the people who rely on them for so many things. So should we all be. If this can happen here, a half hour away from Victoria, it can happen anywhere.

To our politicians, please don't let this happen, please consider your actions. If this were to threaten your own neighbourhoods, would you sit idly by? Please help stop this project to dump Victoria's toxic waste in our watershed!

Kind regards, \$22 Shawnigan Lake

From: janet cundall [mailto:treesforchildren@gmail.com]

Sent: Monday, April 8, 2013 10:40 PM

To: Bunce, Hubert ENV:EX; Lake.MLA, Terry LASS:EX; Minister, ENV ENV:EX; OfficeofthePremier, Office PREM:EX; joe.sequin@gov.bc.ca; Taje, Eddy EMNG:EX;

Fleming.MLA, Rob LASS:EX; councillors@victoria.ca Subject: Shawnigan Lake Watershed + bio-remediation

Dear Sirs:

It is illegal in Europe to dump contaminated fill in a watershed so the industry of bio-remediation has grown up. As an example, www.livingwater.org.uk is a company I worked for that has a long 20 year client list including Bodyshop, BP hydrocarbons, fish canneries, pulp processing to convert waste into useful products. Fast growing micro-organisms - bacteria, algae, and plants mimic the work that estuary and wetland ecosystems and compost heaps do to transform waste into earth, fertilizer, essential oils, florists greenery as well as beautiful landscaping, cleaned water and more oxygen. More of the planet's oxygen is produced from blue-green algae than from forests! In Nature there is no waste, just processes of converting it. Often the companies find they save money doing the bioremediation because ways are found to reduce the b.o.d. which saves the water and energy bills. Jobs and incomes are created, especially in the summer student work months and for contractors.

In view of the potential of bio-remediation, I am wondering why on earth there is even a consideration of dumping contaminated fill anywhere near Shawnigan or Sooke Lake drinking water? At last August's public meeting in Kerry Park, I asked the engineers if they intended to build a roof to protect the current day's dumping load from the rain that would wash the contaminants into the Creek on the edge of their property; their answer was 'thinking about it''. So how are the toxins not going to leach into the underground water aquifers or the streams? It takes more than a day to bury the contaminated fill and less than a day's rain to wash some of the current day's dumping load not yet buried into the water supply.

David and Jane Shields who run the Living Water Company in Scotland would be happy to speak to the issue. They do have contacts in bio-remediation in BC and Jane has visited Shawnigan Lake. She is highly trained in micro-biology.

Yours sincerely, Janet Cundall, teacher/owner Shawnigan Lake Montessori PO Box 206, Shawnigan Lake BC V0R 2W0

922

Sent: Monday, April 8, 2013 10:27 PM

To: Bunce, Hubert ENV:EX; OfficeofthePremier, Office PREM:EX; joe.sequin@gov.bc.ca;

Taje, Eddy EMNG:EX; Fleming.MLA, Rob LASS:EX; councillors@vic.ca

Subject: SIA application to accept contaminated soil for reclamation at Shawnigan Lake

Dear Mr. Bunce, et al,

Please understand that I and my family urge you to reconsider issuing a permit to South Island Aggregates which would allow them to accept contaminated soil at their site in the industrial area of the Shawnigan Lake watershed.

Even though the application may meet the standards required to allow such a permit, I contend there is another side to the equation. While nobody can guaranty that there will never be a leakage of any of the toxic contaminants, you must ask yourself what would or could be done if a leakage were to occur. As you can imagine it would not be a simple job to contain any spillage and the effects on the lake would be IRREVERSIBLE. Once the contaminants escaped into the aquifer there would not be any way to contain them. By the time they are detected any hope of containment would be gone.

While I cannot speak to the science about the geologic structure of the area, I can speak to the devastation which would occur if these toxins entered the watershed and the creek going into the lake.

Once again, if you cannot guaranty a 100% failsafe system, I urge you to do the right thing and reject this application and deny the permit.

Thank you,



From: S

Sent: Monday, April 8, 2013 10:24 PM

To: Bunce, Hubert ENV:EX; Lake.MLA, Terry LASS:EX; Minister, ENV ENV:EX; OfficeofthePremier, Office PREM:EX; joe.sequin@gov.bc.ca; Taje, Eddy EMNG:EX;

Fleming.MLA, Rob LASS:EX; councillors@victoria.ca

Subject: Proposed contaminated soil site in the Shawnigan Lake watershed.

I am writing to you to express my concern over the SIA proposal of the contaminated soil landfill at the Stebbings Road site in Shawnigan Lake. The site has been selected based on convenience and economic gain rather than suitability. There has not been any guarantee that the rock below the site is solid and will not allow flow through of contaminates if and when the storage cell is compromised. As was pointed out in studies by Dennis Lowen, the bedrock is not likely to be without cracks. Nearby wells are further, unarguable proof of the connection to groundwater throughout the area in question. There is no remediation plan to deal with contaminated groundwater. There is also a lack of consideration of the long term. After 50 years of dumping the economic gain will come to an end but the risks to the community of Shawnigan will continue. They will continue without monitoring and with increasing likelihood of failure due to aging materials and shifting geology.

On the BC Ministry of Environment website it states, "The Environmental Protection Division (EPD) of the Ministry of Environment works to prevent pollution and promote and restore environmental quality. Its business goals include: Pollution prevention; Continuous improvement in Air. Land and Water Quality; and Fully engaged partners." The Draft SIA permit under consideration does not reflect the ideology or goals of the above statement. The proposed site increases the risk of pollution to a drinking water source and I do not think the words are meant to infer that the restoration of environmental quality is found through the relocation of the problem. With regards to the business goals I see two very obvious disconnects. Putting a drinking water source at risk, transporting contaminates through the salmon spawning area of Goldstream, that has already witnessed the effects of spilled pollutants, and creating potential for airborne contamination is not continuous improvement. Finally I would like to speak to the goal of fully engaged partners. The community of Shawnigan Lake does not want contaminated soils posing a risk to our watershed. The CVRD has made it clear that they are also against the site. Members of the CRD stand behind us as do our local politicians. I ask the provincial government to listen to us and consider its responsibility to the environment of British Columbia and the citizens that depend on it.

S22

Shawnigan Watershed Roundtable

S22

Sent: Monday, April 8, 2013 9:34 PM

To: Sheila Leigh; Jame Pollock; Julia Pollock; Osman; Lana Salmon; Taje, Eddy EMNG:EX; Minister, ENV ENV:EX; Bunce, Hubert ENV:EX; joe.sequin@gov.bc.ca; OfficeofthePremier, Office PREM:EX; Fleming.MLA, Rob LASS:EX; Bailey.Cameron@bcg.com; Lake.MLA,

Terry LASS:EX; greg.johnson@cibc.ca

Subject: Objection and opposition to the Dumping of refuse ~

I object and oppose wholeheartedly the Dumping of refuse ~ ~ or any other such items in or within 10k of the Shawnigan Watershed (or any other watershed for that matter!)

I spent some time today in the area where water flows from that watershed into Shawnigan Lake. (See pics below).

We are so fortunate ~ the birds were chirping, several species of ducks were calling back and forth, 2 sunning turtles dove in as we approached, buds were beginning to appear, water flowed from the streams into the lake ~ clear and clean. It was peaceful and untouched by greed and money and the resulting pollution those 2 things cause!

S22

LET US KEEP IT THIS WAY FOR not just

\$22

Children but her Grandchildren too!

PRISTINELY CLEAR AND FREE FLOWING WATER ~ Entering Shawnigan from the south end watershed ~ TODAY!

Today's outing on OUR lake!

Contentment!



822

Sent: Monday, April 8, 2013 9:04 PM

To: Lake.MLA, Terry LASS:EX; Minister, ENV ENV:EX; Officeofthe Premier, Office PREM:EX; joe.sequin@gov.bc.ca; Taje, Eddy EMNG:EX; Bunce, Hubert ENV:EX;

Fleming, MLA, Rob LASS: EX; councillors@victoria.ca

Subject: Letter of opposition to the granting of a permit to SIA for dumping of

To Minister Lake

I am writing to express my opposition to the granting of any permit to allow South Island Aggregate or Cobble Hill Holdings Ltd to operate a dump for contaminated soil at a facility within the Shawnigan Lake Watershed. As a resident of Shawnigan Lake with two school aged children who depend on Shawnigan Lake as our source of drinking water, I find the action by the British Columbia Ministry of Environment to be a despicable act against the citizens of not only Shawnigan Lake, but the Province. For a governing body to take the liberty of placing income from business above and beyond the rights of the local people who have clearly demonstrated and scientifically proven the fragile nature of this site, is beyond comprehension. I would like clarification on how studies to show the suitability of this site, which were funded by the company applying for the permit, can be deemed an acceptable practice, considering the environmentally sensitive nature of this issue. Your immediate response will be appreciated.

For the sake of the health of the residents of Shawnigan Lake, and potentially those within the adjoining areas linked by fractured limestone bedrock aquifers, I urge you to withdraw the draft permit immediately.

S22

Shawnigan Lake Resident

522

Sent: Monday, April 8, 2013 7:58 PM

To: Bunce, Hubert ENV:EX; Lachance, Luc ENV:EX; Lake.MLA, Terry LASS:EX; joe.sequin@gov.bc.ca; Taje, Eddy EMNG:EX; OfficeofthePremier, Office PREM:EX;

XT:Evans, Carollyne HLTH:IN

Subject: Contaminated soils dump in Shawnigan Lake

As a resident of Cowichan Valley and a proud British Columbian I would like you to know that I am vehemently opposed to the proposal to allow SIA to dump contaminated soils in the Shawnigan Lake Watershed.

I was astonished and disappointed that a temporary permit was granted, but remain hopeful that the powers that be will listen to the community, hear our concerns and refuse to allow this proposal to proceed any further.

A watershed which supports thousands of families and forms an integral part of our ecosystem is a completely inappropriate place to dump contaminated soil. There is nothing in this proposal that benefits our community. The sole beneficiary is SIA.

The science upon which the proponents rely is not definitive. There is equally strong science indicating that the proposal is unsafe. SIA is not a large, deep pocket organization. There are no safeguards in place which would ensure that should the project fail and the contaminants leak from the storage site that SIA has either the capacity or the resources with which to make things right again. So much for the polluter-pays principle ...

At the very least, a full and detailed scientific assessment of the proposal needs to be undertaken by an independent third party. There is no rational reason for rushing this proposal through at this time. The community doesn't want it and the science doesn't support it.

As a Province, we can do better than this. We should do better than this. We owe it to ourselves and our future generations to be better stewards of the land.

I implore you, please, please STOP THE SIA PROPOSAL!!!

Suzanne



S22

Sent: Tuesday, April 9, 2013 10:28 PM

To: Bunce, Hubert ENV:EX; Lake.MLA, Terry LASS:EX; Minister, ENV ENV:EX; OfficeofthePremier, Office PREM:EX; Seguin, Joe EMNG:EX; Taje, Eddy EMNG:EX;

Fleming.MLA, Rob LASS:EX Subject: SIA contaminated soil site

Councillors

Subject: South Island Aggregate

Please look at the conflicting reports with regard to the suitability of the proposed site for SIA site for the dumping and treating of contaminated soils. Any risk to Shawnigan Lake's water quality is a risk that should not be taken. Activity in the Shawnigan Lake watershed has continually posed a threat to the lake's water quality and the SIA project has the potential to be catastrophic, not just now, but for generations to come.

We currently reside on Shawnigan Lake and pull our drinking water directly out of the lake. Clean drinking water is the world's most valuable resource and it is our duty to protect it. Please say no to SIA and take the time to find a site that will be safe, with no potential impact on its surroundings.

Thank you for your time,

822

Sent from my iPad hubert.bunce@gov.bc.ca; terry.lake.mla@leg.bc.ca; ENV.Minister@gov.bc.ca; premier@gov.bc.ca; joe.sequin@gov.bc.ca; eddy.taje@gov.bc.ca; rob.fleming.mla@leg.bc.ca

----Original Message----

From:

Sent: Tuesday, April 9, 2013 8:01 PM

To: councillors@victoria.ca; Fleming.MLA, Rob LASS:EX; Taje, Eddy EMNG:EX; joe.sequin@gov.bc.ca; OfficeofthePremier, Office PREM:EX; Minister, ENV ENV:EX;

Lake.MLA, Terry LASS:EX; Bunce, Hubert ENV:EX

Subject: SIA draft permit: Shawnigan Lake

Dear Ministry of environment,

I am 100% opposed to this draft permit as it threatens the health of residents of Shawnigan Lake and potentially Victoria and Sooke.

Sent: Tuesday, April 9, 2013 7:58 PM

To: Bunce, Hubert ENV:EX; Lake.MLA, Terry LASS:EX; Minister, ENV ENV:EX; OfficeofthePremier, Office PREM:EX; joe.sequin@gov.bc.ca; Taje, Eddy EMNG:EX;

Fleming.MLA, Rob LASS:EX; councillors@victoria.ca

Subject: Opposed to proposed Shawnigan contaminated soil deposition

Very simply, I am opposed to the deposition of contaminated soils in the Cowichan Valley, and specifically in the Shawnigan Watershed.

Sent: Tuesday, April 9, 2013 7:38 PM

To: Bunce, Hubert ENV:EX; Lachance, Luc ENV:EX; Lake.MLA, Terry LASS:EX; Minister, ENV ENV:EX; Taje, Eddy EMNG:EX; OfficeofthePremier, Office PREM:EX; crowder.j@parl.gc.ca; Routley.MLA, Bill LASS:EX; jean@jeancrowder.ca; steve.housser@bcliberals.com; Fleming.MLA, Rob LASS:EX; office@bcconservative.ca; kerry.davis@greenparty.bc.ca; s22 XT:Evans, Carollyne HLTH:IN; letters@timescolonist.com; smcculloch@timescolonist.com; cfaxnews@cfax1070.com; jlavoie@timescolonist.com; Shane.Woodford@corusent.com; vpalmer@vancouversun.ca; editor@cowichannewsleader.com; news@cowichanvalleycitizen.com; editor@shawniganfocus.ca; editor@thetyee.ca; scoop@huffingtonpost.com; newswatch@bbc.co.uk; nature@natureconservancy.ca; Go public Subject: April 10 edition - Shawnigan Lake Watershed protection

This is a quote I found at Bonterra Pizza website at http://bonterrapizza.com/2013/04/09/shawnigan-industrial-site-or-neighbourhood-the-200-million-question/

"In 1978, the town of Love Canal, near Niagara Falls, New York, was evacuated over the burial of only 21,000 tons of hazardous waste. 800 families were moved out and many people became ill over the effects of the buried chemicals. The site was lined with a solid layer of clay, thought to be impermeable at the time. The material was stored in metal and fibre barrels, also thought to be completely safe. Through the process of time, heavy rainfall (a 1 in 25 year event) and nearby highway construction, this material came to the surface and changed the way we think about hazardous material forever. It is also important to note here that Love "Canal" was not a water source for the community, but an uncompleted project that never held water and was filled in. People there became ill from just having the material in close proximity, the very same material that will be buried at SIA's site in a watershed for 7000 people."

Please, let's all work together to find the appropriate alternative this ill conceived plan!

Kind regards, \$22 Shawnigan Lake

Sent: Tuesday, April 9, 2013 5:09 PM

To: Bunce, Hubert ENV:EX; Lake.MLA, Terry LASS:EX; Minister, ENV ENV:EX; OfficeofthePremier, Office PREM:EX; joe.sequin@gov.bc.ca; Taje, Eddy EMNG:EX;

Fleming.MLA, Rob LASS:EX; councillors@victoria.ca Subject: *NO* To S.I.A. Contaminated Waste Site !!!

To All Concerned,

822 of this proposed site. Our I and my family potable water comes from a well drilled

we are all on well water. This water has been tested and revealed to be remarkably soft water which is usually not the case else where. Having a waste site - Contaminated or Not - in the head waters of a watershed is absolutely *INSANE* I do not even care to entertain Engineers promises that it can be contained in that spot – just ask the Japanese town folk of Tarou- who were told by engineers that their 10 METER high wall would protect them from any tsunami wave! Sadly that town no longer exists as will happen to Shawnigan Lake if you allow this permit to go through. PLEASE someone show some leadership & intelligence and STOP THIS MADNESS!!!!

p.s. This site is also located a mere 4.5 km's uphill from Sooke Lake reservoir You figure out what happens with poop & gravity!!

922

Shawnigan Lake

Sent: Tuesday, April 9, 2013 5:02 PM To: OfficeofthePremier, Office PREM:EX

Subject: Proposal PR 105809

"copy"

ENV.Minister@gov.bc.ca;

Dear Ministry of Environment,

I strongly object to the soil remediation facility proposed at 640 Stebbings Road, Shawnigan Lake, BC. This proposal, PR 105809, poses an unacceptable risk to the drinking water of the Shawnigan and Sooke Lake Watersheds.

Sincerely,

S22 Duncan, BC

From: Pat Lintaman [mailto:pat@topnotchlog.com]

Sent: Tuesday, April 9, 2013 4:21 PM

To: Bunce, Hubert ENV:EX; Lake.MLA, Terry LASS:EX; Minister, ENV ENV:EX; OfficeofthePremier, Office PREM:EX; joe.sequin@gov.bc.ca; Taje, Eddy EMNG:EX;

Fleming.MLA, Rob LASS:EX; councillors@victoria.ca Cc: bruce@fraserforshawnigan.ca; 'Georgia Collins'

Subject: FW: Adverse effects, NOW

RE: Draft Permit for SIA dump.

To all concerned:

Over the last 5 years we have been developing Shawnigan ECO-Industrial Park at the corner of Stebbings and Shawnigan Lake Road. { for information, please visit www.shawniagnecoindustrialpark.com }.

So far, the majority of the work has been "behind the scenes" { public engagement, re-zoning, drafting original "ECO" bylaws, environmental work, DFO consultations, covenants, drainage repairs, soils tests, water wells, design work, surveying, legal, etc.}.

With these basics in place, last year we switched to marketing and the job of attracting locators, businesses and investors to build the industrial/commercial facility. { over 300,000 sq.ft.} We see the potential here for many jobs and community amenities.

Twice now, in the last year, we have had clients back away citing concerns about the proposed SIA dump site on Stebbings Road. One stated that they felt it devalued the property. Another, awaiting the outcome, stated that if that dump were there, they would not be interested in investing or purchasing.

Much of the concern is around potential problems, but this issue is having adverse effects on our business now.

Please rescind the draft permit and consider the other locations and technologies that are available to solve this problem .

Thank you .

Pat Lintaman
Pat Lintaman Design Ltd.
(250) 478-0795
(250) 478-4453 fax
pat@topnotchlog.com
www.shawniganecoindustrialpark.com

Sent: Tuesday, April 9, 2013 1:21 PM

To: Bunce, Hubert ENV:EX; Lake.MLA, Terry LASS:EX; Minister, ENV ENV:EX; OfficeofthePremier, Office PREM:EX; joe.sequin@gov.bc.ca; Taje, Eddy EMNG:EX;

Fleming.MLA, Rob LASS:EX; councillors@victoria.ca

Cc \$22

Subject: SIA's Shawnigan contaminated soil site

To Whom it may concern

As land owners in the Stebbings Rd and Goldstream heights area we are very concerned and strongly opposed to SIA's plan to use their property as a contaminated soil facility. We accordingly request that any application to do so be denied.



From: Shawnigan Village Family Practice [mailto:svfp@shaw.ca] Sent: Tuesday, April 9, 2013 12:50 PM To: OfficeofthePremier, Office PREM:EX

Subject:

Sending this letter from the office of Dr. William Moulaison @ The Shawnigan Village Family Practice, Shawnigan Lake, BC

Shawnigan Village Family Practice

Box 240, 2749 Dundas Road Shawnigan Lake, B.C. VOR 2W0 Telephone (250) 743-0793 FAX (250) 743-0754 William G. Moulaison, MD, Inc Peter Kalios, MD Trudy D. Woudstra, MD, CCFP Ravi Dhanoa, MBBS, BSc(Hon) AICSM

April 8, 2013

Dr. Perry Kendall Provincial Health Officer 4th Floor, 1515 Blanshard Street Victoria BC, V8W 3C8 Fax: 250-952-1362

Attention: Dr. Perry Kendall

Re: South Island Aggregates Contaminated Soil Facility

Dear Dr. Kendall,

We, the physicians of the Shawnigan Village Family Practice, are writing to seek your immediate attention to what we consider to be a potential major threat to the public health of the residents of Shawnigan Lake. are aware, the Ministry of the Environment has given tentative approval to a Waste Discharge Permit application from South Island Aggregates to dump several million tons of contaminated soil into a containment facility in the watershed of Shawnigan Lake. Some of the contaminants in this toxic soil include toluene ethylbenzene and other highly toxic chemicals. There is conflicting science as to whether the level of protection that this containment offers will really be sufficient to prevent leakage into an underlying aquifer and eventually into our drinking water. Should there be a breach of the containment, either through degradation or even worse, an earthquake, the risk to the public health would be severe.

It is our understanding that, as the Provincial Medical Health Officer, it is within your jurisdiction to investigate this matter and to intervene as necessary when there is potential risk to the public health. With the community's drinking water at stake, we feel that this is one of those situations, as we cannot risk any uncertainty.

.../2

As the Minister of the Environment will be making a final decision on this application in the next couple days, we respectfully request that you call the Minister of the Environment as soon as possible to delay this application until the protection of our water is guaranteed.

This request is submitted with respect.

Sincerely,

William Moulaison, M.D.

Dr. Ravi Dhanoa, MBBS BSc

Dr. Trudy Woudstra, M.D.

Dr. Peter Kallos,

pc: Premier Christy Clark, Premier of British Columbia
 Terry Lake, Ministry of Environment - fax 250-3871356/387-5669
Bill Routley, MLA - Cowichan Valley - fax 250-715-0139
Dr. Paul Hasselback, Central Island Chief Medical
Health Officer - fax 250-755-3372
CVRD Board of Directors - 250-746-2512
Warren Jones, Chief Administrative Officer - fax 250746-2513
Medical Director, BCCDC - fax 604-707-2401

Original Message
From: John Bomans [mailto:jbomans@shawnigan.ca]
Sent: Tuesday, April 9, 2013 10:15 AM
To: OfficeofthePremier, Office PREM:EX; Lake.MLA, Terry LASS:EX
Cc: Routley.MLA, Bill LASS:EX; Lachance, Luc ENV:EX; jean.crowder@parl.gc.ca;
Dix.MLA, Adrian LASS:EX; steve.housser@bcliberals.com; kerry.davis@greenparty.bc.ca;
malto@victoria.ca; s22 susanbrice@silverthreads.ca; s22
alastair.bryson@csaanich.ca; leross@sidney.ca; teddaly@shaw.ca; vicderman@shaw.ca;
barb.desjardins@esquimaltcouncil.ca; mayor@victoria.ca; mayor@colwood.ca;
directorjdf@crd.bc.ca; ghill@town.viewroyal.bc.ca; directorsgi@crd.bc.ca; bisitt@victoria.ca
oakbaymayor@oakbay.ca; mayor@saanich.ca; directorssi@crd.bc.ca; s22
wmilne@sooke.ca; jranns@metchosin.ca; wergeland@shaw.ca; gyoung@victoria.ca
Subject: TOXIC WASTE DUMP OPPOSITION
Importance: High

Premier Christy Clark and Environment Minister Terry Lake,

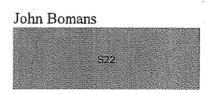
I am writing to vehemently oppose South Island Aggregate's application for a dumping permit allowing thousands of tons of toxic waste per year to be deposited on Stebbings Road in the Shawnigan Lake Watershed.

Consider this. If you allow this abomination to take place, I would invite you to my house in Shawnigan Lake, a year from now, after countless loads of toxic waste are deposited in the Shawnigan Watershed. Bring your whole family; they can all swim off our dock! Would you let your family swim in that water?? I would offer you a glass of water from my tap, originating in that same Shawnigan Watershed. Can you honestly say YOU would drink it??

The risks to our community's drinking water and to the health of our residents and our children are immeasurable. The environmental damage could be irreversible. You cannot ensure that this dump will be 100% safe. You cannot see into the future and promise our community that errors will not be made! You cannot promise me that my drinking water will be protected, or that it will still be safe for my children to swim in the lake. You cannot promise me that my children's health will not be compromised!

To approve SIA's permit in the face of the resistance you are encountering screams of arrogance. As a Shawnigan Lake resident and as the father of four children, I implore you to do the right thing. DO NOT PROVIDE SOUTH ISLAND AGGREGATE WITH THIS PERMIT!

Sincerely,



From: S22
Sent: Thursday, April 11, 2013 5:40 AM
To: Bunce, Hubert ENV:EX; Lachance, Luc ENV:EX; Lake.MLA, Terry LASS:EX; Minister,
ENV ENV:EX; Taje, Eddy EMNG:EX; OfficeofthePremier, Office PREM:EX;
crowder.j@parl.gc.ca; Routley.MLA, Bill LASS:EX; jean@jeancrowder.ca;
steve.housser@bcliberals.com; Fleming.MLA, Rob LASS:EX; office@bcconservative.ca;
kerry.davis@greenparty.bc.ca; XT:Evans, Carollyne HLTH:IN;
letters@timescolonist.com; smcculloch@timescolonist.com; cfaxnews@cfax1070.com;
jlavoie@timescolonist.com; Shane.Woodford@corusent.com; vpalmer@vancouversun.ca;
editor@cowichannewsleader.com; news@cowichanvalleycitizen.com;
editor@shawniganfocus.ca; editor@thetyee.ca; scoop@huffingtonpost.com;
newswatch@bbc.co.uk; nature@natureconservancy.ca; Go public
Subject: April 11 edition - Shawnigan Lake Watershed protection

Good morning, everyone. Okay, here's the thing, the basis on which all of these protests lie:

What if?

What if we have a once in a hundred years' rain storm? There have been recent reports of up to 3 inches of rain falling in just a few hours. This week the temperature dropped in Colorado by 55 degrees Farenheit in less than 24 hours. Extreme weather is becoming the norm, nothing unusual, but with extremely unusual results. The containment and settling ponds SIA plans to use in the Shawnigan Lake Watershed could so easily overflow, contaminating not only the Shawnigan/Mill Bay area, but conceivably the Sooke Lake Watershed. Are we prepared for that? Nope.

What if the containment products in the dump fail? What if there's an earthquake? I guess you could consider the water issue to be small potatoes compared to that, but why take the risk of making things worse?

What if a tandem truck spills its load in Goldstream on the way up here? There was a huge outcry when one of Columbia Fuel's trucks did so right next to Goldstream Park a few years ago, why not now?

The South turnoff to Shawnigan Lake is NOT MEANT FOR BIG, HEAVILY LOADED TRUCKS! We travel to and from Victoria from Shawnigan every day, and we see the close calls, we see the difficulties those trucks have making an up-hill left hand turn from a dead-stop, while fully loaded.

What if? The repercussions are imaginable, just think about it. The result is a contaminated watershed no more than a half hour drive from the Capital City of the Province of British Columbia. The result may well be the contamination of the Capital City's own watershed.

Please, won't our Provincial Government reject this proposal and find the alternative that will more safely achieve the required goal?

Sincerely, Shawnigan Lake, BC

----Original Message-----

From:

S22

Sent: Wednesday, April 10, 2013 9:38 PM To: OfficeofthePremier, Office PREM:EX

Cc: Lake.MLA, Terry LASS:EX; cfaxnews@cfax1070.com

Subject: Re: SHAWNIGAN LAKE CONTAMINATED WASTE SITE TEMPORARY PERMIT

Thank you for your reply Madame Premier. If every politician in the area thinks that a contaminated waste site upstream from a watershed is a bad idea (unheard of all four parties, Liberal, NDP, Conservative, Green on board), then it is evident you don't support the beliefs of your candidate Steve Houser. If this is indeed the case then why is he wasting his valuable time and resources running for your party.

If you can't support the candidate for the BC Liberal Government for Cowichan Valley, how can I with good conscience vote for a candidate his own party will not back.

s22

Sincerely

822

---- Original Message -----

From: "Office PREM OfficeofthePremier:EX" < Premier@gov.bc.ca>

To: '

522

Cc: "ENV ENV Minister:EX" <ENV.Minister@gov.bc.ca>

Sent: Tuesday, April 9, 2013 9:24:47 AM

Subject: RE: SHAWNIGAN LAKE CONTAMINATED WASTE SITE TEMPORARY

PERMIT

Thank you for your email regarding South Island Aggregates' application to discharge waste and relocate contaminated soils in the Shawnigan Lake region.

It would not be appropriate for the Premier to intervene when a proposal like this is under review by the Environmental Protection Division. However, the Ministry is inviting the public to comment on a draft permit. If you have not done so already, we would encourage you to share your feedback with the Ministry's Environmental Protection Division: http://www.env.gov.bc.ca/epd/regions/vanc_island/env-mgt/sia_permit.htm.

We understand the concerns that you and others have raised as well as the importance of the forthcoming decision by Ministry staff. Please be assured that all feedback received will be carefully considered and factored into related deliberations.

Again, thank you for letting us know that this is a priority for you.

pc: Honourable Terry Lake

----Original Message----

From:

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Sent: Wednesday, March 20, 2013 10:41 PM To: OfficeofthePremier, Office PREM:EX

Subject: SHAWNIGAN LAKE CONTAMINATED WASTE SITE TEMPORARY PERMIT

I would like the Premier to comment on whether she supports this proposed contaminated waste site.

The people of Shawnigan Lake and the Cowichan Valley would like to know the BC Liberals stance on this.

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I want to know how it makes sense to put a massive contaminated waste site in a watershed that is also in close proximity to the drinking water of all of Greater Victoria never mind just Shawnigan Lake.

"Shawnigan Lake the new site of the largest contaminated waste site on Vancouver Island." Is it time for me to sell my home and leave? That's what I want to know, If the government's intention is that I should live next to a contaminated waste site.

If your government is foolish enough to support this I will do everything in my power to ensure the BC Liberal Party is not in power very soon. I find this absolutely mind boggling that I even have to ask this question.

I want a simple answer Yes the BC Liberal Government Supports this temporary permit and the future contaminated waste site

or No the BC Liberal Party does not support this proposed contaminated waste site in a Shawnigan Lake.

Please chose one

I can't even fathom how anyone would think this is OK. I can't believe this can happen in a Democracy. This is insane.

(Yes) for supporting this contaminated waste site.

(No) for not supporting this contaminated waste site.

Thank You

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