

# PUBLIC HEARING

## WHITES POINT QUARRY AND MARINE TERMINAL PROJECT

### JOINT REVIEW PANEL

---

#### V O L U M E 2

---

HELD BEFORE: Dr. Robert Fournier (Chair)  
Dr. Jill Grant (Member)  
Dr. Gunter Muecke (Member)

PLACE HEARD: Digby, Nova Scotia

DATE HEARD: Monday, June 18, 2007

PRESENTERS: Bilcon of Nova Scotia  
Mr. Uwe Wittkugel

---

Recorded by: A.S.A.P. Reporting Services Inc.  
200 Elgin Street, Suite 1004 Ottawa, Ontario K2P 1L5  
130 King Street W., Suite 1800 Toronto, Ontario M5X 1E3  
613-564-2727 (Ottawa Office) / 416-861-8720 (Toronto Office)  
613-564-7756 (Ottawa Fax) / 416-946-1693 (Toronto Fax)  
1-888-661-2727 (Toll Free)

Per: Hélène Boudreau-Laforge, CCR

EXAMINATION BY THE PANEL  
(MS JILL GRANT)

1 to determine whether the suggestion that all of the rare  
2 plants were in the environmental preservation zone, whether  
3 in fact that was correct or not.

4 Mr. PAUL BUXTON: I think perhaps it lies  
5 in the definition of "rare", and I'm not sure that I can  
6 speak to that.

7 **EXAMINATION BY THE PANEL - THE CHAIRPERSON**

8 THE CHAIRPERSON: Mr. Buxton, I'd like to  
9 talk a little bit about scientific sampling, or the sampling  
10 approach that has been used. This is of some interest to  
11 us.

12 It was referred to earlier in Mr.  
13 Wittkugel's presentation, and the scientific sampling  
14 approach or the sampling approach which is referred to as  
15 the scientific approach is important because it produces  
16 information or data, and then that data, as you well know,  
17 is used in a number of different ways.

18 Some of the ways that the data has been  
19 used that you and your colleagues have collected have been  
20 to establish VECs to create baselines. I presume they're  
21 used in defining the pathways that exist in the ecosystem  
22 approach, but the ones that are mostly of interest to me are  
23 long-term monitoring.

24 I think that long-term monitoring  
25 makes... is addressed using some presumptions and as well as  
26 adaptive management, which you mentioned again this morning

EXAMINATION BY THE PANEL  
(THE CHAIRPERSON)

1 and which, as I said last time, you mention at least 140  
2 times in the EIS and various places.

3           So adaptive management, long-term  
4 monitoring are two things which are of considerable  
5 importance, and you have stressed them repeatedly. And they  
6 are based, to some extent, on the quality of the data that  
7 you have. That is, you have to have a sound baseline in  
8 order to make comparisons down the road.

9           You might say that that baseline  
10 information is a kind of lynchpin.

11           I would like to read something to you.  
12 This appears in Volume 4 of the EIS, and it's 6.7, and it's  
13 just one paragraph. It says:

14           "The overall approach to preparation of  
15 the Environmental Assessment Impact  
16 Statement is science based and uses  
17 scientific methods of investigation.  
18 The scientific research procedure  
19 included literature research and, most  
20 importantly, involved original on-site  
21 research. On-site research followed  
22 acceptable scientific methods of  
23 investigation and, in some cases,  
24 modelling of various environmental  
25 components. Research was also conducted  
26 through public consultation meetings,

EXAMINATION BY THE PANEL  
(THE CHAIRPERSON)

1 traditional community knowledge  
2 interviews, community surveys and  
3 community open- house meetings. Public  
4 involvement has been conducted by Bilcon  
5 and others during the past four years of  
6 the environmental assessment process."  
7

8 There are two elements in that paragraph  
9 that I would like to deal with. One is, I would like to  
10 have you clarify for me, you or your colleagues, clarify for  
11 me what the scientific method of investigation is.

12 What are "accepted scientific methods"?  
13 Can you define those for me?

14 Mr. PAUL BUXTON: I pass that question,  
15 first of all, perhaps, to Mr. Wittkugel, and then I'll  
16 confer with Mr. Kern and see if he can add further  
17 clarification.

18 Mr. UWE WITTKUGEL: I would think that  
19 that is certainly duveck(ph) specific or duveck (ph)  
20 dependent. There are certain ways of undertaking vegetation  
21 analysis for example. There's certain accepted,  
22 scientifically accepted ways of identifying rare species.

23 For example, when it comes to the rare  
24 species, we follow the prescribed approach or the approach  
25 prescribed by the Nova Scotia Department of Natural  
26 Resources, which starts at a 100 kilometre radius and slowly

EXAMINATION BY THE PANEL  
(THE CHAIRPERSON)

1 moves into a smaller scale.

2 Those are what we would think  
3 scientifically and professionally accepted methods. And  
4 each discipline, I would think, has a different approach.

5 Toward noise and air quality, the  
6 measurements taken around the site are again based on other  
7 principles that don't apply to, perhaps, other valued eco  
8 assessment components. So we could go through each one of  
9 them, but in general I would think the standard question is  
10 repeatable.

11 Is someone there that's going out doing  
12 the same exercise and arriving at the same results? Is it  
13 in line with the existing guidelines and specifications?  
14 That's the kind of standard the environmental assessment  
15 would tend to achieve.

16 THE CHAIRPERSON: Thank you, Mr.  
17 Wittkugel. Could I hear from Mr. Kerns, what he has to say?

18 Mr. DAVID KERN: I think I would follow  
19 what Mr. Wittkugel had to say in that each discipline would  
20 have their own set of scientific methods and standards that  
21 they would follow that are acceptable within their  
22 profession.

23 THE CHAIRPERSON: Is there anyone else  
24 with an opinion?

25 Mr. PAUL BUXTON: Excuse me. Perhaps...  
26 Would it shed any light if you asked a specific element and

EXAMINATION BY THE PANEL  
(THE CHAIRPERSON)

1 perhaps extrapolated from that?

2 THE CHAIRPERSON: What I'm addressing is  
3 the way in which data was collected and the statement within  
4 the EIS that it was collected according to scientific  
5 methods or the generally accepted format of science.

6 Has anyone in the group heard of the  
7 "scientific method"? The "scientific method", which is the  
8 accepted method whereby scientific research is carried out?

9 It's a well accepted, well agreed upon,  
10 widely used and generally it defines the way in which  
11 science is done. It involves observation, which you have  
12 done, analysis, hypothesis, testing, additional hypotheses,  
13 and a great deal of replication.

14 There is a well defined process which,  
15 as far as I can tell, doesn't warrant the paragraph that has  
16 been used over here because there hasn't been a scientific  
17 approach except in the sense of a rigorous observation.

18 Now, I'm not trying to say this to mince  
19 words or to...or to back you into a corner. What I'm saying  
20 is that a cornerstone to the process that you're involved in  
21 is the gathering of data of a certain level of  
22 respectability, a certain acceptable level which we would  
23 call the baseline level.

24 That baseline level, it would  
25 subsequently be used to monitor. It's the baseline against  
26 which monitoring is done. And in addition, adaptive

EXAMINATION BY THE PANEL  
(THE CHAIRPERSON)

1 management depends on baselines that are rigorously  
2 prescribed.

3 Now in your paragraph, you argue that  
4 that is what you've done, but neither one of the two  
5 individuals has given me what I consider to be an acceptable  
6 response.

7 Now, when you look at some of the data,  
8 for example, that has been collected, the floral survey, the  
9 faunal survey, the odonata survey, the coastal sediments,  
10 the benzoic sediments, the various photographs that have  
11 been taken, and you can even, if you wish, include some of  
12 the mammal surveys, all of these have been done by people  
13 who are competent, but they've done it in a relatively short  
14 window of time.

15 For example, if you go out and collect  
16 benzo and you collect 10 samples and the grab brings back 4  
17 or 5 samples, then what you have, in effect, is 4 or 5  
18 samples taken on one day. That's not replication. That  
19 doesn't lead to anything more than a spot sample.

20 It can be good data, but the question  
21 then becomes, is it adequate? Is it sufficient, in fact, to  
22 make comparisons with or is it sufficient to monitor  
23 against?

24 Well, scientific colleagues would say  
25 no. Now, the regulatory agencies might say: "Yes, it is an  
26 acceptable minimal level", but you are arguing in the EIS

EXAMINATION BY THE PANEL  
(THE CHAIRPERSON)

1 that you're attempting a higher standard. You're  
2 suggesting, in fact, that adaptive management is the process  
3 that you will be using, and I'm saying adaptive management  
4 requires a different set of standards.

5 So it seems to me that the... First of  
6 all, I believe that the paragraph which has been written  
7 here is not appropriate given the standards against which  
8 you're setting yourself. It may be acceptable within other  
9 standards.

10 Now the second part of that paragraph, I  
11 would like to raise the subject of public involvement, which  
12 we raised on Saturday.

13 Now it seems to me that we ended on  
14 Saturday with the view that public involvement was less than  
15 it could be. It seems to me, if I recollect exactly, it was  
16 something to the effect that: "We have an open door policy.  
17 We encourage people to come", but it doesn't necessarily  
18 engage the community to the full extent, perhaps, that CEAA  
19 would like.

20 I'd like to know where the public  
21 consultation, the traditional community knowledge and so  
22 forth is in your surveys. Can you point to specific cases  
23 where the knowledge about tides and currents and formal  
24 surveys and all the rest of it is?

25 Mr. PAUL BUXTON: Yes. I'm not quite  
26 sure that I would agree that that's where we left off