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MACKENZIE VALLEY LAND
AND WATER BOARD

TECHNICAL SESSION FOR
TOWN OF FORT SMITH
TYPE A WATER LICENCE RENEWAL
MV2011L3-001

Facilitator Kathy Racher

HELD AT:

Yellowknife, NT
June 15th, 2011

APPEARANCES

1
2
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4 Zabey Nevitt)
5 Angela Plautz)
6 Lynn Boettger)
7 Kathleen Graham)
8
9 Jean Soucy) Town of Fort Smith
10
11 Marie Adams) INAC
12 Jeanne Arsenault)
13 Wayne Starling (via phone))
14
15 Sarah-Lacey McMillan) Environment Canada
16 Mary Kelly)
17 Jane Fitzgerald)
18
19 Diep Duong) ENR
20 Gerald Enns)
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22 Michel Lanteigne) AECOM
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24
25

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1 --- Upon commencing at 9:20 a.m.

2

3 THE FACILITATOR: So I'll just give some
4 opening comments about why we're here in and some
5 important information. First of all, there's coffee and
6 muffins at the side. Wayne, will send you some by
7 airmail later. The bathroom is out that door and around
8 the corner. The code for the bathroom door is on that
9 yellow sticky, I don't know if you can see, behind John's
10 head. And the fire exit, I would imagine, is down those
11 -- the front stairs and out -- out the front door.

12 So we're here today to -- to have a
13 technical session for the renewal application for the
14 Town of Fort Smith, type A water licence, the municipal
15 water licence. And we've got -- I think you all
16 distributed comments on the table with some initial
17 responses from Board staff.

18 And just to help focus the conversation a
19 little bit, I faxed out to most people though I don't
20 think I got a table from Fort Smith -- can you give that
21 to them -- a table that just shows -- I'd like to go
22 through the topics and the comment tabled by -- by topic
23 as opposed to by the comment.

24 So I just handed out a table to everybody,
25 but most of the comments that we'll talk about under each

1 topic. We're going to start the day with -- with
2 roundtable introductions. Please be sure to state your
3 name and the organization you work for. And then we're
4 going to go with a presentation from the Town of Fort
5 Smith. And then we'll go all around and through the
6 comment table.

7 We've allowed time to -- to 2:45, but it
8 just depends on how everything goes and how agreeable
9 everybody's feeling, how knowledgeable everybody's
10 feeling. What -- the session is really about trying to
11 clear up anything, you know, issues and -- and trying to
12 resolve things and -- as -- as much as possible between
13 all the parties and -- and get clarity so that you can
14 prov -- you make your submissions to the Board for the
15 public hearing. And -- and I just really encourage
16 everyone just to -- to speak and try to be really clear
17 and make sure you get all the information you need out of
18 this session.

19 Okay. The -- the -- oh, sorry, the other
20 thing I need to tell you is that it is being recorded and
21 transcribed so we'll have it for the record, all --
22 everything that happens here, but you do have to speak
23 into the mic every time you speak. That's the only way
24 your voice will be recorded. And -- yes, and each time
25 you speak into the mic I'd like to -- you to say your

1 name and -- and where you're from just quickly.

2 Okay, so let's start with the roundtable
3 of introductions. I'll start with myself and go this
4 way. My name's Kathy Racher, on behalf of the Mackenzie
5 Valley Land and Water Board.

6 MR. ZABEY NEVITT: My name's Zabey
7 Nevitt. I'm the executive director of the Mackenzie
8 Valley Land and Water Board.

9 MS. ANGELA PLAUTZ: My name is Angela
10 Plautz. I'm acting regulatory manager until next week.

11 MS. MARIE ADAMS: Marie Adams, from INAC
12 Water Resources.

13 MS. JEANNE ARSENAULT: Jeanne Arsenault,
14 from INAC Water Resources.

15 MS. SARAH-LACEY MCMILLAN: Sarah-Lacey
16 McMillan, from Environment Canada.

17 MS. MARY KELLY: Mary Kelly, with
18 Environment Canada.

19 MS. JANE FITZGERALD: Jane Fitzgerald,
20 Environment Canada.

21 MS. DIEP DUONG: Diep Duong, it's spelled
22 D-I-E-P, D-U-O-N-G, from ENR.

23 MR. GERALD ENNS: Gerald Enns, from ENR.

24 MR. MICHAEL LANTEIGNE: Michael Lanteigne
25 from AECOM.

1 MR. JEAN SOUCY: Jean Soucy, from the
2 Town of Fort Smith.

3 MS. LYNN BOETTGER: Lynn -- Lynn
4 Boettger, with the Mackenzie Valley Land and Water Board.

5 MS. KATHLEEN GRAHAM: Kathleen Graham,
6 from the Mackenzie Valley Land and Water Board.

7 THE FACILITATOR: Kathy Racher and on the
8 phone?

9 MR. WAYNE STARLING: Calling from Fort
10 Smith, Wayne Starling from INAC.

11 THE FACILITATOR: Okay. Thank you very
12 much, everybody. We are circulating a piece of paper so
13 that we can get everyone's names spelled right or on --
14 for behalf -- on behalf of Wendy.

15 Okay. We'll start out with a presentation
16 from Jean. Jean, you'll have to speak into the mic. Are
17 you able to -- you want to point to stuff through -- the
18 -- the laser pointer works but you'll have to speak into
19 a mic.

20 Okay, I can -- I can help.

21 MR. JEAN SOUCY: Do I have to be right
22 near it, or...

23 THE FACILITATOR: I believe so, yeah.

24

25 PRESENTATION BY TOWN OF FORT SMITH:

1 MR. JEAN SOUCY: All right. Well, so
2 this would be just a brief description of all of our --
3 our stations. I put it all on Google so that we have a
4 bit of a visual. It's basically a visual representative
5 of all the -- the stations and all the facilities for the
6 Town of Fort Smith.

7 So I'll be going back and forth from the
8 laptop. I'll have to select certain sections of it so
9 I'll go back and forth.

10 And -- and I want to talk about past
11 history, what -- what has occurred, what we have done to
12 this point. I've been with the Town of Fort Smith for
13 twenty-five (25) years, predominantly with the water
14 treatment facil -- or waterworks department. I'm doing
15 an acting position at the moment as director of municipal
16 services. In this case I'm quite familiar with water and
17 wastewater for the Town of Fort Smith.

18 So in this Google -- Google map here, this
19 is a -- an earlier version from -- of what AECOM has
20 included in their first report of the stations throughout
21 Fort Smith, so station 567-1 is the raw water support
22 from the -- the Slave River pump house. The station
23 itself is actually situated in the water treatment plants
24 identified there. 67-2 is the sewage disposal facility
25 affluent to the Slave River, and then 67-3 is sewage

1 prior to entering the disposal facility which is in the -
2 - just prior to entering the -- the lagoon itself.

3 67 -- 67-4 is runoff directly below the
4 disposal facility, the solid waste disposal facility.
5 It's a running stream down at the bottom. And then, of
6 course, 67-5, I don't know if we can see it there, but
7 that is the groundwater monitoring program that we've --
8 we've been doing for the last eight (8) years, I believe.

9

10 (BRIEF PAUSE)

11

12 MR. JEAN SOUCY: Bear with me with that
13 for a bit. So the intake pump house identified in the
14 Google map here is right at the river -- right at the
15 river's edge. There's a concrete structure embedded in
16 the concrete bed, in the rock bed, sorry. It encompasses
17 numerous entering chambers, four (4) chambers, in fact, a
18 large chamber with 6 inch bar screens, preventing any
19 large material from entering the -- the intake.

20 Further to the next chamber, it is
21 protected by a 1/2 inch stainless steel screen. Then
22 going into the other two (2) chambers which are -- we
23 call them chambers, but there's actually just one (1) in
24 -- in -- in there. There's three (3) intake pumps and
25 all three (3) of them are protected by a basket screen of

1 a similar size.

2

3

(BRIEF PAUSE)

4

5 MR. JEAN SOUCY: It's not the -- it's not
6 the best picture, but I just wanted to -- I mean, I -- I
7 have numerous, numerous pictures, but we could sit here
8 and -- and look at pictures all day. I don't know if
9 that's the best approach.

10 But this is essentially the work that we
11 completed a few years ago with respect to landslide or
12 land -- land movement within the area of the intake,
13 subsequently from what we had seen from the discharge
14 line. We didn't want to -- we didn't want to have to
15 deal with that again.

16 So you can see this is at the beginning.
17 You can see the height of the bank there. And this is
18 actually the road going down, this is the intake line
19 here.

20 And we actually took this big mountain of
21 -- of a sandhill here and we actually sloped this whole
22 area so it's more of a gradual incline versus a steep
23 bank that it was before, which essentially created the
24 problem at the discharge.

25

1 (BRIEF PAUSE)

2

3 MR. JEAN SOUCY: Similar -- I'm sorry.
4 So similar is the discharge line which is located just at
5 the bottom of the lagoon.

6

7 (BRIEF PAUSE)

8

9 MR. JEAN SOUCY: So in 2004, the
10 discharge line itself -- and I don't exactly know exactly
11 when the previous line was installed, I think it was in
12 late '70s -- it was built upon the natural sloping of --
13 of the riverbank and it was buried below about 2 feet of
14 -- of material. So it was a buried discharge line.

15 And the slope from here to midway was
16 quite severe. It was -- every time we had to go down
17 there and do some work it was -- we always knew that on
18 the way back we had to climb that hill back up. So
19 subsequently -- and -- and it was all surrounded by this
20 heavy vegetation here, trees, shrubs and whatnot.

21 And so in -- in 2004, there was a fairly
22 large crack on the very top of this -- this embankment
23 here and not -- not that we hadn't seen those before, and
24 so we were ready to -- to -- to do some -- some repair
25 work on that. And the following day we ended up with a

1 major landslide that sheared off the -- the discharge
2 line. It was about 40 metres down, about 70 metres away
3 and 400 metres long. I have some more pictures if people
4 want to look at them later.

5 And so we had to do some major emergency
6 repair. First of all we had to -- we had to stop the
7 flow from the -- from the lagoon, we did that. We
8 included a temporary, which was a long-term temporary
9 line for at least a year until the construction of this
10 new line. We put a temporary flex line from the lagoon
11 all the way to the di -- to the discharge area and then
12 con -- continued with the project to repair this whole
13 area.

14 So essentially a new intake line, a new
15 structure, and similar to the -- to the intake line,
16 sorry, similar to the intake line, this discharge line is
17 on sleepers and it doesn't really show very well here but
18 actually the ground continuously moves every year 4 to 6
19 inches. So every time the ground moves we reset those
20 sleepers on the line so the line is not affected; it's
21 manageable that way.

22 Without that if it's buried underground or
23 whatnot then the ground will take the line with it and
24 subsequently break it. Prior to the land -- landslide in
25 this area here we were doing regular maintenance work,

1 line breaking, whatnot, at least three (3) to four (4)
2 times a year.

3 So the lagoon is, of course, situated near
4 this landslide area further up on -- on the level ground.
5 And I tried to give you a picture of -- of both the
6 landslide in 2004 and the lagoon itself.

7 So going back to the actual slide. This
8 whole area here was for at least 400 metres in length.
9 This dropped a -- a fair distance. So essentially
10 everything here was above here at one (1) point or
11 another. And it's -- it -- it just slid right to the
12 bottom.

13 So this was in -- during the process of --
14 of remediation of -- of this access point first of all to
15 -- to create some -- some area where we can actually
16 start the process of rebuilding our discharge line.

17 We see a couple of CATs here. They're
18 basically sloping this whole area as opposed to the sheer
19 bank that it was. We basically sloped the whole area
20 down to the bottom.

21 The reason we're util -- utilizing sloping
22 versus -- versus anything else for that matter is past
23 experience had showed us that since the 1969 landslide in
24 Fort Smith where Ron Parkston (phonetic) was -- was
25 killed, sloping the area still -- there would still be

1 some activity within the area. However, being - having a
2 -- a gradual slope gives us access to the area as well as
3 managing the -- the potential of -- of any large slopes
4 or -- or slide -- sliding.

5 So by doing so, we've done this in
6 numerous other locations throughout the Town and it's
7 worked very well for us for many, many years.

8 The water treatment plant was built in
9 1993. As you can see here, it used to be along the edge
10 of this river bank, similar to where I just talked about,
11 the discharge area. It was moved for -- for two (2)
12 reasons: One (1), which was it was a fairly old plant,
13 it was too small for -- for the current operation at the
14 time. And then, of course, it was close to the river
15 bank and it was in the slide zone, which is identified
16 along this whole area following this line here. Excuse
17 my shakiness, I'm only on my second cup of coffee.

18 So the water treatment plant in Fort Smith
19 was built in 1993. It is a -- it is a classified level 3
20 plant, util -- utilizing the pre-settling system in the
21 summertime with an upflow clarifier and gravity -- three
22 (3) gravity summer sand filters -- rapid sand filters,
23 sorry. In this picture here is the water treatment plant
24 itself. This is the -- the waste tank itself. Basically
25 any turbidity, any unused portion from the backwash goes

1 into this tank here. And this other tank here is the
2 clear water -- or clear well.

3 The Primrose lift station is right beside
4 the water treatment plants, it's one (1) of our smaller
5 lift stations. It was built in 1991, I believe. The
6 water tower is in -- essentially in the centre of town to
7 a certain degree. It encompasses a water tower, a
8 hundred thousand (100,000) US gallon water tower, a five
9 hundred thousand (500,000) gallon reservoir, and a pump
10 house. I apologize if I use the old gallons versus
11 litres.

12

13 (BRIEF PAUSE)

14

15 MR. JEAN SOUCY: The main lift station is
16 -- essentially receives about 85 percent of the sewage
17 within the Town of Fort Smith and is the last point prior
18 to going into the lagoon itself. It's a direct line
19 force main into the lagoon itself. It is the largest
20 lift station that we do have. Again, it was built in the
21 early '90s as well. I should say it was built in 1958,
22 but renovated in nineteen (19) -- in the early '90s.

23

24 (BRIEF PAUSE)

25

1 MR. JEAN SOUCY: The Towering Pines lift
2 station is in the Towering Pines trailer court. It was
3 renovated last year, essentially the pumps and the pan --
4 the electric -- electronics and the pumps themselves were
5 replaced, as well as an air monitoring system to be
6 brought up to -- essentially, we've had a twenty (20)
7 year capital plan on all these lift stations. All of
8 them have been -- have been retrofitted or brought back -
9 - back to their proper conditions. All except one (1),
10 which is the next lift station. But the Towering Pines
11 was completed last year. And it looks similar to that.
12 It's a barrel type station. Most of them are except the
13 main lift station. We talked about that a little bit.
14 It has a new air exchange, continuous air exchange unit,
15 new electronic system, level control electronic system,
16 and this is the barrel.

17

18 (BRIEF PAUSE)

19

20 MR. JEAN SOUCY: The frontier lift
21 station is -- is -- it's location is near the new --
22 newly acquired reserve land by the Salt River First
23 Nation. It is being upgraded this summer. We -- we
24 understand that this -- this large area here will be
25 developed near -- fairly soon by the Salt River First

1 Nation.

2 So this station here basically would
3 collect alo -- all of their sewage, and so we are
4 designing it to -- to receive the volume, although we
5 don't know exactly what time frame that is. There --
6 there is potential up to forty (40) homes within the next
7 ten (10) years.

8 So this station here, although it's only -
9 - it's only -- it was built in mid-'70s, '78, I believe,
10 new technology here is that this station here, as well as
11 the Towering Pines, are a single-phase power supply but -
12 - but running large three-phase pumps by -- by the virtue
13 of using start capacitors or run capacitors. It's a
14 very, very problematic system, so we will rectify that.

15

16 (BRIEF PAUSE)

17

18 MR. JEAN SOUCY: The caribou lift station
19 is located near the college area. There's another
20 trailer court here, and the college is right around this
21 area here, and it receives the -- this -- this area,
22 essentially, so it's not the largest station that we
23 have, but it is -- and -- and the run is only gravity to
24 get up to this corner and into the main lift.

25

1 (BRIEF PAUSE)

2

3 MR. JEAN SOUCY: Our landfill is located
4 near this -- you see this depression here. This is a --
5 this is an active zone again. It's active all the way
6 along Fort Smith, and it's just a few kilometres from the
7 Bell Rock (phonetic) residential area.

8

9 (BRIEF PAUSE)

10

11 MR. JEAN SOUCY: I apologize for the
12 colour selection for -- for the writing here, but I'll go
13 through it. So I've tried to -- downloaded this -- this
14 map, and I surrounded in some of the areas. This is an
15 older picture, although I -- I took it from Google just
16 last week, but it doesn't -- it doesn't reflect what the
17 metals are here.

18 But anyway, the -- this is what's
19 surrounded -- what's highlighted here is some of the
20 stations, the recyclables, and hazardous waste that we
21 have. This area here is the metals area. Excuse me.
22 Although most of this material has been -- has been
23 recycled, has been crushed, and has been shipped out,
24 there's mo -- the -- the whites are over here at the --
25 at the moment.

1 We're in the process of doing that this
2 week and the following next couple weeks. We -- we
3 started a project last November, but due to the
4 conditions of -- of the winter, we got about half of it
5 done, so we're -- we'll finish off that -- the White's
6 (phonetic) project that we had.

7 After that point our next area of concern
8 is to deal with the tire -- the tires around this area
9 here. We figure we have about ten thousand (10,000)
10 tires to deal with. This area here is a construction
11 area, so any non-contaminated area -- construction
12 material goes into this area here. This is the land farm
13 where the hydrocarbon area has been -- has been located.
14 It's -- it has a membrane underneath and it's -- I
15 believe it's been turned over once since it's been --
16 since it's been implemented.

17 The small strip here is the low-level
18 radioactive material that we have. And I -- I've
19 forwarded some documents yesterday -- finally got a
20 response from INAC yesterday on this area here. The rest
21 of this -- this is our actual landfill here. We have a
22 little area here and then this topside here.

23

24

(BRIEF PAUSE)

25

1 ENR. I was wondering, how old is the landfill -- the
2 landfill?

3 MR. JEAN SOUCY: Another good question.
4 I would have to assume, and this is an assumption at the
5 moment, that as old as the Town, I would say, late '50s,
6 '60s. That's a guess at my best -- that's my best guess.

7 MS. MARY KELLY: This is Mary Kelly with
8 Environment Canada. Since you have the map up, I was
9 just wondering if you could identify a specific location
10 where sludge has been stored from the sewage lagoon?

11 MR. JEAN SOUCY: The sludge has not been
12 stored at the landfill from the sewage lagoon, but the
13 sludge has -- I can -- can I go back to the map?

14 MS. MARY KELLY: Yeah.

15

16 (BRIEF PAUSE)

17

18 MR. JEAN SOUCY: So our -- we have a
19 desludging of the primary cell 1 and 2 on a regular
20 basis, "regular" being these cells are evaluated for
21 sedimentation. And once every five (5) years we do do
22 Primary 1 and Primary 2.

23 This -- there's a cell here that's been
24 allocated and now gor -- of course, this looks like an
25 older version of Google map anyhow. This -- there's an

1 area here that's been identified. There's a dike
2 embankment all the way around so it's being discharged
3 from this location into here to this drawing bed. It
4 takes about two (2) years to -- to evaporate.

5 The material is then collected and donated
6 to the local golf course. And we've had that sampled.
7 Wayne took some samples of this material a few years back
8 and from what we -- we -- we've seen it is very good
9 material and the golf course would love nothing better to
10 have this -- this for -- for many years to come. It
11 helps our environment there.

12 MS. DIEP DUONG: This is Diep from ENR. I
13 was just curious as well, Jean. Is this a secondary or a
14 tertiary treatment system?

15 MR. JEAN SOUCY: Can you be more
16 specific?

17 MS. DIEP DUONG: There's a primary cell
18 and secondary cell?

19 MR. JEAN SOUCY: Yeah.

20 MS. DIEP DUONG: Correct?

21 MR. JEAN SOUCY: These are primary cells
22 and this is the secondary.

23 MS. DIEP DUONG: Okay.

24 MS. MARY KELLY: This is Mary for
25 Environment Canada. Again, just using the map since it's

1 right there, the two (2) primary cells, are they fed with
2 like a split line from the sewage?

3 And then my second follow-up question is
4 just the trucked sewage, does it only get applied to the
5 south cell?

6 MR. JEAN SOUCY: Yeah. So currently we
7 can - we can manoeuvre by virtue of turning lines on or
8 off any -- any particular direction we want, but it's
9 been practised that the dis -- main lift or any of the
10 sewage enters the primary cell here, subsequently settles
11 to a certain degree in here, enters the next, Primary
12 Cell 2. Further settlement is -- is involved there, and
13 then goes into the secondary lagoon.

14 You can see there's a bit of a turnout
15 here. This is the discharge of the waste pump-out truck.

16 THE FACILITATOR: Kathy Racher for the
17 Board. Switching seats with Jean. I'm just wondering
18 about the sewage outfall. I haven't seen -- I don't -- I
19 don't know the exact configuration at the end where it
20 goes --

21 MR. JEAN SOUCY: M-hm.

22 THE FACILITATOR: -- into the lake. Does
23 it -- does it -- it discharges onto the surface -- sorry,
24 not the lake, the river, and just how far out from the
25 bank it is and those kind of configurations.

1 MR. JEAN SOUCY: If you bear with me I
2 could go through a quick picture. There's -- I have
3 pictures of the actual diffuser.

4 Would that -- would that help?

5 THE FACILITATOR: Kathy Racher for the
6 Board. Yes, that would help very much. Thank you.

7 MR. JEAN SOUCY: All right.

8

9 (BRIEF PAUSE)

10

11 MR. JEAN SOUCY: This looks awful but it
12 was awful.

13

14 (BRIEF PAUSE)

15

16 MR. JEAN SOUCY: So the discharge into
17 the river itself is structured as such. The intake --
18 I'll give you a bit of a historical background with the -
19 - with the discharge.

20 In prior years, prior to this landslide,
21 the intake itself used to go right into the river. And
22 when I talked about earlier where we had problems with
23 movement underground and we have to deal with line all
24 the time breaking and whatnot, majority of it was at the
25 tip.

1 I don't know how many fittings and -- and
2 connections that we had on this pipe, it would just --
3 whether it was shear erosion from spring breakup or just
4 ground movement, this line would shear every time. And,
5 of course, to try to tie into the original one at -- at
6 that time -- we managed it for many years, but it really
7 didn't work very well. For the most part it was just --
8 it would just shoot out the side until we had got it
9 fixed.

10 In this case here, it's a -- this rock
11 formation diffuser, as we like to call it. As -- as the
12 material -- the liquid enters here it trickles in along
13 the way and there's a bit -- there's a -- there's a
14 membrane at the bottom here and it just trickles in and
15 falls into the bottom of the river.

16 THE FACILITATOR: Kathy Racher for the
17 Board. That's -- that's very helpful.

18 So during the winter is there ice right up
19 to the shore, or does it -- does it end up on top of the
20 ice or does it go underneath?

21 MR. JEAN SOUCY: We -- we have a - we
22 have a healthy supply of this rock -- rock material, so
23 we're -- we're monitoring that on a regular basis and
24 monitoring the water levels themselves. So at times when
25 the water level is lower we'll add more rock to protect -

1 - protect the actual liquid from being even visible, for
2 that matter. So if this water level happens to be at
3 this level here, then it just trickles underneath; and if
4 it happens to be lower, these rocks actually go further
5 down into -- into the water itself.

6 THE FACILITATOR: Kathy Racher for the
7 Board. Does that mean you have to replace the rocks
8 fairly frequently because of the movement --

9 MR. JEAN SOUCY: Fairly frequently, yes.

10 THE FACILITATOR: -- of the river.

11 MR. JEAN SOUCY: Yeah.

12 THE FACILITATOR: Kathy Racher. There
13 was a question about where you sample for different
14 things. So for -- when you're doing water quality
15 testing for station number 2, SNP-567-2, where do you
16 take the sample from?

17 MR. JEAN SOUCY: That's on the very top
18 of the -- of the field. I don't have -- I have...

19

20 (BRIEF PAUSE)

21

22 MR. JEAN SOUCY: It's not very visible up
23 here, but there's a -- there -- so the lagoon -- the
24 lagoon discharge line is connected in this area here.
25 And there's a -- this is a natural mechanical setting

1 that only allows it to -- to overflow to -- to an
2 overflow set point; and there's a valve to isolate it,
3 should we have to.

4 Further down here there are -- SNP-567-2
5 is located right here, and that's where we do our dip,
6 grab samples. And so understanding that -- an end-point
7 pipe -- end-point is -- is identified as end-pipe. In
8 this case it's the same material that we would sample
9 should we sample it right at the end of that line.

10 THE FACILITATOR: Kathy Racher for the
11 Board. Just while we're -- again have these pictures up
12 I think Environment Canada had a question in their
13 comments about where you sample when you're doing acute
14 toxicity testing.

15 Is that at the end of the -- the rock
16 diffuser?

17

18 (BRIEF PAUSE)

19

20 MR. JEAN SOUCY: I'm trying to get a
21 better picture, but I think that's the only two (2) that
22 I have.

23 So the location would be at the very
24 bottom where it meets the water, nearest to the rocks as
25 possible just on the -- now at certain times, fall time

1 when the -- when the water levels are quite low you can
2 actually see the green -- the green colour of the
3 discharge into the water. So we try to take as near as
4 that point as possible.

5 THE FACILITATOR: Okay. Kathy Racher for
6 the Board. Does anyone have any questions on Jean's
7 presentation at the moment? And we can always come back
8 to things when we go through the comments, but if you
9 have questions.

10 Diep...?

11 MS. DIEP DUONG: This is Diep Duong from
12 ENR. I was just wondering Jean -- Jean, sorry, the
13 sludge from the primary cells that is taken out every
14 five (5) years, he says that Wayne Starling has sampled
15 it in the past. And what --

16 MR. JEAN SOUCY: Yeah.

17 MS. DIEP DUONG: What is the sample for?

18 MR. JEAN SOUCY: Wayne, could you --
19 could elaborate on that sample from the dried sludge that
20 we -- that we sampled I'm going to say about ten (10)
21 years ago?

22 MR. WAYNE STARLING: Yes, we collected
23 samples from the dried sludge bed and sent to TAIGA Lab
24 and just analysed for regular bacteria analysis. So it
25 was faecal coliform, total coliform, I believe faecal

1 strep and ecoli, the regular bacteriological sampling and
2 analysis that TAIGA does for us.

3 MS. DIEP DUONG: Thanks, Wayne. Was
4 there any metals tested?

5 MR. WAYNE STARLING: No.

6 MS. DIEP DUONG: Thank you.

7 THE FACILITATOR: All right. Kathy
8 Racher here. Any other questions before we get on to the
9 comment table?

10

11 (BRIEF PAUSE)

12

13 COMMENT 1 - ANNUAL REPORTING:

14 THE FACILITATOR: All right, Kathy
15 Racher, for the Board. That was really helpful. I've
16 never -- I've never had a presentation done by -- with
17 Goo -- Google Earth before, but I thought that was --
18 that was great for those of us who haven't been there.
19 So thank you very much for that, Jean.

20 Okay. So I thought we'd go through it by
21 topic. And we'll take a break in a -- in a few minutes
22 but let's see if we can get a couple of things knocked
23 off for topics. Let's hopefully start out where it's
24 easy, annual reporting. There's a couple of questions
25 about that.

1 One (1) thing I'd -- I'd like to keep in
2 mind as we're going through comments, and that is in the
3 end, you know, we have a water licence where we have to -
4 - if there are changes to the terms and conditions, then
5 -- then that's -- that's our main focus of a renewal, is
6 we can't sort all of the -- every problem in the world
7 out before renewal.

8 We just want to know what the terms and
9 conditions of the licence need to be going forward or if
10 anything needs to change. So as we're going through the
11 comments I'd ask you to -- to keep that in mind. If you
12 have specific recommendations for changes to the terms
13 and conditions in particular, that would be good to -- to
14 know about.

15 So the first comment is from INAC Water
16 Resources about annual reporting. And I'm just -- you --
17 you -- INAC made some recommendations on things that
18 should be in the annual report. I just wondered if you
19 could elaborate a little bit with your rationale for what
20 I believe you're recommending to include in the annual
21 report, which would mean a change in the conditions of
22 the licence.

23

24

(BRIEF PAUSE)

25

1 MS. JEANNE ARSENAULT: Jeanne Arsenault,
2 INAC. Would you like me to go over each specific
3 recommendation?

4 THE FACILITATOR: Kathy Racher. Yes,
5 please.

6 MS. JEANNE ARSENAULT: So the first one -
7 - the first one was to include in the annual report
8 results from any inspection of all dams, berm, dikes, and
9 controlled structures. We -- we thought that it would be
10 good practice just to inform of the states of the
11 structure yearly at the -- from the routine inspections.

12

13 (BRIEF PAUSE)

14

15 MS. JEANNE ARSENAULT: As far with the
16 sludge management details, the removable happening every
17 five (5) years, so on the years that it occurs we'd like
18 to have -- we think it would be useful to be reported in
19 the annual report to have the volume that was removed, as
20 well as any results from sampling that would have
21 occurred at the time that they do occur, if -- if it is
22 two (2) years after the drying process has -- has
23 occurred, or depending on the -- the time required.

24 The other component was comparison of the
25 sur -- surveillance network program data to the water

1 licence regulated limits and sampling analysis
2 requirements. We observed it was a requirement that was
3 added to the Type A water licence for Hay River, and
4 again thought it would be useful to have it in that
5 format, useful for the Town as well.

6 Am I going too fast? And the last one --
7 or sorry, the -- the one after that was correspondence
8 between the inspector and the Town. So that one was --
9 was to be a short paragraph on any discussion on
10 outstanding issues, if any, that would have occurred
11 during that year.

12 And -- and -- sorry, INAC would like to
13 point to the annual report of the City of Yellowknife,
14 who has a -- a single paragraph discussing their various
15 discussions that occurred around the storm water
16 management plan -- plan submission.

17 And I think the last one was groundwater
18 monitoring result which are already part of the water
19 licence, so you can...

20

21 (BRIEF PAUSE)

22

23 THE FACILITATOR: Okay. Kathy Racher for
24 the Board. I'm just wondering, the correspondence
25 between the inspector and the Town, wouldn't that already

1 -- already be captured in the inspection reports, and
2 I'll ask that to -- to Wayne.

3 MR. WAYNE STARLING: Wayne in Fort Smith,
4 Yes, Kathy, I -- I think that a lot of that probably is a
5 duplication, and I -- I guess for some government offices
6 and files it would be a summary of these other
7 discussions and documents, but all of that information
8 would also be contained in inspection reports and other
9 letter correspondence between the department and the Town
10 and licensees.

11

12 (BRIEF PAUSE)

13

14 THE FACILITATOR: Okay. Kathy Racher for
15 the Board. Jean, do you have any comment on what INAC
16 was requesting?

17 MR. JEAN SOUCY: Yeah, I -- I view it the
18 same way as Wayne does. It is a duplicate. We have
19 numerous inspections throughout the year with a local
20 inspector, Wayne himself. And any -- any -- and of
21 course the annual report provides information of anything
22 that's happened or projected to happen in the following
23 year. There's a fair amount of information exchanged
24 between the Town and -- and current information being
25 exchanged by the Town and the inspector at the moment.

1 THE FACILITATOR: Kathy for the Board.
2 Did you have any comments on any of the other items in --
3 in that comment?

4 MR. JEAN SOUCY: Well, continuing the
5 groundwater monitoring program that we have, we would
6 like to -- we would like the Board to look at and -- and
7 possibly identify any potential problems with what we
8 have done in -- in the past eight (8) years because it is
9 a very cost -- costly endeavour with the Town for the
10 last eight (8) years.

11 It originally started at about fifteen
12 thousand dollars (\$15,000) a year to -- to monitor these
13 wells, sampling and -- and reporting. And it's grown to
14 about twenty-five thousand dollars (\$25,000) a year. You
15 know, it -- it -- the Town -- the Town is -- is -- is
16 like any other municipality in -- in the -- the
17 Territories or Canada for that matter, struggling to --
18 to meet a lot of our -- of our needs by virtue of
19 financing and -- and -- and funding.

20 So we'd like the Board to -- to look at --
21 at the last -- I believe the AECOM's last report on -- on
22 the -- the data collected and the sampling that happened
23 in the last eight (8) years or so to see if we could
24 remove some of these -- some of these parameters as well
25 as some of these -- some of these walls that possibly or

1 at least show that there is no contaminants within that
2 area.

3 THE FACILITATOR: Kathy Racher for the
4 Board. And I think we will have a -- I would like to
5 have a good discussion about that, about the
6 recommendations that have been made by AECOM and your own
7 concerns with everyone.

8 So we'll -- we'll do that all together and
9 -- and -- in a -- in a bit and also talk about reporting
10 of ground monitor -- groundwater monitoring results which
11 I understand is kind of complex and hasn't been in every
12 annual report but maybe it shouldn't be, I'm not sure.
13 So we'll have a discussion about -- about all of those
14 things at the same time.

15 Okay. The other comment I thought had to
16 do with annual reporting was number 19 by Environment
17 Canada.

18

19 COMMENT 19 - re ANNUAL REPORTING

20 MS. SARAH-LACEY MCMILLAN: I don't know
21 if we need -- sorry, it's Sarah-Lacey McMillan from
22 Environment Canada.

23 I don't know if we need much more
24 elaboration, just we -- we're requesting that it become a
25 condition that the annual report just get approved, just

1 so that way it helps for, you know, next renewal or
2 anything else, that -- if they're all been verified. And
3 -- and every once in a while, you know, something might
4 slip and if -- if it's been approved by the Board then we
5 know that all the little pieces are there.

6 THE FACILITATOR: Sorry, Kathy Racher.
7 Just some housekeeping, if we get too many mics going it
8 won't work so we have to remember to turn off our mic.

9 Okay. And if -- did you have any specific
10 comments about whether the annual reports have not
11 contained all the information in the past at all?

12 MS. SARAH-LACEY MCMILLAN: This is Sarah-
13 Lacey again. No, we were just hoping to have it as a
14 condition.

15

16 COMMENT 2 - SNOW DISPOSAL PLAN

17 THE FACILITATOR: Okay. Any other
18 discussion just about the annual report I'd say mostly,
19 and the conditions around the annual report at this time.

20 Okay. The next topic is snow disposal.
21 INAC has -- has recommended that there be a condition for
22 snow dis -- a condition relating to snow disposal. I
23 wasn't sure if it meant like a separate plan is what you
24 were thinking or if you were just thinking of an addition
25 to the operation and maintenance plan.

1 MS. JEANNE ARSENAULT: Jeanne Arsenault,
2 Water Resources. Looking at what was submitted by the
3 Town of Hay River again, who was asked to provide a snow
4 disposal plan, it consists -- it consisted mainly on the
5 location and with -- with respective coordinates,
6 northing and easting (sic). So it was a six (6) pager
7 plan.

8 So I think we've looked at what was
9 submitted by the Town of Fort Smith for the location of
10 their snow disposal location and we're satisfied with
11 what was submitted.

12 THE FACILITATOR: Kathy Racher for the
13 Board. Maybe I'll just ask you what your main concern
14 was in -- in requesting a condition related to snow
15 disposal. I -- I wasn't sure what your -- what your
16 concern was about.

17 MS. JEANNE ARSENAULT: Jeanne Arsenault,
18 INAC. I don't think it was part of the water licence and
19 so I wanted perhaps it to become -- to be inserted. And
20 also in the future if any revision from the location
21 occur to -- that it -- that when reviewed annual -- it is
22 reviewed annually and any revisions should be identified
23 in the annual report.

24 THE FACILITATOR: Okay. Well, that kind
25 of gets us into the operation and maintenance plan. So

1 with the snow disposal location I'm -- I'm, I guess it's
2 not completely clear, but I'm assuming that that would
3 just be something that would be placed into the operation
4 and maintenance plan.

5 But I'm not -- I'm not entirely sure what
6 kind of condition you were -- you were hoping for in the
7 licence, so maybe you could clarify and -- and then I'll
8 let you carry on with comment number 3 in terms of other
9 revisions to the O&M plan.

10

11 (BRIEF PAUSE)

12

13 MS. JEANNE ARSENAULT: It's Jeanne
14 Arsenault from INAC. So in the water licence as Part D
15 in condition applying to waste disposal that a condition
16 be added to the -- as the licensee shall annually
17 renew the snow disposal location, perhaps. And shall
18 modify the plan -- those locations as required.

19

20 (BRIEF PAUSE)

21

22 COMMENT 3 - OPERATION AND MAINTENANCE PLAN:

23 THE FACILITATOR: Okay. In your comment
24 number 3 on the operation and maintenance plan you
25 recommend that the O&M plan be revised and also include a

1 number of things. I think a number of people have
2 recommended an update to the O&M plan and I believe the
3 Town of Fort Smith is okay with that, although I'll let
4 them jump in if they want to.

5 And I'm just wondering if the items that
6 you've listed here, if those are just standard items you
7 see in an O&M plan or if the -- the licence for the Town
8 of Fort Smith is -- is missing any of these items in
9 particular.

10

11 (BRIEF PAUSE)

12

13 MS. JEANNE ARSENAULT: Jeanne Arsenault,
14 INAC. So those would be standard requirements to be
15 included. There was a first version of the O&M plan that
16 was submitted -- or prepared in 1999 which I didn't find
17 on the website, but was able to get from -- from Wayne.

18 And this one had a portion that talked on
19 sanitary sewage system. Yeah, so it's to be -- to
20 include all of the information within one (1) plan. But
21 all the other requirements for number 2 on hazardous
22 waste -- waste management plan -- there was also a
23 section on the O&M Plan on -- that was submitted in 2000
24 -- or prepared in 2004, there was a Section 4.6 that
25 addressed hazardous waste management.

1 the date but I believe 2004 is the solid waste O&M plan.
2 We don't have a sewage disposal O&M plan, so -- but I --
3 we do recognize that one is needed, and we can definitely
4 put something together.

5 THE FACILITATOR: Kathy Racher for the
6 Board. Does it make sense -- I mean, the -- the licence
7 calls for sewage and solid waste -- well, an operation
8 and maintenance plan of the sewage and solid waste
9 disposal facilities.

10 Does it make sense from an operating
11 perspective to have all of those things in one (1) -- one
12 (1) master plan?

13 MR. JEAN SOUCY: No, I don't -- I don't
14 believe that that does make sense. I would like to see
15 two (2) separate plans. One (1) for the solids -- solid
16 waste and -- and one (1) for sewage disposal, O&M plan,
17 two (2) separates.

18 MS. DIEP DUONG: This is Diep from ENR.
19 I would agree with Jean, keeping them separate, because
20 they're -- the operators who work at one (1) facility
21 might not necessarily work at the other facility, and it
22 would be good to keep them separate.

23

24

(BRIEF PAUSE)

25

1 THE FACILITATOR: Okay, back to -- to
2 you, Mary. Does that -- that fits with -- with your
3 thinking? And -- and also carry on if you have any other
4 comments about the O&M plan.

5 MS. MARY KELLY: Sure. Mary Kelly again.
6 I agree with what has just been discussed, that if
7 there's different operators it would be practical to have
8 separate documents and that they'd be submitted for
9 approval.

10 Otherwise, the solid waste O&M plan,
11 again, we are -- we're seeing deficiencies, and I'm not
12 clear whether that document has been approved at this
13 stage. I don't think it has. Actually, I -- I'm not
14 sure about that, so maybe that could be clarified at this
15 stage.

16 THE FACILITATOR: I'm sorry, I'm not as
17 familiar with the files as I should be, and I -- I'm not
18 aware. Jean, do you know if -- has that -- the solid
19 waste disposal plan been approved by the Board?

20 MR. JEAN SOUCY: Jean here. Yeah, I
21 believe so. It was submitted in 2004. We don't have any
22 in -- indication that it wasn't approved by the -- by the
23 Board. The first I've heard of this, so.

24 THE FACILITATOR: Kathy Racher for the
25 Board. I know that the online record is a little sketchy

1 in the early 2000s because the system was just getting up
2 and running. So I -- I know the solid waste disposal
3 plan is -- or O&M plan is on the registry, but I'm not
4 sure if the documents associated with its review or
5 approval made it, so we'll have to look into that.

6 MS. MARY KELLY: Thank you. Mary Kelly
7 again. So what we would be looking for is that the solid
8 waste plan be updated and submitted for approval. And,
9 at that time, we would be able to address any
10 deficiencies that exist that we feel are important to be
11 included in the plan.

12 And I would also just point to a guidance
13 document that GNWT has, and I can't remember the title of
14 it. I'll just get the title here from Diep. It's the
15 guideline for the planning design operations and
16 maintenance of solid waste sites in the NWT, and this
17 document has very specific recommendations of what should
18 be included in an O&M plan.

19 THE FACILITATOR: Kathy Racher for the
20 Board. So your -- would your recommendation be to ensure
21 that the conditions in the licence related to the -- the
22 solid waste plan at least con -- address or just be taken
23 from the ENR document or according to the ENR document?

24 MS. MARY KELLY: I wouldn't -- I'm not
25 familiar -- familiar a hundred percent today with -- if

1 that's all inclusive of what should be included, but it's
2 the best guidance document that we often go to to make
3 sure that everything's in place.

4 MS. DIEP DUONG: This is Diep Duong from
5 ENR. I just wanted to clarify that that document is
6 actually a Municipal and Community Affairs document, and
7 that there's actually another document from MACA that
8 also -- it's called "Preparation of an O&M Manual for
9 Sewage and Solid Waste Disposal Facilities."

10 Basically, it's like a cookbook of how to
11 write an O&M manual. And then the other MACA document
12 helps address all of the points that would be covered in
13 the water licence.

14 THE FACILITATOR: Kathy Racher for the
15 Board. Can I ask you to provide the links to those
16 documents, so that we make sure we've got the right ones
17 on the record?

18 MS. DIEP DUONG: Yeah, I could do that.
19 It's actually part of our comment table, but I can
20 provide that, as well.

21

22 --- UNDERTAKING NO. 1: For ENR to provide links

23

24 THE FACILITATOR: Jean, did you have any
25 comments on the O&M plan?

1 MR. JEAN SOUCY: Jean -- Jean, Fort
2 Smith. No, I don't. The only question I was going to
3 ask was for the same links, so if you can provide that
4 for us that would be great. Thank you.

5 THE FACILITATOR: Kathy Racher for the
6 Board. Before we leave Environment Canada, there's just
7 this comment number 16. I wasn't probably entirely sure
8 where to put the -- this as far as a home goes, but maybe
9 it will -- it relates to the sewage O&M plan.

10 And I'm just wondering the significance of
11 your -- your question and -- and how it relates to sewage
12 treatment for comment number 16.

13 MS. MARY KELLY: Yes, thank you. This is
14 Mary Kelly again. I'll give the explanation of why we
15 felt this was pertinent. In drinking water facilities
16 when a floc (phonetic) is applied there's two (2) ways of
17 dosing. You can either dose according to what is needed
18 on that day and, therefore, you don't overdose, or you
19 put a standard dosage.

20 And what ends up happening is the backwash
21 water has unreacted coagulant. And so that unreacted
22 coagulant then get -- ends up in the sewage lagoon which
23 then reacts and settles out more solids than you might
24 expect.

25 Also, because it's polyaluminum chloride

1 or -- I'm not sure if that's the right name but it's
2 aluminum, and so there may be additional aluminum in the
3 sewage lagoon that could be as a result of that dosing
4 and backwash being -- settling out in the sewage lagoon.

5 At this stage we'll just -- do we
6 recommend that any additional terms and conditions be
7 applied? No. At this stage we just wanted to flag that
8 as a possibility and something that would probably need
9 to be considered in the sludge management plan.

10 THE FACILITATOR: Okay. Thank you. That
11 was a very helpful clarification. Okay. Environment
12 Canada, are you -- were you satisfied with the discussion
13 so far on O&M plan?

14 Did you have any other comments you wanted
15 to address?

16 MS. SARAH-LACEY MCMILLAN: It's Sarah-
17 Lacey. No, thanks.

18

19 COMMENTS 27 AND 30 TO 34 - OPERATIONS AND MAINTENANCE
20 PLAN, HAZARDOUS WASTE MANAGEMENT

21 THE FACILITATOR: Okay. Kathy, for the
22 Board. Okay. We'll move to -- to ENR. I identified
23 comments 27 and 30 through 34 on this issue, and maybe
24 we've covered some already. So maybe you could just
25 describe what your -- what your thinking is on this.

1 MR. JEAN SOUCY: I think 27 is a bit
2 awkward.

3

4 (BRIEF PAUSE)

5

6 MS. DIEP DUONG: This is Diep Duong, with
7 ENR. We actually did have a look at the 2004 O&M plan
8 and it's actually pretty good, but there are -- I agree
9 with Mary Kelly that there are a few things that are
10 sufficie -- insufficient. So we would like for the
11 community to update the solid waste O&M plan in addition
12 to a sewage O&M plan which the Town has indicated that
13 they don't have.

14 And we would like the Town to consult with
15 MACA's document, the planning design operations and
16 maintenance of modified solid waste sites in the NWT, and
17 also the guideline for the preparation of an O&M plan for
18 a sewage and solid waste disposal place.

19 And also that the Town make the plan
20 available to any staff, operators, or contractors working
21 at those facilities. That's one (1) portion.

22 THE FACILITATOR: Okay. I -- Kathy
23 Racher for the Board. That seems a very clear
24 recommendation. I apologize for not recognizing that you
25 put all these links in here.

1 Does anyone have any comments on that
2 before we go on to the next set of comments, which I
3 believe are mostly to do with hazardous waste?

4 Okay. Go ahead, ENR.

5 MR. GERALD ENNS: So our -- it's Gerald
6 from ENR here. Are we going over 28?

7 UNIDENTIFIED SPEAKER: I think we're doing
8 to 30, right?

9 THE FACILITATOR: Kathy Racher, for the
10 Board. Yeah, I want to just stick to the O&M plan. 28
11 seemed to be about the spill contingency plan so we'll go
12 on to comments 30 through 34.

13 MR. GERALD ENNS: Okay, it's Gerald again
14 from ENR.

15 With respect to the land farm, the Town of
16 Fort Smith has indicated that they'd like to continue
17 using the land farm. They'd like to continue using the
18 land farm for the remediation of hydrocarbon-contaminated
19 soils.

20 We understand that the land farm that is
21 built there was built by Public Works to clean up the --
22 a major spill at the college, which took several years.
23 And Public Works and Services has cleaned up that spill
24 but some infrastructure remains like a lined treatment
25 cell, 45 x 85 metres I believe it's mentioned, that can

1 still be used to collect hydrocarbon-contaminated soils.

2 However, we would like to see, you know,
3 clearer transfer of ownership from Public Works and
4 Services to the Town of Fort Smith, that this is -- this
5 infrastructure has been left behind by the Town -- by the
6 Public Works and Services. And we have -- they have
7 closed off their -- essentially closed off their -- their
8 portion of the clean-up from the spill and further
9 details about the capacity of the hydrocarbon or of the
10 treatment pad to accept contaminated soil. For example,
11 what's the maximum volume of contaminated soil that could
12 be treated on this treatment pad? How does -- how is
13 runoff from snow melt managed?

14 Snow melt from hydrocarbon-contaminated
15 soils, right. Are they gonna -- are you gonna accept
16 soil -- contaminated soil, contaminated snow,
17 contaminated water, or is it just going to be
18 contaminated soil, these types of -- of details.

19 And also importantly is that a qualified
20 professional is retained to test the soils to ensure that
21 they're -- they're suitable for the land use -- or they
22 meet the land use criteria for which they're going to be
23 used. If industrial fill or is -- is chosen then it
24 should be demonstrated that it meets industrial criteria.

25 So as far as -- that was our comment.

1 These types of details are not quite clear. And we don't
2 want to have a drawing of the -- an engineer drawing of
3 the land farm in the application. Some of those drawings
4 may, I believe, exist from the previous Public Works and
5 Services files. However, they're not in the application
6 so we can't -- we can't really see, you know, what the
7 capacity is and make -- make decisions about how it's
8 going to be operated.

9 In addition, in other land farms in the
10 Northwest Territories, hydrocarbon-contaminated soils
11 receiving facilities are registered as receivers of
12 hazardous waste. So the contaminated soil is tracked on
13 movement documents that identifies where the soil came
14 from, the quantities, who carried it, and the date.

15 These movement documents are -- are very
16 useful, they're important. They help land farms operate
17 and keep track of how much material is in them. And it
18 provides also some -- some assurances and some -- to the
19 Town, when materials are accepted that the generator of
20 the contaminated soils is representing them accurately.

21 For example, if it stated that you're
22 accepting hydrocarbon-contaminated soil and you have
23 actually accepted -- it's found that you've actually
24 accepted something that isn't you can go back to the
25 generator and say, This is not what you said you gave us,

1 therefore you need to take it back, those types of
2 protections for the Town.

3 So we recommend that in further
4 correspondence with regards to developing an operation
5 maintenance plan that the operation of the land farm is
6 included in a hazardous waste management plan, and that
7 the hazardous waste management plan is part of the solid
8 waste O&M plan, as well.

9 THE FACILITATOR: Kathy Racher for the
10 Board. Can I just interrupt for a sec. I think one
11 thing we were interested in knowing from the Board's
12 perspective is just what part of this is your
13 jurisdiction or you're dealing with the Town of Fort
14 Smith as ENR and what part are you actually recommending
15 for terms and conditions of the water licence; that's an
16 important distinction from our perspective?

17 MR. GERALD ENNS: We recommend that terms
18 and conditions be included in the water licence similar
19 to hydrocarbon treatment facilities in Yellowknife and
20 Hay River. And that, for example, with respect to
21 hazardous waste management the -- or, hazardous materials
22 management it is identified in the NWT waters regulation,
23 so we recommend that that be consistent in this water
24 licence, as well. So that would be a change to the
25 current Type A water licence, if I'm not mistaken.

1 And I think that's all I have to say as
2 far as Board -- changes to the water licence or...

3 MS. DIEP DUONG: This is Diep from ENR.
4 I just want to sort of I guess clarify that the
5 management of hazardous waste is actually within the NWT
6 waters regulations and it's also within the terms and
7 condition of a water licence. So we wouldn't be stepping
8 in to duplicate matters obviously, because the -- the
9 federal authorization is actually higher than the
10 territorial guidelines.

11 And we would be, as far as hazardous waste
12 management goes, we register generators, carriers,
13 receivers of hazardous waste. And then we also register
14 communities that receive hazardous waste, i.e.,
15 contaminated soils in Hay River and in Fort Smith. So we
16 don't have regulations that pertain to the management of
17 hazardous waste, per se. We do, however, have the used
18 oil and fuel management regulations, but that's sort of
19 one (1) component of hazardous waste of which there's
20 dozens.

21 But given sort of our, I guess, knowledge
22 in the area, Gerald I know has been working quite a bit
23 with communities to help them develop a hazardous waste
24 management plan and we have a draft document that we can
25 provide to the Town to -- to help with that.

1 THE FACILITATOR: Kathy Racher for the
2 Board. I -- I realize it's 10:35 and maybe we'll take a
3 break before we carry on.

4 After the break I'll let anybody, but
5 especially the Town of Fort Smith, just respond to that
6 last -- do you want to do that now, or are you happy to--

7 MR. JEAN SOUCY: If you don't mind --

8 THE FACILITATOR: Go for it. Okay.
9 Please respond.

10 MR. JEAN SOUCY: Jean Soucy, Town of Fort
11 Smith. Yeah, we recognize that the haz -- hazardous
12 waste management lacks in many areas. And -- and the
13 Town will pursue a decent and -- and a working document -
14 - what -- is what we'd like to see.

15 But further to -- to the earlier comments,
16 the Town has no plans to expand their hazardous waste
17 land farm. However, should there be a spill or a need
18 for it then we want to be ready for it. It's not that we
19 want to start a whole new business in -- in hazardous
20 waste management, but I -- I do agree that we do need a
21 haz -- a hazardous waste management plan and -- and that
22 is definitely valid.

23 As far as the design drawings, I -- I've
24 never -- I've never seen any. However, as I stated, I've
25 only been in this acting position for eight (8) months

1 and I'm still digging through -- through a lot of files
2 trying to find some older documents.

3 Now, not to say that doesn't exist, but we
4 -- we can definitely get as much information as -- as
5 possible. If it doesn't exist within the Town's file
6 system, sure -- surely we can find it somewhere else but,
7 failing that, a proper design within the haz -- hazardous
8 management plan would fit together. Thank you.

9 MS. DIEP DUONG: Thank you.

10 THE FACILITATOR: Okay, Kathy Racher.
11 Let's -- let's take a ten (10) minute break, fill up on
12 some more coffee and -- and muffins. Thanks.

13

14 --- Upon recessing at 10:35 a.m.

15 --- Upon resuming at 10:50 a.m.

16

17 THE FACILITATOR: Okay. Kathy Racher for
18 the Board. We'll start up again. On -- we are on
19 hazardous waste management and ENR has just talked about
20 one (1) of their comments, they've got a few more.

21 I just wanted to clarify when we were
22 talking -- when I was asking the question about what's --
23 what goes in the water licence and what's just a
24 conversation between ENR and -- or the relationship
25 between ENR and -- and the Town of Fort Smith. Hazardous

1 waste is certainly something that gets dealt with in the
2 water licence but always from the perspective of
3 potential impacts of wastewater and -- or indirectly or
4 directly to -- to water.

5 So when you have recommendations about
6 registering as a receiver or in the next -- in comment 31
7 about establishing a relationship between AECL and Town
8 of Fort Smith, I just want to clarify that's -- in the
9 water licence we wouldn't cover -- we wouldn't require
10 those things of -- of the Town of Fort Smith, but we will
11 require anything to do with the management of the waste
12 once it's there. The hazardous waste once -- once it's
13 there, if you know what I mean.

14 So in your comments, just to clarify like
15 if there's some specific thing that the Town of Fort
16 Smith needs to do to comply with ENR guidelines or
17 recommendations just to make a clear distinction between
18 those things and things -- terms and conditions of the --
19 of the water licence.

20 So having said that I think we're -- we're
21 on to 31, uranium.

22 MR. WAYNE STARLING: Kathy, it's Wayne in
23 Fort Smith. Could I provide a quick comment, please?

24 THE FACILITATOR: Kathy. Absolutely,
25 Wayne.

1 MR. WAYNE STARLING: Thank you. Just on
2 that last point from ENR. I just wanted to caution the
3 Land and Water Board and -- and other departments where
4 that discusses the requirement of obtaining the services
5 of a professional for monitoring and accepting
6 contaminated and treated material.

7 In a case like that, of course what we're
8 talking about there is -- if -- if we're speaking about
9 professionals, it's the requirement to retain
10 consultants. And I believe that we already have burdened
11 many of the communities with expensive requirements for --
12 - for consultants in areas that -- that are necessary.

13 But if it just requires a matter of
14 sampling the soil and then comparing the laboratory
15 results to published criteria, I believe there at times
16 is in-house staff that can do that type of procedure. So
17 I just want us to be a little bit careful, especially
18 when it pertains to communities as opposed to industries
19 because a lot of industry already have that staff person
20 on -- on their payroll. So it's not a hardship to them
21 to have them confirm this type of -- of job or task.

22 But in other words it's a matter of
23 collecting samples similar to what we now already have
24 the community do for surveillance network programs
25 routinely, other than specialized work. They are able to

1 do that and provide the sample for analysis. And once
2 it's evaluated then we move on from there.

3 So I just wanted to add that comment for
4 you.

5 THE FACILITATOR: Okay. Thank you,
6 Wayne. Thank you for that clarification.

7 ENR...?

8 MR. GERALD ENNS: It's Gerald from ENR
9 here.

10 We have registered other contaminated soil
11 treatment facilities in the Northwest Territories and we
12 do expect from them that a third party is -- is obtained
13 to sample the contaminated soil and interpret the
14 results. There are also a few other considerations with
15 respect to remediating soil, like how often it's turned,
16 aeration, and these types of things.

17 So while it's not out of the question that
18 the -- the Town can -- can do this on their own. We do
19 recommend that they look closely at -- at how they're
20 going to ensure that once the contaminated soils are
21 received, that they're going to be able to determine that
22 they -- they meet the appropriate land use criteria.

23

24

(BRIEF PAUSE)

25

1 THE FACILITATOR: Okay. Kathy Racher,
2 for the Board. With -- with those things in mind, could
3 you go on with comment number 31?

4 MR. GERALD ENNS: It's Gerald again from
5 ENR here. It -- it's listed in our spreadsheet as a
6 topic of hazardous waste management. Radioactive waste
7 is actually speci -- specifically excluded from the
8 definition of -- of hazardous waste for the simple reason
9 that radioactive waste has as many different
10 considerations unto itself as does generally the whole
11 spectrum of hazardous waste, so.

12 However, it -- it is a contaminant of
13 concern, and we do note that there's very little details
14 on -- on the design and construction of this site and how
15 -- how -- what kind of a relationship the Town of Fort
16 Smith has with Atomic Energy Canada and -- and how this
17 uranium site is being monitored and being managed, and
18 even if there any impacts that information was -- it's
19 not there.

20 And, actually, Diep, do you have anything
21 further to add?

22 MS. DIEP DUONG: It's Diep with ENR. I -
23 - I do agree -- or sorry, I concur with Gerald in that
24 there is very little information in the application
25 package as far as the uranium burial sites.

1 The only information that we have is its
2 location, and once census that says that it exists at the
3 landfill. Although it is low level, we still, like
4 Gerald said, consider it as a contaminant. And we don't
5 have any information whatsoever on how it's operated and
6 how it's managed, and whether there's any monitoring
7 whatsoever at the site. Furthermore, how much soil or
8 foreign material has gone into that -- that facility --
9 or that site.

10 We don't know what sort of soil conditions
11 and -- and analysis has been done to date to characterize
12 the soil that has been placed in that facility, we don't
13 know. The -- the fact that we have elevated metals in
14 the groundwater and the surface water downstream of the
15 land form, has that even been considered as a potential
16 source of contamination?

17 So I guess we would like to -- for the
18 Town to clarify what is the relationship between Atomic
19 Energy Canada and the Town as far as that facility goes
20 and how is it maintained, operated, managed, monitored.

21 MR. JEAN SOUCY: Jean Soucy, from the
22 Town of Fort Smith. The relationship with -- with Atomic
23 Energy Canada, as of late, might be -- be stressed
24 because we refuse to take any more material from another
25 location.

1 However, I've provided the only documents
2 that I -- that I received from AMAC. Brian Geddes
3 yesterday, I -- I got it mid -- mid-day yesterday, so --
4 and I -- I provided that information, and understanding
5 there was volume numbers with that document.

6 However, having said that, I'm not aware
7 of any -- of any testing of the material since it --
8 since it's been placed there other than the -- the
9 barrier that's been -- that protects it and the -- the
10 liners within the bottom and the top liner that's
11 included with -- with the -- the station. There's no --
12 I don't know of any other monitoring that's -- that's
13 taken place since -- since its conception.

14 THE FACILITATOR: Kathy Racher for the
15 Board. I don't believe anyone's had the chance to see
16 the information from yester -- that you sent in
17 yesterday. I understand that you -- you weren't in
18 control of getting that necessarily.

19 But what -- what kind of information is in
20 there about -- about the design or the site?

21 MR. JEAN SOUCY: There's three (3)
22 components to three (3) reports, I suppose. Given the
23 brief history of the need for low-level -- low lettle --
24 low-level radioactive material site, there's some history
25 of certain locations within Fort Smith that needed to be

1 cleaned up back in the early '80s. Further -- so these
2 sites were cleaned up and put -- and put in this -- in
3 this area.

4 And then one (1) last remediation site
5 which was done last year, Peregrine Street (phonetic),
6 which is almost undetectable amounts, but it -- which had
7 been cleaned up prior to, but so that just to be on the -
8 - on the safe side they removed an additional seventy
9 (70) cubic metres, I believe, before the paving project
10 was going to take place last summer.

11 So essentially we cleaned that up and --
12 so each time, from the -- from these reports, each time
13 another -- another session of -- of remediation took
14 place it was either exposed or extended. So there's a
15 liner though at the very bottom and the top, and material
16 is -- is subsequently put on the very top dry sand and
17 it's buried -- buried -- barricaded, sorry, all the way
18 around with snow fence and signage all the way around
19 this cell.

20 THE FACILITATOR: Kathy Racher for the
21 Board. Did -- was it -- was it the Town of Fort Smith
22 that built that and made the additions or was it people
23 from Atomic Energy Canada?

24 MR. JEAN SOUCY: It was recognized that
25 there was an issue with low-level radioactive material

1 within the Town of Fort Smith. Again, reading the
2 reports briefly yesterday, as it was identified and it
3 had -- had to be addressed, so I think the request was
4 made by the Town of Fort Smith to ACL to address this --
5 these sites. So subsequently that took place and -- and
6 that's what we ended up with.

7 I don't know what the requirements are --
8 the requirements were then or are now to -- to monitor
9 the site. There's no schedule that I could find that --
10 anywhere, whether in the water licence or any other place
11 that annual sampling is required. Or -- matter of fact,
12 from what I've read: buried, contained, do not approach
13 is -- is what we see.

14 THE FACILITATOR: Kathy Racher. ENR, do
15 you have any follow-up from that? Note -- noting that we
16 haven't seen what was submitted yet.

17 MS. DIEP DUONG: It's Diep from ENR. I
18 guess we -- we'd like to have a look at the report before
19 we made any further comments. Thanks.

20 THE FACILITATOR: Okay. Kathy Racher for
21 the Board. Comment 32 deals with hazardous waste
22 management and just the development of a comprehensive
23 plan which -- which you've been very specific about what
24 should be covered in a plan. And I just wanted to
25 clarify the current landfill O&M plan does contain a

1 section on hazardous waste although I realize it's pretty
2 brief. And I just wanted to make sure I understood that
3 you -- what you're asking for is an update to the O&M
4 plan to contain the more details about how hazardous
5 waste is managed on site in accordance with your
6 guidelines.

7 Is that what you're looking for here?

8 MR. GERALD ENNS: It's Gerald from ENR.
9 That's essentially correct. What ENR's looking for is a
10 plan that articulates the types of waste that are
11 acceptable and unacceptable at Fort Smith landfill or
12 disposal site and -- and from which sector.

13 For example, hazardous waste is generated
14 by residents, and there's also hazardous waste generated
15 from the industrial, commercial, and institutional
16 sectors. And a plan, you know, has equal emphasis on the
17 -- on the types of waste that the Town screens out, so
18 they're not managing by default waste that they're not
19 capable of.

20 And one (1) of the reasons why we've taken
21 this approach is to flush out the details about the
22 different types of hazardous waste that are generated.
23 For example, the application states that no commercial
24 hazardous waste is being accepted at the Town of Fort
25 Smith.

1 However, it's -- it's not uncommon or
2 unreasonable for communities to manage asbestos or
3 hydrocarbon-contaminated soils from residents and the
4 commercial, or the institutional and commercial
5 industrial sector, if they have facilities set up for
6 that.

7 However, it becomes less reasonable for
8 community disposal facilities to start managing hazardous
9 waste from like -- like waste fuel or solvents or wa --
10 other institutional and commercial institutional waste.

11 So developing that -- that plan and -- and
12 going through each waste type and saying, Yes, no, we
13 will or will not accept from this sector, from residents,
14 and from industrial -- especially from the industrial
15 commercial institutional sectors is important and -- and
16 it makes it clear to everybody within the community
17 what's acceptable. So that's -- that's an -- an
18 administrative process at the front end. And some of the
19 hazardous wastes do impact water, like hydrocarbon-
20 contaminated soils. And some of the hazardous wastes
21 don't, like ozone-depleting substances.

22 So it's -- it's always a challenge for us
23 to say which hazardous wastes are a requirement for ENR
24 and which hazardous wastes are -- are -- need to be
25 looked at by the Board, like, for example, the water lic

1 can't handle it and that there will be an issue, an
2 environmental issue, or is it that you're trying to --
3 you're trying to understand how manage -- waste is
4 managed in the Territories in general? I'm not sure
5 which -- which way -- why -- why that information is
6 important to ENR.

7 MR. GERALD ENNS: Gerald from ENR. Part
8 of it is it is important for ENR to understand how
9 hazardous waste is managed, you know, across the
10 Territories. And we apply our guidelines consistently
11 and so this is an approach we have been taking with all
12 communities and it allows communities to develop their
13 own plans, plans that they understand and that's
14 developed by them, in correspondence with us.

15 Why it's important to say what's
16 acceptable and not acceptable is because there are -- are
17 different considerations with each type of hazardous
18 waste.

19 As previously mentioned to say no
20 commercial hazardous waste will be accepted would
21 actually mean that if a Town -- a small business within
22 the Town had a heating oil spill they could not be able
23 to bring their contaminated soil into the treatment pad.

24 Or if a business within the community was
25 renovating and they had some asbestos. To say we don't

1 accept any commercial hazardous waste then technically
2 that asbestos would actually have to go outside the
3 Territories. It's also not unreasonable for a community
4 to take lead acid batteries from businesses within the
5 community.

6 So to say it's a -- it allows those
7 details to be very clear that while a battery may be
8 acceptable your drum of used oil is not acceptable even
9 though they are both hazardous waste.

10 MS. DIEP DUONG: It's Diep from ENR, if I
11 could add to that. It's important because it lets the
12 Board, regulators, and the Town know how to manage a
13 certain type of hazardous waste. So like -- like an O&M
14 plan it's basically saying this is how we're going to
15 manage our solid waste facility. We're going to do this,
16 we're going to monitor it, we're going to compact it
17 every so many days. So it's basically just another
18 extension of how do you operate that certain facility
19 within your landfill.

20 And it sets I guess -- or clarifies, I
21 guess, liability as well. So if the Town is saying that
22 they will accept a certain type of hazardous waste from
23 an institution, for example, then it's on record to say,
24 okay, this is what we accept and this is where it's
25 coming from and this is how we're going to manage it.

1 So, if you don't have that sort of tracking from the
2 beginning to the end, a staff that could be working at
3 the landfill would just say, Hey, okay, keep on coming
4 we'll accept everything. And then the -- the Town is
5 going to end up having to deal with certain types of
6 hazardous waste that they may or may not be prepared to
7 deal with.

8 THE FACILITATOR: Okay. Kathy Racher
9 from the Board. I think I understand now. Thank you.

10 Does the Town of Fort Smith have a comment
11 on -- on this?

12 MR. JEAN SOUCY: Not to any great extent.
13 As I said -- said before, the Town can provide an O&M
14 plan for hazardous waste material.

15 MR. GERALD ENNS: Yeah, it's Gerald again
16 from ENR. And just in addition, it -- yeah, it protects
17 the Town from accepting materials that they don't --
18 aren't suited or well-equipped to manage. And the Town
19 does have three (3) great things going for it and that is
20 they have a fence, they have a permanent staff, and they
21 have a gate and they lock it. So compared to other
22 communities in the Northwest Territories -- like those
23 three (3) basic components are very -- are very -- put
24 you in a good position to -- to control what's coming
25 inside your facility. And just for further

1 clarification, did you get a copy of the guideline for
2 developing hazardous waste management plan?

3 MR. JEAN SOUCY: Jean Soucy, the Town of
4 Fort Smith. I got the link for it. And then I -- I
5 looked at it, but I didn't copy it. Is -- is that what
6 you're asking?

7 MR. GERALD ENNS: Yeah, I just wanted to
8 know that you've gotten it and if -- if we need to
9 provide that.

10 MR. JEAN SOUCY: Well, any -- any
11 additional information you can provide us to -- to start
12 the O&M planning itself would be valued. So maybe in the
13 near -- very near future we can get together and -- and
14 we'll -- we'll gather all the information on the links
15 that you've provided us earlier with how to create an O&M
16 plan and how to work with one.

17 Those are all valued documents that we --
18 we can definitely work with.

19 MR. GERALD ENNS: Okay.

20 THE FACILITATOR: Kathy Racher, for the
21 Board. I think the other comments here, I'm -- I'm not
22 sure if you needed to make any further clarifications or
23 if they're sort of -- if we've kind of -- we've had a
24 general discussion about the hazardous waste management
25 plan.

1 Do you have any further comments, ENR?

2 MR. GERALD ENNS: It's Gerald, from ENR
3 here. Some of the questions on the spreadsheet here
4 about what topics are outside of the water licence, like
5 record keeping, household hazardous waste collection, and
6 whether we -- whether, you know, acceptable -- so
7 industrial waste is part of a water licence then.

8 And the water licence is very general. I
9 mean, it asks for a plan on how the Town manages
10 hazardous waste, and that leaves it very -- very open.
11 But hazardous waste management across -- you know, in --
12 across, you know, the United States and Canada does
13 involve record keeping, household hazardous waste
14 collection. It involves a broad, you know, array of
15 topics.

16 So the term and condition is in the water
17 licence for a plan to manage hazardous waste. So, yeah,
18 we -- ENR believes that this is all part of a water
19 licence.

20 THE FACILITATOR: Okay. Kathy Racher,
21 for the Board. I guess what I've heard you say, I think
22 I'm clear that -- I mean, the reason why you want to know
23 what kind of hazardous waste is acceptable or not is to
24 ensure that the Town has a plan in place to -- to
25 actually manage the waste when it does come, you know,

1 and we want to make sure that if it's acceptable there's
2 a plan in place to manage it and that it's clear that the
3 -- all the operators and the staff at Fort Smith
4 understand what's acceptable or not.

5 And so -- and that -- that should be part
6 of the hazardous waste management plan, which then should
7 be part of the O&M plan. Does that -- does that kind of
8 -- like having specific to household hazardous waste
9 collection days and -- and everything, that that could be
10 part of their plan.

11 I just -- I just wanted to be clear on
12 specifically what -- what we needed. Like -- and -- and
13 the recommendations I wanted -- I mentioned this Diep --
14 to Diep on the break, that the comment table is a very
15 useful place for everyone to put everything,
16 recommendations for the city, but the Board just needs to
17 know what specifically needs to go in the water licence.

18 And what I'm hearing is a hazardous waste
19 management plan that -- where we know what kind of waste
20 is going to be acceptable and how it will be managed
21 onsite is the basis of your recommendation.

22 Is that true?

23 MS. DIEP DUONG: It's Diep here. Yeah,
24 that's correct. I don't...

25 THE FACILITATOR: Excellent. Okay, is

1 there any further comments on the -- what needs to be
2 included in the operation and maintenance plan?

3 MS. MARY KELLY: This is Mary Kelly, with
4 Environment Canada. And I actually have a question for
5 Diep, if you don't mind. The -- the guideline or the
6 guidance document you mentioned about the preparation of
7 O&M manual for sewage and solid waste, does that include
8 recommendations to include sludge management within the
9 sewage operation and maintenance plan?

10 MS. DIEP DUONG: It's Diep, from ENR. I
11 don't think it does, but I'd have to -- I'd have to check
12 it again.

13 MS. MARY KELLY: Thank you. This is Mary
14 again. So just to make clear what Environment Canada
15 would like to see is that a sludge management plan be in
16 place and whether that forms part of the sewage O&M plan
17 or is a standalone document, does it make a difference.

18

19 COMMENT 4 - SPILL CONTINGENCY PLAN

20 THE FACILITATOR: Okay, Kathy Racher,
21 with the Board. Thanks for that, Mary. Any -- any other
22 comments on this topic? All right. Then we'll roll onto
23 the spill contingency plan. There was a little bit of
24 confusion. I believe the Town of Fort Smith provided a
25 fuel spill contingency plan recently.

1 So INAC and -- INAC and ENR both had
2 comments on this, so we'll start with -- with INAC, and
3 just in terms of recommendations for the water licence
4 and the spill contingency plan.

5 MS. JEANNE ARSENAULT: Jeanne, from INAC.
6 So we've review -- we have reviewed the Town fuel spills
7 contingency plan that was submitted on June 9th. We
8 believe it doesn't contain the level of details that
9 would be required for -- to enable the Town staff to
10 provide prompt action, and if it's a response --
11 response, may a spill was to occur at the water treatment
12 plan toward the landfill or even at the sewage depot.

13 So what we recommend is simply that the
14 condition in Part I, Section 1, refers to the Guideline
15 for spill contingency planning that was published by INAC
16 in April, 2007, so that the spill contingency plan would
17 be structured in accordance to that -- to those
18 guidelines.

19 THE FACILITATOR: Kathy Racher, for the
20 Board. I'm just wondering. You mentioned the spill at
21 the -- at the sewage lagoons. Is that -- would that be -
22 - those kind of -- that kind of information about sewage
23 lagoon be included in the operating plan? I -- I don't
24 actually know the answer to this question, so anybody can
25 answer.

1 MS. MARIE ADAMS: I believe the -- the
2 spill contingency plan that INAC's -- or guideline,
3 includes everything, right. So we're talking about
4 sewage spills, fuel spills, everything that's part of the
5 Town's water licence facility.

6 So that would include the lagoon, the
7 solid waste facility, the water treatment plans, anything
8 that's part of the water licence, whereas the one --
9 okay, the May 2003 spill contingency plan, the -- sorry,
10 the fuel spill contingency plan, that was the one that
11 the Town of Fort Smith submitted to ENR under our
12 regulations, and it only deals with a fuel spill.

13 So I think INAC's plan includes
14 everything. So if we have more fuel tanks that the Town
15 owns, for example, if there is a fuel tank that's at the
16 garage, for example, you might want to include that. If
17 there's a sewage spill, we would want it included in that
18 plan as well. Or if there's maybe a chemical spill, like
19 from the water treatment plant or something, that would
20 be included in -- in that plan.

21 MR. JEAN SOUCY: Jean Soucy, Town of Fort
22 Smith. No, I do agree that this is specifically only for
23 the water treatment plant that was requested back in the
24 day, to put one (1).

25

1 (BRIEF PAUSE)

2

3 MR. JEAN SOUCY: That was contained
4 within the building. It was a dike. It was at night, a
5 500 gallon tank, I believe.

6 Following the document from top to bottom,
7 we -- we addressed every concern within for the emergency
8 that it was at the time and cleaned up. And we were
9 commended by ENR at the time that it was one (1) of the
10 fastest and more proficient way that they had dealt with
11 any fuel spill from the Town of Fort Smith or any other
12 place at that time, how quickly everything was done, how
13 the emergency backup -- the emergency assistance that we
14 received, how everybody was contacted and how the
15 reporting prior to and during and after was completed.
16 So the document works very well from my experience with
17 it.

18 Although it does need to be -- does need
19 to include other tanks and other fuel that we currently -
20 - the Town currently possesses. Again, we can include
21 other chemicals that we -- that we store on site at the
22 water treatment plant and other places as part of this
23 fuel or contingency plan.

24 THE FACILITATOR: Kathy Racher for the
25 Board. Okay. Is there any further comments on the spill

1 contingency plan? I appreciate your clarifications, by
2 the way, Diep, that's very helpful.

3 Okay. Excellent.

4 The -- the next topic on the list was the
5 sewage discharge. Although -- I know you're all excited
6 about that one, but I was going to leave that because I
7 wanted to -- yeah, yeah, that's right. It would be
8 better after lunch. I wanted to discuss it in the
9 context of the Water and Effluent Management Policy with
10 the Board because it's directly related to that, so that
11 will be a bigger topic -- topic than we could probably
12 handle before lunch.

13

14 COMMENT 6 - GROUNDWATER MONITORING STATIONS

15 THE FACILITATOR: So maybe let's move on
16 to the groundwater monitoring stations. And -- and there
17 was -- there's -- there's a couple of -- a couple of
18 issues related to groundwater monitoring. I think in a -
19 - in an initial response to comment number 6 from INAC, I
20 -- I list -- listed some of them.

21 So overall in the discussion they wanted
22 to include a discussion of -- of the results and any
23 concerns with the -- the results to date, the
24 recommendations made for changing what sample -- what --
25 what stations are sampled and the frequency of the --

1 that sampling and the number of parameters, and for both
2 5674, which is the surface water sample, and 5675, which
3 are the -- the multiple bore holes around the site.

4 So let's -- let's start with -- with INAC,
5 if you could just give me a -- a rundown of your
6 recommendations and -- and how this relates to changes
7 that might be necessary to the water licence.

8 MS. JEANNE ARSENAULT: If I may, I might
9 -- I had two (2) recommendations. I might start with the
10 second one that talked about retrofitting BH-04. So it
11 was -- it was identified by the report by IEG (phonetic)
12 in 2008 that purging and sampling -- during the process
13 of purging and sampling it was observed that the well was
14 producing a large amount of sand and silt and was
15 clogging the internal pump system.

16 I -- it was also identified that BH-03,
17 which previously had the same problem was refitted to
18 reduce the cost associated with drilling a new well. So
19 basically what happened, they -- they placed a 3/4 inch
20 monitoring well that was installed inside the existing
21 two (2) inch well, so that was the second recommendation
22 we had to do the same as -- the same procedure for the
23 groundwater well BH-04.

24 As far as for a revision of protocols,
25 sampling location and parameters, I think EC had some

1 great comments on those and perhaps we'll relay it to
2 Environment Canada.

3 THE FACILITATOR: Kathy Racher for the
4 Board. Just before we get on to that then in terms of
5 the borehole 4 retrofitting and -- and what have you. I
6 think that was a recommendation by -- by one (1) of the
7 Town's consultant and I just wondered if you could update
8 us on the status of -- of that.

9

10 (BRIEF PAUSE)

11

12 MR. JEAN SOUCY: Jean Soucy, from the
13 Town of Fort Smith. If I may, we -- Ken Johnson, who was
14 part of the licence application, involved with it from
15 the be -- from the beginning, subsequently, he's on
16 holidays the last couple of months, so that's why he
17 couldn't be here today. And Michel has gone through a
18 lot of the -- these documents trying to get informed with
19 it.

20 We'd like to ask for -- for a review of --
21 of this document once Ken Johnson returns from his
22 holidays.

23 THE FACILITATOR: Kathy Racher, for the
24 Board. Okay, that's fine. Well, let's move on to then
25 the sampling parameters of which, as INAC pointed out,

1 Environment Canada had a number of comments. Environment
2 Canada, I'll pass it to you.

3 MS. SARAH-LACEY MCMILLAN: It's Sarah-
4 Lacey, with Environment Canada. I guess, to start with,
5 we'd like clarification on whether the Town is looking to
6 further reduce the number of monitoring wells. In the
7 2011 ground monitoring report it was indicated that you
8 will still have eleven (11) ground water monitoring wells
9 for elevation, but there'll only be seven (7) that'll be
10 monitored for all the parameters. Is that correct?

11 So it -- so it -- the original 2003 water
12 licence had sixteen (16) wells, and in 2006 it got
13 dropped down to eleven (11). And now you want to go down
14 to seven (7)?

15 MR. JEAN SOUCY: Jean Soucy, the Town of
16 Fort Smith. Yes, that's correct. We can monitor the
17 groundwater levels with the other stations, but we'd like
18 to reduce the amount of analysis that is required as per
19 our current water licence.

20

21 (BRIEF PAUSE)

22

23 MS. SARAH-LACEY MCMILLAN: Okay. So
24 under our comment 9 the 2011 study, in their conclusion,
25 I think it's 5-1, it states that:

1 "The number of elevated parameters or
2 those of greatest concentrations, the
3 majority of the wells were absorbed --
4 observed within the down gradient
5 wells."

6 And it was the wells that -- and so it
7 indicates the solid waste facility is impacting
8 groundwater. So then I guess we're going back to our
9 original question is: Can you describe the measures
10 already in place or their plan to be introduced to reduce
11 the water contact with the wa -- landfill waste for the
12 purpose of reducing the leachate that -- that is
13 happening?

14 MR. JEAN SOUCY: Jean Soucy here, the
15 Town of Fort Smith. The -- the results of the -- the
16 analysis suggests, yeah, the -- there might be some
17 elevations in a certain place, but there is no plan that
18 I know of to mediate those, subject to -- I don't know
19 what -- what could happen.

20 Maybe if I can ask Wayne to -- to -- for
21 some feedback on that. I really don't know at this
22 point.

23 MR. WAYNE STARLING: Wayne in Fort Smith,
24 with INAC. That's correct. There's no plan in place or
25 has never been suggested that there be a collection below

1 the -- the landfill area or anywhere along the riverbank
2 for a treatment of groundwater that seeps from that area.

3 It is somewhat buffered before entering
4 the river through the wetland area below the -- the
5 riverbank, but that -- it also is not uncommon along the
6 -- the riverbank through natural water seeps that occur
7 anywhere from Fort Smith down to at least Salt River,
8 which is about 30 kilometres downstream where the
9 riverbank is high and the groundwater is exposed to the
10 surface as a result of the -- the cut from -- from the
11 riverbank.

12 So I think that what is being requested is
13 that uniform representative sample locations be
14 established but the number may not necessarily have to be
15 as great as is currently being sampled and was initially
16 developed in the -- the first analysis and -- and design
17 of that network program.

18 THE FACILITATOR: Kathy Racher, for the
19 Board. I guess I'm -- I'm seeing two (2) issues. One
20 (1) is, as Environment Canada has noted, the CCME
21 guidelines for the protection of aquatic life are being -
22 - are used in the -- for example, the last AECOM report
23 on the groundwater monitoring results.

24 I'm not sure what the appropriate standard
25 is to compare groundwater to because there's no fish

1 living in the groundwater, but the groundwater will make
2 it event -- often makes it to surface water, which is
3 where our concern would lie mostly.

4 So I guess partly I just wanted to get
5 people's comments on what are the impacts -- what are the
6 significance of the results that we're seeing? They
7 AECOM report hasn't really flagged anything other than
8 chan -- some differences in metal concentrations. It's
9 not clear what -- if that's -- that's an effect or if
10 that's just a change or if it has any significance at
11 all.

12 Does anyone have any evidence or comments
13 on the significance of the impacts of the landfill to the
14 environment?

15 MS. DIEP DUONG: Hi, it's Diep, from ENR.
16 And the 2011 groundwater monitoring program review that
17 AECOM did actually specifically says that the solid waste
18 facility is impacting groundwater, in their conclusion.

19 So there's water, groundwater being
20 impacted within the site downstream of the spec -- like
21 directly downstream of the site. And based on some of
22 the previous reports, I think it mentions that there's a
23 wetland to the northeast and the northwest that could
24 potentially be treating some of that leachate, but we
25 don't know because there's no assessment or correct

1 assessment that was done.

2 And it also mentions in the report that we
3 should be following the Alberta code of practice for
4 landfills that are less than te -- 10,000 tonnes as far
5 as monitoring, I believe it's sodium. There's about four
6 (4) different parameters.

7 And I cannot -- I'm -- I'm a little bit
8 hesitant to say, okay, let's use those criteria because
9 from 2001 to 2005 some of those parameters have actually
10 exceeded those code of practices, or the -- the Alberta
11 code of practice.

12 And according to the code of practice, it
13 says:

14 "If at any time during the lifespan of
15 a landfill, closure and post-closure,
16 that the groundwater does not meet
17 those guidelines, the proponent is
18 actually supposed to submit the
19 groundwater remediation plan and
20 implement the approved plan to Alberta
21 Environment."

22 So is that what we're heading towards?
23 That -- that -- I'm -- I'm posing that to the Board
24 because the Board has essentially accepted the reduction
25 of -- from sixteen (16) or seventeen (17) groundwater

1 monitoring wells down to eleven (11), and now potentially
2 down to seven (7) without -- it doesn't quite correlate
3 with what's happening to reduce the amount of groundwater
4 monitoring wells. Although I think sixteen (16)
5 initially was probably a bit much for a facility of this
6 size, but I don't know if seven (7) will be sufficient
7 enough for us to determine, okay, this is what's
8 happening at the site and that's what's happening
9 downstream of the site.

10 THE FACILITATOR: Kathy Racher, for the
11 Board. I -- I guess again that the -- the two (2) issues
12 -- and I forgot to mention the second one. One (1) is:
13 How much monitoring have -- do you have to do to
14 determine if there is an impact? And -- and as you said,
15 they did say there was an impact, although the word
16 "impact" is -- means different things to different
17 people.

18 And I -- I don't know in -- in this case
19 if it just means that, yes, there is leachate. For sure,
20 there's something coming -- there is leachate coming out.
21 But in terms of an environmental effect we don't know
22 what that is or how -- you know, how it's manifesting in
23 the environment in terms of what -- in terms of
24 remediation I think we -- you know, we'd want some
25 information about what the effect of this is, which maybe

1 the Alberta Code of Practice could help us with.

2 So there's -- there is the significance of
3 the results in terms of do we need to do some remedial --
4 remediation, but I guess the monitoring -- the number of
5 wells doesn't -- isn't going to clean the site, so having
6 more monitoring doesn't make the -- make it different.
7 It just -- we get -- we just have to make sure that we're
8 monitoring the right locations and at the right frequency
9 to collect the data we need to understand the impact. So
10 I would separate those two (2) issues.

11 And I -- I did -- it might be helpful,
12 actually, if you could put the map up with the borehole
13 locations because AECOM did have specific recommendations
14 for removal and I -- I would like to just ask people's
15 opinion at this stage on what those -- on the
16 recommendations.

17 MS. DIEP DUONG: It's Diep from ENR. So,
18 Kathy, are you saying let's deal with them two (2) --
19 separately as in should we reduce the amount of
20 monitoring? And two (2), what do we do about the
21 elevated metal -- or, elevated concentration of certain
22 chemicals within the groundwater and downstream?

23 Correct?

24 THE FACILITATOR: That's what I'm
25 thinking. Does that make sense to people? Because, you

1 know, like I said, monitoring doesn't solve the problem.
2 If the problem is there then we need to deal with it.

3 But the monitoring, we -- we need to make
4 sure there's enough monitoring to make sure we understand
5 what the issues are so if we need to deal with it then
6 we'll know how to do that. So I -- I do kind of see them
7 as related, obviously, but can be dealt with separately.

8 MS. DIEP DUONG: That makes sense.

9 THE FACILITATOR: So Jean is just going
10 to put up a -- a picture of the monitoring wells. Can --
11 we'll just take a look at the recommendations made by
12 AECOM in terms of the sites to remove, and possibly one
13 (1) to add.

14 I note, AECOM in their last few years of
15 sampling kind of added a second site for 567-4 which is
16 the surface water site, so they added an up-gradient to
17 surface water sampling location which seemed like a -- a
18 smart thing to do, so -- so that they would have a
19 comparison with the down-gradient, which made sense, so
20 now you can actually know what your impacts are. So I'd
21 also like comments on that.

22 Okay. So we've got the map up. And the
23 Board, I -- I hope -- well, you've probably memorized
24 these, Wayne, but if you haven't I'm sure you can find a
25 map of the borehole locations.

1 So AECOM has re -- recommended removing
2 borehole 1A and 1B, so that they consider -- they
3 consider borehole 2 as being -- from the last study as
4 being up-gradient so that the water is generally moving
5 in this direction. I guess, that's to the north and
6 east.

7 So borehole 1A and 1B is sort of off to
8 the side, which could also be considered up-gradient, so
9 a reference area. And then for down-gradient they're
10 recommending removing borehole 4, which isn't labelled on
11 this map, but I think it's this one right here, and
12 borehole 5, this one here. So these two (2), I guess,
13 the idea that there's all of these.

14 And I can't remember of -- of these sites,
15 Jean, which ones -- is this an old map of -- are these
16 all the things that are still monitored, or is this
17 before the --

18 MR. JEAN SOUCY: No, this is
19 (INDISCERNIBLE - off mic).

20 THE FACILITATOR: Okay. So what -- what
21 sampling sites have been removed already from this map?

22 MR. JEAN SOUCY: I'd have to go back and
23 check (INDISCERNIBLE - off mic).

24 MS. DIEP DUONG: It's Diep from ENR. I
25 believe in 2006 it was all the monitoring well around the

1 land farms. So it's --

2 THE FACILITATOR: Oh, this --

3 MS. DIEP DUONG: -- W-101, 102, 103A,
4 103B, and 104.

5 THE FACILITATOR: Okay. So all of these
6 over here. Okay.

7 So the idea is the water is running this
8 way and I guess the idea then would be that this would be
9 borehole 2 would make a good reference location because
10 its up-gradient. And then borehole 3, 10, 9, 8, 6, and 7
11 would be the down-gradient locations.

12 Is that your understanding, Jean?

13 MR. JEAN SOUCY: Yeah, that's my
14 understanding.

15 MS. DIEP DUONG: It's Diep from ENR. Can
16 we perhaps maybe go through each of the borehole -- the
17 ones that they want to get rid of?

18 As an up-gradient well, monitoring well,
19 BH-02 I believe would represent up-gradient or upstream,
20 however that section there to the bottom right where BH-
21 01A and 01B.

22 I believe that's a standard area where the
23 Town is currently using, correct?

24 MR. JEAN SOUCY: That's right alo --
25 along the road, actually.

1 MS. DIEP DUONG: Oh, along the road.

2 MR. JEAN SOUCY: Jean Soucy, Town of Fort
3 Smith. Yeah, it's along the road, the access port --
4 point from the highway essentially. You can see -- yeah,
5 and it's basically on -- on the side. And within the
6 open area there it's mostly heavy metals, which is tanks
7 and heavy steel frames or whatnot, that's surrounding
8 that area right now.

9 MS. DIEP DUONG: And is that being just
10 staged there is it being buried there?

11 MR. JEAN SOUCY: No, it doesn't get
12 buried there. That'll be recycled in the future.

13

14 (BRIEF PAUSE)

15

16 MS. DIEP DUONG: It's Diep from ENR.
17 Jean, do you -- that -- that little area there, are you
18 planning to use it for anything else?

19 MR. JEAN SOUCY: What --

20 MS. DIEP DUONG: Sorry, that area that
21 we're talking about where it's cleared for -- it's as the
22 previous map, "clear for future use." Are you planning
23 to use it for anything else other than storing metals for
24 recycling?

25 MR. JEAN SOUCY: Not in the immediate

1 future.

2 MS. DIEP DUONG: Okay.

3 THE FACILITATOR: Kathy Racher for the
4 Board. In terms of the up-gradient wells, I guess I
5 didn't see in the AECOM 2011 report sort of -- the
6 variability between borehole 2 and borehole 1A and 1B to
7 see -- I mean, if they're -- if they're reporting the
8 same things then that tells us then they're
9 representative of the groundwater in that region but I
10 haven't looked myself and I didn't see an analysis in the
11 AECOM report.

12 I don't know if you -- if AECOM can
13 comment on this on the similarity of the composition of
14 those samples, because if -- if it's -- if it's a
15 reference site, if -- if one (1) site will do it for
16 everything that's one (1) thing but we need some sort of
17 analysis to know that those sites are, in fact,
18 identical.

19 I'm actually wondering too why there's
20 borehole 1A and 1B. Does anyone know the answer to that
21 question, so close together?

22 MR. JEAN SOUCY: I don't have any
23 information to give you on why they're so close together.
24 Jean Soucy.

25 THE FACILITATOR: Does anyone have any

1 other comments about the removal of the up-gradient
2 sites? We're just talking about borehole 1A and 1B at
3 the moment. Any other considerations?

4 MS. JANE FITZGERALD: It's -- sorry, go
5 ahead.

6 MS. MARY KELLY: This is Mary Kelly,
7 Environment Canada. Just to help the general discussion
8 on the boreholes, do we have historical information of
9 why those positions were chosen?

10 I know this was just asked about 1A and
11 1B, but all of them. Do we have that information of why
12 they were established in those positions?

13 THE FACILITATOR: Kathy Racher for the
14 Board. I assume that would be from the original -- well,
15 from several years ago but I'll let Jean answer that.

16 MR. JEAN SOUCY: I don't have the -- I
17 think -- I believe it was EBA who designed the boreholes.
18 I don't have that document with me but I can definitely
19 make it available for the Board.

20

21 --- UNDERTAKING NO. 2: Mr. Soucy to provide the
22 document regarding why the
23 boreholes were established
24 where they are

25

1 MS. MARY KELLY: As far as an up-gradient
2 well goes, I think as long as there isn't any current
3 activities that's happening at that particular spot --
4 so, for example, if you were planning to expand the
5 landfill further south of BH-02, for example, then that
6 would no longer serve as an up-gradient well.

7 Furthermore if you were to be using that
8 cleared area where BH-01A and 01B for other things, I
9 guess, then you would need to establish another
10 upgradient well further south to ensure that there isn't
11 anything happening there and that it's contributing to
12 the background levels.

13 MR. JEAN SOUCY: Jean Soucy, Town of Fort
14 Smith. With respect to BH-05 and to BH-01B, anything on
15 the east side of this access road is typically the
16 recycling portion of the landfill. So there isn't --
17 there's no landfill components at all in here.

18 So white metals are halfway through and
19 heavier metals kind of further down, and those are -- are
20 either crushed cars, which are -- are shipped south
21 and/or recycled, large heavy metals that are further sent
22 -- shipped south for recycling.

23 MS. DIEP DUONG: It's Diep, ENR. What's
24 the time period that those things were stored at that
25 particular spot. I'm just wondering because if -- if

1 it's stored there for like five (5) years, for example,
2 and you've got rain and precipitation that would
3 contribute to the -- the water underneath the -- the
4 ground and that could potentially impact it.

5 MR. JEAN SOUCY: To my knowledge the
6 metals that are there are non-contaminated, are -- are
7 clean. They're not full of hydrocarbons or anything like
8 that. If there were some -- some -- if there was a tank
9 or whatnot. So the likelihood of any contamination is -
10 - is lessened by that factor. Possibly a little bit of
11 rusting might in -- increase the iron content within the
12 -- within the surface area, but other than that there's
13 no contamination that I know of.

14 But as far as the time frame, why -- how
15 long a material sits there, again, the Town doesn't --
16 isn't in a financial -- financially in a position to
17 address concerns on an annual basis. We collect a -- a
18 certain amount of -- of material until such time as its
19 of value to the company that we hire to process this --
20 this material.

21 So there is a -- a certain amount of time
22 that this material would sit on -- on the -- the location
23 that it's been identified. It -- it could be longer than
24 five (5) years or it could be less than that. I'm not
25 exactly sure.

1 MR. WAYNE STARLING: Dr. Wayne from INAC.
2 If I could make a comment?

3 THE FACILITATOR: Please do, Wayne.

4 MR. WAYNE STARLING: Yeah, I just wanted
5 to mention there was some discussion about the number of
6 holes and justification for them. For your
7 consideration, before this groundwater assessment was
8 completed, there wasn't any available information at all
9 in this area. So when the initial study was designed and
10 -- and the consultant had the drill rig here, they put in
11 boreholes and wells in every location that they could
12 think that may possibly contribute to providing useful
13 information.

14 So within those is -- it was very
15 inexpensive to put additional boreholes in place once
16 they had the infrastructure here to do that. But if they
17 were to have missed certain areas and found that they had
18 to collect additional information later, and bring that
19 rig back and drill a -- a few holes, the cost would have
20 gone up, per well, exponentially.

21 So that's partly the reason why there were
22 a -- a lot of boreholes drilled and developed initially.
23 And then once those data were analyzed and researched
24 somewhat, it would be easier to then remove them and not
25 sample further than it would be to go back and say, Well,

1 we need five (5) more, or two (2) more, or whatever the
2 case is in -- in other areas.

3 So that's always a, I guess, a -- a danger
4 to the proponent in that -- in my experience with these
5 water licences, is once that a station is established
6 we're very reluctant to remove or discontinue it. But in
7 terms of the initial assessment, it was prudent on their
8 part to drill and develop additional wells that may not
9 be needed in the future.

10 So I can give you that background as to
11 why perhaps there -- there were more than -- than less
12 because they would want to err on the side of -- of
13 caution in that it was very little expense to put in an
14 additional well while everything was in place than it
15 would be to bring a rig back and -- and have to do that
16 later.

17 THE FACILITATOR: Kathy for the Board.
18 This is why we -- we don't want to lose you, Wayne,
19 because you know all these things from years past. Thank
20 you, Wayne. Do you have any specific comments or
21 suggestions to do with the -- the recommended removal of
22 boreholes 1A, 1B, which are upgradient, and 4 and 5,
23 which are downgradient?

24 MR. WAYNE STARLING: Well, again, I -- I
25 think that what the consultant is saying is that they

1 needed a control or reference station initially to assess
2 the -- the background levels prior to being contacted by
3 the waste material.

4 At that time, they wouldn't have any real
5 idea as to whether borehole 2, borehole 1A, 1B, or any --
6 either of those would be most representative of which
7 direction the groundwater was flowing or what the
8 analysis would be.

9 So in years since then, the analysis of --
10 of the data, they're suggesting that borehole 2 is a
11 suitable reference site so, therefore, the other ones are
12 -- are redundant and -- and not needed. They're in place
13 that if someone should at some other time want to go back
14 and -- and redo them or look as to what's happening
15 there, they're available. But perhaps it isn't necessary
16 or prudent to continue just to -- to accumulate
17 additional data.

18 Now, I'm -- I'm not sure because I wasn't
19 with AECOM when they did the analysis of the other
20 downstream boreholes, but my guess, having been around
21 this for a little while, is that that's again a similar
22 assessment on their part, that those holes are also
23 represented by other data that's collected through the
24 additional wells in that -- that vicinity.

25 So, again, that's just a matter of looking

1 at the data from all of the holes and the direction of
2 the groundwater flow which was not known prior to this
3 initiation of this study. And once they could analyze
4 all of these criteria, now suggest that the -- the
5 appropriate monitoring could be done by sampling the
6 wells that they have suggested.

7 THE FACILITATOR: All right. Thanks,
8 Wayne. Does anyone else want to comment or -- on -- on -
9 - if not, support for or vehemently against the removal
10 of the stations but -- or on other considerations in --
11 in how we consider what to do going forward?

12 MS. DIEP DUONG: It's Diep from ENR.
13 Just one (1) point of caution. If we only leave borehole
14 2 as an upgradient well, what happens if it gets run over
15 by CATs or is broken or something?

16 MR. WAYNE STARLING: Wayne, from Fort
17 Smith again. I don't think anyone's suggesting that any
18 of the other boreholes be destroyed. I believe that they
19 should all be maintained. And that would be my
20 suggestion, is those that are in existence now should be
21 maintained and protected, but we're -- we're just
22 suggesting that they don't necessarily have to be sampled
23 at every monitoring date.

24 MS. DIEP DUONG: Okay. Thank you, Wayne.
25 I just -- I remember seeing the 2005 or '06 report. The

1 evaluation -- or groundwater evaluation report, and one
2 (1) of the recommendations initially to get to not sample
3 monitoring well 101, 102, 103A, 103B, and 104, was
4 actually to get rid of those wells.

5 And I guess maybe if I could ask Jean if
6 that was done or if those wells are still there?

7 MR. JEAN SOUCY: Jean Soucy, Town of Fort
8 Smith. Yeah, I -- I -- I'll reiterate what Wayne was
9 saying. I don't think the -- the intent is to remove the
10 wells altogether. It's to reduce the amount of -- of
11 sampling that -- that we have to do on an annual basis.

12 So the wells are still there, they're
13 actually bright coloured, so the likelihood of getting
14 run over are very -- very small. Although -- no, we --
15 we -- we would rather keep them, and if need be we can
16 utilize them later.

17 MS. DIEP DUONG: Thank you.

18 THE FACILITATOR: Okay. Kathy Racher,
19 it's 12:05, so I think we should take a break. I think
20 the agenda says until 1:15. Is that right, Kathleen?

21 MS. SARAH-LACEY MCMILLAN: Kathy, it's
22 Sarah-Lacey. I just -- before we leave this, a question
23 about holes and -- and so if we're assuming the upgrading
24 is -- is BH-2, and it's moving, what -- now I can't
25 remember exactly the -- the coloured map with the -- Jean

1 had outlined each piece of the landfill and what was in
2 each one, but if everything moves and -- and, you know,
3 down the road we find that there are contaminates and
4 they're serious. And -- and say it's at BH-10 that we
5 see that.

6 How do we know that it's not coming out
7 from contaminates close to BH-4, like when we go to clean
8 up? How -- isn't it easier to know where it's coming
9 from if we have those holes there?

10 THE FACILITATOR: Jean, do you have a --
11 a comment on that?

12 MR. JEAN SOUCY: No, I don't actually on
13 that. I was just going to provide her with a -- a
14 gradient drawing that I do -- map that I do have here.
15 And I -- and I -- I gather not -- nobody else has it as
16 well.

17 But I don't have a response to that
18 comment.

19 THE FACILITATOR: Kathy Racher for the
20 Board. Yeah. No, that's a good question, and I think --
21 I think that what I'm hearing, and someone can tell me if
22 I'm wrong here, what I'm hearing is that it's not that
23 people are necessarily really opposed to removing these
24 stations, but there's a couple of outstanding questions
25 that -- and -- and maybe a bit more rationale required,

1 probably from -- from -- from AECOM, probably in a
2 written format that we can -- we can discuss with you to
3 -- to -- to further that request?

4 I'm -- I'm not hearing opposition
5 necessarily, but there's a couple of outstanding
6 questions, and I -- I think the last question was a good
7 one of knowing. That would be my only question, really,
8 about boreholes 4 and 5, is just knowing where your
9 contamination is coming from, because it's sort of in-
10 between different areas of the landfill.

11 But maybe -- maybe that's not relevant and
12 maybe we just don't have all the information here today
13 to finish that discussion. So what I'm hearing is maybe
14 we need some more considerations of -- or rationale for a
15 change to those stations, but it's not -- it doesn't
16 sound like it's off the table for anybody.

17 Is that accurate? Speak now or hold your
18 peace until later.

19 MS. SARAH-LACEY MCMILLAN: Yeah, that
20 sounds pretty accurate, Kathy. Just for the records, I
21 don't think that we need three (3) upgradient wells, so I
22 would probably support getting rid of -- or not getting
23 rid of, but just not monitoring borehole 1A and 1B for
24 now.

25 THE FACILITATOR: Okay. Kathy Racher for

1 the Board. Thank you for that. Is everyone okay to stop
2 for an hour? 1:15 and we'll come back and finish the
3 discussion about the groundwater monitoring and then --
4 and then the other topics. Hopefully we'll get it all
5 done by 2:45 as planned. Thanks. We're starting back at
6 1:15.

7

8 --- Upon recessing at 10:54 a.m.

9 --- Upon resuming at 1:22 p.m.

10

11 THE FACILITATOR: Kathy Racher for the
12 Board. I'd like to start again so we can --

13 MR. WAYNE STARLING: Sounds good.

14 THE FACILITATOR: -- finish soon.

15 Thanks. Wayne's back online. Okay, guys. Okay, so the
16 -- just before the break we were talking about the
17 groundwater monitoring requirements, and I think
18 summarized by saying that we do need some further
19 rationale for boreholes 4, removal of the four (4)
20 stations that were recommended in the 2011 AECOM report.

21 And I think there was another point in the
22 AECOM report that I was unclear on, about which
23 parameters were being sampled. I wasn't sure what the
24 request a hundred percent was. And so the information
25 request to the Town of Fort Smith is to -- to provide

1 further rationale for the removal of those stations.

2 And perhaps you could use some of the
3 dialogue from the transcripts here to -- to help you with
4 that. And you can also call the Board to discuss it
5 further. That information request would be due on June
6 24.

7 MS. DIEP DUONG: It's Diep from ENR.
8 Kathy, do you think it would be maybe a good idea to have
9 like a mini group meeting on groundwater information just
10 to hash out the rationale for not monitoring as many
11 monitoring wells and what the parameters should be, like
12 some sort of technical advisory group committee?

13 THE FACILITATOR: Kathy Racher for the
14 Board. Well, I -- I was just talking to Jean about this.
15 There's -- there's two (2) ways to do this, the -- the --
16 deciding on the final SNP requirements would -- it would
17 be a lot tidier to have it all done in time to renew the
18 licence, but it's not absolutely necessary.

19 Amendments to the SNP can be made at any
20 time. And can, in fact, be done as part of the current
21 licence. They don't -- we don't have to -- you can wait
22 for the renewed licence. We have a timeline for the
23 renewal of the licence that -- that is pretty short and
24 sweet because the minister takes a couple months to sign
25 and that licence is -- expires in October, I believe.

1 there was a little bit of discussion just before we broke
2 at lunch time and it's a good point that -- it's tough to
3 get everyone's name, so I -- I'm not sure who was
4 speaking. It might have been Diep -- that -- that --
5 what -- some boreholes where -- there's reluctance to
6 remove because there might be some desire to see in the
7 future where -- if -- if some contamination was to be
8 detected, where that might be coming from.

9 So that's where the initial evaluation
10 would be useful. But I just wanted to mention that would
11 still remain as a -- as a site, similar to others that we
12 have in surveillance network programs in other licences
13 and -- and in this one (1) as well.

14 For example, 567-3 is a -- is a
15 surveillance station that is associated with the sewage
16 disposal, but it's upstream of the -- of the lagoon. So
17 if we were to notice some activity in our lagoon effluent
18 that caused some concern that we wanted to find out what
19 was -- was happening, whether there was some additional
20 contamination upstream, or the lagoon wasn't performing
21 properly, or whatever, that station would then come into
22 play and -- and become useful in detecting and isolating
23 a particular concern.

24 So stations do exist in surveillance
25 network programs that are there for sampling if and when

1 required, but are not generally sampled on a -- on a
2 regular basis. So the accommodation for that is there
3 and I just wanted to make that aware for some who might
4 not realize that that exists in -- in other locations
5 presently.

6 THE FACILITATOR: Excuse me. Kathy
7 Racher for the Board. Thanks, Wayne. Yeah, so that --
8 that would be part of, I think, what I'm requesting with
9 regards to clarifying the recommendation to make it very
10 clear that the recommendation is not to remove stations,
11 but just to change which ones are monitored and on what
12 frequency.

13 MR. WAYNE STARLING: Yeah.

14 THE FACILITATOR: And could -- yeah. So
15 there's -- there are other options there and that's --
16 that's a -- a very good point. The other thing that we
17 had started to talk about was the -- the results of
18 monitoring. So how do we -- what we were talking about,
19 the impacts to -- to the groundwater because of the --
20 the landfill. And I think the AECOM reports are pretty
21 clear on the fact that the -- there is leachate from the
22 landfill. It is in the ground. It's affecting the water
23 quality of the groundwater.

24 But I haven't really heard -- I -- I ha --
25 it wasn't really clear in the AECOM report really what

1 the significance of that was to the environment. The --
2 you know, we always have to keep track of water uses and
3 protecting water uses, so any water used by any creature,
4 animate or inanimate.

5 That's what -- that's what we're trying to
6 protect. And I -- and I just wondered if anyone has any
7 comments about how you determine the significance of
8 that. There's a -- Environment Canada has recommended --
9 I believe Environment Canada has recommended to have a
10 remediation plan for the groundwater, but I -- you know,
11 part of that is needing evidence to know that such a
12 thing is -- is actually required.

13 I don't know who wants to start with that,
14 if Environment Canada wants to start.

15 MS. SARAH-LACEY MCMILLAN: It's Sarah-
16 Lacey. Which recommendation or comment are you referring
17 to for that one?

18 THE FACILITATOR: I'm sorry. It's Kathy
19 Racher here for the Board. I thought it was Environment
20 Canada that talked about remediation of the groundwater.
21 Is that incorrect, or was it ENR?

22 MS. DIEP DUONG: It's Diep from ENR. I
23 know we talked about it. I'm sure if Environment Canada
24 had talked about it in their comments or not.

25 MS. SARAH-LACEY MCMILLAN): Sorry, my

1 brain's not working yet. Just give me a few minutes. If
2 you wanted to go ahead first, and then I'll find it.

3 THE FACILITATOR: Kathy Racher, for the
4 Board. I'm sorry. Then perhaps it was ENR, and which
5 comment was it, thirty-six (36)?

6 MS. DIEP DUONG: It's Diep from ENR. And
7 out of reading the groundwater monitoring reports, on the
8 re -- re-evaluation reports, we had a list of about seven
9 (7) things that we sort of wanted to get more information
10 on, basically, is we still don't know where the elevated
11 metal concentration is coming from.

12 Some of it is maybe attributed to the
13 landfill, but some of the upstream wells are also showing
14 some elevated metals concentration. So what we would
15 like is some sort of desktop study to determine the soil
16 characteristics, and you can find that out from the
17 original borehole logs that were logged when the wells
18 were drilled. You can find that by looking at soil data
19 from Geological Surveys Canada or other sort of geologic,
20 hydrologic, or hydrogeologic and geotechnical reports
21 that wa -- that may have been done in the area.

22 That might give us a better indication of
23 what the background levels are and whether there's
24 significant difference between the background levels and
25 the downstream wells to know how much contamination there

1 is that's from the actual landfill, and confirming
2 whether or not there's landfill leachate migrating off
3 site.

4 We have data from the AECOM report that
5 says as far as, I think, borehole 10, that there's
6 elevated concentrations of certain metals. How far does
7 that go? Does that go all the way to the wetland? Is
8 that going into the -- the Slave River? We don't know
9 that, right?

10 The report that -- I think it was IEG that
11 did in 2006 -- sort of did that, except they assessed the
12 wrong wetlands, I believe. So we need to get a better
13 idea of, yes or no, is it actually leaching, and is it
14 going downstream. Two (2), is it impact -- is the -- the
15 wetland able to treat it. And, three (3), whether or not
16 it's going into the Slave River.

17 And a wetland could very well be a
18 remediation answer for -- for -- I don't know because we
19 don't have enough data to know whether or not we'd have
20 the capacity to do that.

21 THE FACILITATOR: Kathy Racher for the
22 Board. When -- I know you've -- you've done studies off
23 and on, and -- and we know something about where the
24 water's going from the landfill.

25 Do you have any indication of sort of

1 effects to surrounding water and -- or -- or what, you
2 know, is -- is the stuff from the landfill going to the
3 groundwater and -- and reaching surface waters? Do -- do
4 you have any comments on that at all?

5 MR. WAYNE STARLING: Yes, I have taken
6 samples below the -- the dump area there, on a couple of
7 occasions I went one hundred (100) metres, two hundred
8 (200) metres, and three hundred (300) metres downstream
9 of Station 567-4 and collected heavy metal samples.

10 And then also to correct that ECG -- or,
11 EIT (phonetic) sorry, study of surface water flow, I
12 followed right down to the mouth of the long slough that
13 the stream eventually discharges into and sampled there
14 as well. And I have given those analyses to Jean and to
15 others, but there's -- there's no indication of elevated
16 metals in -- in those samples as compared to the Slave
17 River itself.

18 And that's something that -- if there is
19 going to be an evaluation done they -- they also would
20 like to compare that to metal levels in the river because
21 the work that Water Resources, Environment Canada, and
22 the GNWT have done since 1990, in particular, and then my
23 work earlier in the -- started in the '80s shows metal
24 levels for some parameters that are above the CCME
25 guidelines for aquatic life in -- that are naturally

1 occurring in the Slave River.

2 So just because some of those guideline
3 levels are exceeded doesn't really mean that -- that
4 there is something that necessarily should be -- be done
5 and -- and is alarming in comparison to what we see
6 naturally occurring in this area.

7 MS. DIEP DUONG: It's Diep from ENR. I
8 was wondering does DFO have any comments regarding CCME
9 freshwater aquatic guidelines? Oh, okay. Never mind.
10 Sorry.

11 MR. WAYNE STARLING: That study -- it's
12 Wayne again. That study that I'm referring to as well, I
13 failed to mention DFO, but DFO was a big part of -- of
14 our work back in the early '90s. We did a significant
15 amount of fish sampling in the Slave River here in -- in
16 this area to -- and it was related to transboundary river
17 agreements and those sorts of things. But we have a very
18 solid data base on the -- the fish components as well.

19 THE FACILITATOR: Okay. Well, I don't
20 know -- it's Kathy from the Board here. I guess -- so, I
21 do appreciate your list of things to know and it -- it
22 does feel like the record is not really clear. If there
23 is an effect -- like, an effect meaning in the sense, you
24 know, a negative eff -- effect on the environment, or
25 that there isn't, at this time. I don't know -- does

1 Environment Canada have any comments on this?

2 MS. JANE FITZGERALD: It's Jane
3 Fitzgerald with Environment Canada. I don't really have
4 a comment on that specifically. But I am wondering --
5 I'm not in a position to comment on effects from
6 groundwater, that's not my background. But it seems like
7 this monitoring program was initiated with no goal at
8 all.

9 So it's -- like, was the monitoring
10 program to determine if leachate is coming out of the
11 landfill, or to determine if the leachate that is assumed
12 to be coming out of the landfill has an effect on the
13 surrounding environment?

14 Like, I'm not really clear what the
15 initial goal of the monitoring program is, so...

16 MR. WAYNE STARLING: It's Wayne in Fort
17 Smith. I can help you out there. The reason for the
18 monitoring program was it became a condition of the
19 licence back a couple of terms ago. So the Town was
20 directed to do it, so -- just to serve the condition of
21 that licence, that -- that's where it started from.

22 MS. JANE FITZGERALD: Okay. It's -- it's
23 Jane again. That makes sense. So I'm just wondering if
24 -- if the reason for the monitoring program was to detect
25 whether leachate was coming out or not and we've

1 determined that yes, it is. I'm also thinking about
2 closure issues.

3 Is there any way whether or not that
4 leachate has -- is causing an impact now, should we -- is
5 there something that can be done to just stop it from
6 leaching at all in terms of long-term of the landfill?

7 I know I'm getting a little off topic
8 here, so it's -- but it's just -- yeah, I'm -- I'm a
9 little bit confused about the purpose of the monitoring
10 program now.

11 MS. DIEP DUONG: It's Diep from ENR.
12 That's a good point, Jane, because I think later when we
13 make that point about closure reclamation, the point of a
14 closure reclamation -- and one of the points, sorry, is
15 that how do you deal with contaminated soil, water, et
16 cetera, and until there is some sort of preliminary or --
17 sorry, intermediate, for example, closure and reclamation
18 plan in place you can't plan for that. If you wait for
19 six months until before you actually close a landfill
20 that might be too late.

21 Like right now what we could probably do
22 is say, Okay, how do we divert some of the water away
23 from the landfill so that we generate less leachates.
24 That's one (1) of the things that we have to think about,
25 right, because we're continuing to leave things the way

1 it is more leachate's going to be generating and
2 migrating off site. Whereas if we think about closure and
3 reclamation we think okay, well, if we divert some of the
4 water away or treat it or something along that line then
5 we don't have to deal with that as much during closure
6 and reclamation.

7 Does that make sense?

8 MR. WAYNE STARLING: Well, it makes sense
9 -- it's Wayne again. It makes sense in theory but there
10 isn't any surface water that flows into that area, it's
11 all precipitation and rainfall -- or snow melt. So
12 unless you build a -- a roof over the top we wouldn't be
13 able to -- to divert any. It's a very sandy soil that's
14 amenable to seepage. But that -- that's a consideration
15 as far as if we could reduce the amount.

16 The other thing, though, the -- the good
17 point that you mention there is that there's probably --
18 I would like to see the evaluation centre on whether or
19 not there's a -- what's the -- detrimental impact that's
20 -- that's unacceptable, for example. We've measured,
21 yes, there's -- there appears to be an impact. Is it
22 such that we can live with it or is it such that it needs
23 attention? Probably is more appropriate to direct the
24 efforts that way.

25 And in terms of, yes, six (6) months for a

1 closure plan is not enough time to determine whether or
2 not there are impacts. I don't believe that we're
3 talking about that because this is going to continue on
4 as the monitoring that has been initiated through the
5 establishment of this wetla -- groundwater and wetland
6 sampling program will continue.

7 So right now the discussion is what form
8 should it continue in terms of how many locations and
9 what parameters. But we're not talking about scrapping
10 it altogether and picking it up six (6) months prior to
11 an abandonment plan.

12 So I -- I believe that that information is
13 going to be accumulated from now until the -- the site is
14 eventually reclaimed but -- and that data and information
15 that's collected in the past and will in the future, will
16 still be available for that.

17 MS. DIEP DUONG: Jean, I was wondering do
18 you guys have a current plan in place that closes out
19 certain cells so a close-as-you-go kind of approach to
20 domestic waste area?

21 MR. JEAN SOUCY: Jean here from Town of
22 Fort Smith. No, there is no plan to -- for any closure
23 of any sections of the landfill. The way we evaluate it
24 we've -- we've got easily another twenty (20) years to go
25 before any -- any residential landfill is full, and

1 potentially longer than that. So, no, there is no plan
2 in place.

3

4 (BRIEF PAUSE)

5

6 THE FACILITATOR: Okay. Kathy Racher for
7 the Board. I -- I did appreciate your point, Jane, of
8 what was the reason for the monitoring plan to begin
9 with, and I think sometimes it's a danger of when things
10 get in the SNP they get put in as -- as sort of hard and
11 fast rules, you will monitor this, but it's often better
12 -- sometimes we have management plans and a licence that
13 say, You will develop a monitoring plan for this and
14 these are the objectives, which is another approach.

15 And -- and so it is kind of, I know,
16 difficult. You get the results and you go, Okay, now
17 what. So we obviously need to look -- look at that a bit
18 more or your other recommendations about additional
19 monitoring or additional studies that would be needed to
20 delineate these -- these things.

21 I'm not sure whether to stay on the -- in
22 our comments or if -- if Environment Canada wanted to
23 weigh in right now about impacts or -- I think I realize
24 you didn't have a recommendation about a remediation
25 plan, just about, as Jane was saying, some other

1 activities to reduce the amount of leaching.

2 I don't know if you want to follow up on
3 that.

4 MS. SARAH-LACEY MCMILLAN: I -- I guess
5 not detailed since the Town doesn't have one (1). Like
6 we were more asking if the Town had a plan to reduce the
7 leachate that was already occurring.

8 THE FACILITATOR: Okay.

9 MS. SARAH-LACEY MCMILLAN: I do have a
10 question about the information you were able to gather
11 from TAIGA Lab. I just noticed going through it briefly
12 that sometimes it has this -- it lists the sample type as
13 freshwater, or raw water, or runoff.

14 And I'm just wondering is it all still at
15 the same location or -- and it's just the labs way of ex
16 -- delineating because it's different years that they
17 just happen to use different words to describe the sample
18 site, or is it still in the same sample site?

19 THE FACILITATOR: Kathy Racher for the
20 Board, yeah, I looked at that too. They did the same
21 thing with the sewage samples. The SNP site is the --
22 the sample name is always unique and was put -- that's
23 what you should --

24 MS. SARAH-LACEY MCMILLAN: Okay.

25 THE FACILITATOR: -- follow. It -- it's

1 just an entry error in their database. You have to
2 choose freshwater, potable water, whatever, and it helps
3 the analyst know, like how much do I need to dilute the
4 sample, you know. If it's sewage then you've got to
5 dilute it a hundred times. If it's freshwater then less.
6 So that's -- that's why that thing is in there.

7 And I noticed that it's incorrect, and
8 that's, you know, probably summer students just picking
9 the wrong value, but the SNP station is the right one
10 (1), so I'll vouch for that.

11 But I will ask Jean if you have any
12 comments about -- have -- have you looked into any
13 practices to improve -- like do you have a -- a process
14 of looking into practices to improve how you manage the -
15 - the landfill? I think that's what Environment Canada
16 was asking in general?

17 MR. JEAN SOUCY: Jean Soucy here from the
18 Town of Fort Smith. Yes, well, a -- a -- a fair amount
19 or a large amount of improvements have been made in the
20 last ten (10) years at the landfill. If I remember
21 correctly ten (10) years ago it was a -- a spot to just
22 dump everything and leave it as is. And bulldoze --
23 bulldoze it -- bulldoze it over and -- and continue on.

24 So, yes, we have a location for household
25 waste and we have a -- a location for hazardous wastes

1 previous licence it was re -- recommended that we do
2 monitoring. So we did monitoring. And we've got a lot
3 of data to support what we've done and -- and -- at this
4 point, you know, subject to -- to closing up the landfill
5 and opening a whole new one where we don't know what --
6 which way to go with it.

7 MS. MARY KELLY: Thanks, Jean -- Jean,
8 for that comment. I just -- in all of this it might kind
9 of have been lost that the Town of Fort Smith is actually
10 probably one (1) of the very, very few communities in
11 Northwest Territories that actually have a pretty
12 comprehensive groundwater monitoring program in place.

13 So that's why you're kind of being picked
14 on a little bit because we know what's going on, right,
15 whereas a lot of other landfills we don't know because
16 there isn't a program in place for us to monitor
17 anything. It's usually just surface water.

18 Having said that, I sort of alluded to the
19 Alberta code of practice this morning about the ma -- the
20 four (4) main parameters that they are re -- or that they
21 require landfill operators to meet, that it's chloride,
22 sodium sulfate, and pH.

23 So I know in the past, like I said
24 earlier, the -- the groundwater monitoring stat -- or
25 wells have actually exceeded some of these parameters.

1 Now, according to this, like I said before also, is that
2 they actually require a remediation plan for the
3 groundwater if at any time during the life of the
4 landfill it exceeds any of these criteria.

5 So I guess we're at a point now where we
6 have to think about, okay, well, we do know that it's --
7 the -- the landfill is producing leachate that's
8 migrating off site, but what's an acceptable level. So I
9 guess we, as the Board and the regulators, have to come
10 together, and the Town, and say, okay, well, what's
11 acceptable and what's not.

12 And I can't say right now what we would
13 accept, but there has to be a rationale for what
14 parameters we pick or what parameters we pick based on
15 such and such a criteria and -- and why.

16 And if so, if -- if we picked the four
17 (4), for example, from the Alberta code of practice, if
18 they do exceed it, then we're going to have to think
19 about, okay, are we going to require the Town to submit a
20 remediation plan. So that would be pretty much treating
21 leachate for a long, long time.

22 So that's what I said earlier about maybe
23 there are ways that we can divert some of that water away
24 from the domestic waste cell to help sort of minimize
25 some of that or any other ways of reducing precipitation.

1 MR. JEAN SOUCY: Jean here, with the Town
2 of Fort Smith. I'm sure there are many ways to deal with
3 a lot of these issues, but very costly ones. Again,
4 maybe the -- the Board or this -- this committee can
5 address what the limits would be.

6 Again though, I would like to -- to
7 comment on -- on the -- the groundwater that was
8 analyzed, that Wayne has -- has analyzed around the area,
9 has high levels of certain metals within anyway
10 regardless of -- of the landfill so. Keep those in --
11 keep that mind, but at what costs are -- in -- in this --
12 of remediation of -- of some of this groundwater or
13 treating this groundwater, what costs are we looking at?

14 I mean, we got to keep in mind that --
15 that Fort Smith is a small tax based municipality, and I
16 don't see that as being a very cheap answer to -- to this
17 problem.

18 THE FACILITATOR: Kathy Racher, for the
19 Board. In terms of the thresholds for action, do you --
20 do you have -- are you -- do you have specific
21 recommendations for this renewal licence or do you have
22 recommendations to the Board in general?

23 I mean, there's -- there's different ways
24 of doing this. There's a number of things really that --
25 that have come up in this licence and others that, you

1 know, the Board has recognized that it needs to work with
2 other parties to resolve in a general fashion, in a non-
3 project specific fashion, so that when we come to tables
4 like this we know -- we know where we stand. We know --
5 like, if you're over this level, that's it. Or, you
6 know, we've got a plan.

7 Do you have recommendations for this
8 specific licence at this time?

9 MS. DIEP DUONG: It's Diep at ENR. I --
10 I'm sorry to say, Kathy, that I don't have a specific
11 recommendation other than the ones I've already posed
12 regarding a yes criteria for remediation or -- or what --
13 whatnot.

14 And I think, again, going back to maybe
15 some sort of technical group that would sit together and
16 say, Hey, maybe we should be developing something so that
17 it -- perhaps it's project based right now, but could
18 potentially be something that's for other sites that we
19 could use.

20 And I know in the Northwest Territories we
21 don't have very many, if any -- like, groundwater hyd --
22 hydro-geologists that are experts in this field and --
23 and maybe that's something that the Board could -- not
24 necessarily hire a person to do it, but maybe have a
25 consultant come and develop something or put together a

1 group that could assist in putting something in place for
2 -- for future water licences.

3 DR. KATHY RACHER: Kathy Racher for the
4 Board. I was hoping you were gonna solve all our
5 problems, yet -- well, you're certainly pointing us in
6 the right direction. No, I do -- I do appreciate those
7 comments.

8 MR. GERALD ENNS: It's Gerald from ENR
9 here. Yeah, I understood -- especially when selecting
10 criteria that isn't already established in the water
11 licence -- like, a technical group would have to look at
12 appropriate criteria. And good guidance for these types
13 of situation has already been provided by groups like the
14 CCME, especially when it comes to contaminated sites.

15 So if we have contaminated leachate and
16 short of remediating the whole landfill, you go through a
17 standard risk -- phase 2 risk assessment, and I believe,
18 Wayne, you alluded to that earlier.

19 Do you see -- I'll ask this question to
20 Wayne: Do you see, following some of the CCME protocols
21 by a technical group as a way to deal with some of these
22 elevated levels in the -- in the leachate?

23 MR. WAYNE STARLING: Wayne in Fort Smith
24 with INAC. I've thought about some of that, Gerald,
25 before. I don't know what the answer would be, and I

1 don't think it would be very feasible to have different
2 criteria for different watersheds. And -- and that's
3 where CCME people are in a bit of a -- a bit of a jam.
4 They have to establish criteria for aquatic life and that
5 has to cover all species. So, from very, very sensitive
6 ones to very hardy ones. And that's why we will have, in
7 certain areas, water quality that is not suitable for
8 some species of aquatic life, but others have adapted to
9 live in that habitat quite comfortably.

10 So CCME are -- are tied to large
11 guidelines for the entire country and they can't be
12 expected to be specific to smaller watersheds that have
13 different conditions. But I do believe that in
14 establishing guidelines for local effluence, such as wh -
15 - what we're speaking with here, I don't believe that it
16 would be fair or necessary to place more stringent
17 guidelines on the Town of Fort Smith, or the Town of Hay
18 River, or any other community, that of -- exceeded in
19 the natural waterway.

20 So that's -- that's why we can't
21 necessarily always rely on and go by CCME guidelines or -
22 - or national guidelines that are meant to protect the
23 entire nation. So I know it's something that the people
24 that have done the transboundary river work are -- are
25 struggling with somewhat because it's a federal program

1 and federal guidelines suggest that the water meet CCME
2 aquatic standards but they presently in the natural
3 waterway are exceeded.

4 So they're gonna have to try to get around
5 that in one (1) way or another or somehow explain it, but
6 it's not an easy thing for them to do either. But -- but
7 in all of these discussions I -- I would urge those who
8 are -- are looking at effluents from development, be it
9 community, industry, or whoever, that they consider the -
10 - the local background conditions in establishing
11 measures in which licences have to meet.

12 MR. GERALD ENNS: Hi, it's Gerald again
13 from ENR. That's my point exactly, Wayne. I wasn't -- I
14 didn't men -- mean to reference CCME criteria for aquatic
15 life but some of the CCME processes in terms of risk
16 assessment for dealing with contaminated sites that
17 factor in local conditions is where you can go through a
18 comprehensive risk assessment based on local conditions.
19 That -- that was my question, it was not to start
20 referencing CCME criteria for aquatic life. National
21 guidelines.

22 MR. WAYNE STARLING: Yes, Wayne -- Wayne
23 here again. That -- that's right, I agree, and that's
24 the kind of thing that has to be -- be factored in. It's
25 similar to areas of high acidity and acid rock drainage

1 and -- and natural conditions where -- where some fish
2 will live in very highest acid conditions or -- or high
3 sulphur conditions and others who die very quickly.

4 So yeah, those kinds of large-scale
5 guidelines can't be applied to -- to those local habitat
6 conditions and -- and this may be one (1) as well where
7 there will have to be some assessment of -- of what's
8 reasonable and using some other process like the CCME
9 standards to go through that protocol and establish what
10 would be appropriate.

11 THE FACILITATOR: Okay. Kathy Racher for
12 the Board. I think -- I think we're not going to solve
13 this problem today but I think we've had enough
14 discussion on it to give us all some idea of -- of
15 reframing recommendations perhaps or refining
16 recommendations to the Board, and I think -- I think we
17 have a much better understanding.

18 Does anyone else have any other comments
19 that they want -- or things they -- clarifications that
20 they want to discuss about groundwater monitoring at this
21 time?

22 MS. DIEP DUONG: It's Diep from ENR. I
23 just have one (1) last comment is that if, in fact, the
24 land farm is still active, which I think it is, then we
25 would have to monitor the hydrocarbon parameters in some

1 of the monitoring wells again. It was taken out in 2006
2 because it was deemed at the time that the site has been
3 remediated or the land form almost all -- has been
4 remediated but if we're still using it then I would
5 recommend that hydrocarbon parameters be put back into
6 the -- the analysis.

7 THE FACILITATOR: Kathy Racher from the
8 Board. On what kind of frequency were you thinking or
9 what's normal for other sites?

10 MS. DIEP DUONG: Well, right now I
11 believe the Town is doing it once a year, right? I think
12 once a year would be sufficient.

13 THE FACILITATOR: Town of Fort Smith, do
14 you have any comment on that?

15 MR. JEAN SOUCY: No, I don't. If we have
16 to sample once a year for any hydrocarbons that we have
17 onsite well, we'll do so.

18

19 (BRIEF PAUSE)

20

21 COMMENT - SEWAGE

22 THE FACILITATOR: Okay. Kathy Racher
23 from the Board. Just doing hand signals with Environment
24 Canada to see if they had anything else, but I got an I'm
25 good sign.

1 Okay, well, then I think we'll leave
2 groundwater monitoring for the moment.

3 The next topic we wanted to talk about was
4 sewage. And I think we can start with some comments. I
5 think I was going to mention -- perhaps I'll do this now
6 and sort of allow -- Environment Canada has -- has a
7 number of questions, and INAC had one (1), to talk about
8 the water and effluent quality management policy.

9 I don't know if everyone got a copy or
10 not. In this policy -- this policy was approved on March
11 31st, 2011. And in this policy it -- it sort of talks
12 about how --- it -- it will -- it talks about how we are
13 going to set effluent quality criteria for licences going
14 forward.

15 I guess in the past we've had a number of
16 different methods of doing so, and now we're trying to
17 make it more homogeneous and follow this policy. And the
18 policy calls for -- well, the first objective of the
19 policy for regulating the deposited waste is that water
20 quality in the receiving environment is maintained at a
21 level that allows for current and future water uses.

22 And the way we determine what the level of
23 protection needed for water uses is is by setting water
24 quality standards in the receiving environment. And so
25 there's -- there's a figure on page 12 of the policy that

1 shows, you know, the relationship between effluent
2 quality criteria and water quality standards in the
3 environment.

4 So water quality standards in the
5 receiving environment are what we're trying to maintain,
6 what levels of water quality we're trying to maintain,
7 and this is picking water quality standards that are
8 relevant for a receiving environment like a lake or a
9 river.

10 It's kind of a subjective exercise. It's
11 not a -- not nec -- it -- it gets translated into
12 science, but it -- it starts with, you know, do you want
13 -- do people want the water quality in this region to
14 always stay at background levels or do they want it -- is
15 it okay to have it go as high as CCME levels for the
16 protection of aquatic life or some other site-specific
17 derived guideline value based on toxicity to -- or
18 potential toxicity to aquatic organisms.

19 People -- it's the people of the -- the
20 region that decide what the standards are going to be.
21 Whatever standards are chosen for a certain water body,
22 then we -- the idea is you -- you kind of -- you have to
23 know how the effluent comes out and goes into the
24 receiving environment and how it mixes.

25 And -- and then you -- you can sort of

1 back calculate, well, if I want -- I want the
2 concentration of ammonia to be 1 milligram per litre here
3 and I know that there's -- you know, the -- it mixes, you
4 know, ten (10) times before -- to the end of pipe --
5 between the end of pipe and receiving environment, where
6 I want the standard to be met, then I know that the EQC
7 ca -- can't be higher than 10 milligrams per litre
8 because it's going to dilute ten (10) times, and then I'm
9 going to meet my standard. So that's the kind of idea
10 where you're -- but you're setting your -- your effluent
11 quality standard so that you maintain a very definite
12 level of protection in the environment.

13 The -- the current guidelines for the
14 discharge of municipal wastewater say that the -- the
15 guideline values -- four (4) different situations are
16 based on receiving water standards, so this isn't a
17 hundred -- a hundred percent new, but there's no real
18 evidence of how those were calculated, and they're sort
19 of generic values.

20 And we'd like to do this on a site-
21 specific basis, to apply this -- this principle. So the
22 -- the EQC and the Town of Fort Smith may be a hundred
23 percent okay. They may be overprotected. They may be
24 underprotected. And we -- there really hasn't been an
25 evaluation of that, and so we're applying this policy to

1 this licence as best we can with the information we have.

2 We are -- we don't have enough evidence on
3 the record to -- to make this determination at the moment
4 and our intention is to -- we're trying to get some
5 advice as an independent third party consultant who will
6 do this evaluation using the data we have.

7 We have a lot of data from Water
8 Resources, who have sampled forever right next to Fort
9 Smith, I guess, in the Slave River. It's upstream of the
10 sewage outfalls. We have a lot of reference condition
11 information. It's -- it's unbelievable how much there
12 is. We have nothing from downstream of the sewage
13 outfall except for another 20 kilometres or so
14 downstream, which better be okay by then. I'm sure it
15 is.

16 We know something about the flow though
17 too, and we know something about the flow though too, and
18 we know that the flow of the -- the mean flow of the
19 Slave River is 3,400 metres cubed per second, which is
20 pretty enormous, and the mean flow from the Town of Fort
21 Smith sewage outfall is .008 metres cubed per second, I
22 would est -- as an estimate based on their annual report.

23 So it's a million times dilution at -- but
24 -- but of course that dilution isn't instantaneous. It's
25 -- it's -- it might take time, but we don't know anything

1 about how it mixes or what the plume is like when it
2 comes out the end of the pipe.

3 So there's a lot of things we don't know.
4 So I just wanted to let you know that we -- we're
5 attempting to get someone who can do this for us in the
6 next two (2) weeks and this information will go on the
7 record when we have an independent third-party consultant
8 to look at this and what the EQC should be. And if -- if
9 they can't figure it out according to policy, what bits
10 of information are still needed, because maybe we don't
11 have enough right now. And to let you know that that
12 information will be coming July 4th. That's the earliest
13 we can get that in.

14 So it won't form the basis of your
15 interventions. It will become like another intervention.
16 And that consultant will be available at the public
17 hearing for questioning, so people will have an
18 opportunity to -- to question what's in this report and -
19 - as will the Board. So I just wanted let you know about
20 that.

21 Does anyone have any questions about the
22 policy and what it means in this context? I can tell
23 you're all excited.

24 MR. GERALD ENNS: It's Gerald from ENR
25 here. Was this management policy developed within the

1 Mackenzie Valley Land and Water Board with input from
2 various agencies? From -- from the Boards or from --
3 also from Environment Canada, DFO, and ENR, or GNWT?

4 THE FACILITATOR: Yes, in -- in Section
5 2, I believe it says -- in two (2) or three (3) it says
6 how this policy was developed on pa -- section -- page 8,
7 Section 3. And, yes, it was -- it was distributed for
8 comments in 2010 and we did receive comments from the
9 GNWT and from Environment Canada, INAC, a number of --
10 all the -- all the usual suspects commented on the policy
11 and then it was finalized in -- in December and then made
12 effective starting March 31st.

13 I think the -- in -- in the comments I --
14 I would say that nobody was surprised at the content of
15 the policy. It's just a matter of this is the Board's
16 way of finally writing down what we do instead of making
17 it up every time or being inconsistent in -- in our
18 attempts right now, from here until in -- in every other
19 licence that we deal with from now on, especially the
20 Type As where we're going to focus our most attention is
21 to -- to try to follow this policy. Which also would
22 require monitoring in the receiving environment which
23 hasn't been done for municipalities before.

24 I think the City of Yellowknife might be
25 doing some soon, but -- so there -- there may be a

1 requirement for a monitoring site downstream of -- of the
2 sewage outfall according to the policy. This would make
3 sense because you need to know. If you've set objectives
4 -- if you've set effluent quality criteria, how do you
5 know if what you've set at the end of pipe is working?
6 How do you -- how do you know that? You don't know that
7 unless you go out and take a sample. So it would be
8 prudent, I think, to have a sample outside of -- or
9 downstream of the site.

10 I don't -- I don't know. I'm hoping that
11 we'll have some more information about where that
12 sampling site would be. But yes, does anybody else have
13 any other questions?

14 MS. MARY KELLY: Mary Kelly with
15 Environment Canada. I just wanted to point to the second
16 objective of -- for regulating the deposit of waste which
17 reads:

18 "The amount of waste to be deposited to
19 the receiving environment is
20 minimized."

21 I'm wondering if you can speak to whether
22 those two (2) objectives are equally weighted or if the
23 first one (1) is most important.

24 THE FACILITATOR: Kathy Racher for the
25 Board. I think it -- it actually says in the little blue

1 thing underneath the first objective:

2 "Protection of water quality in the
3 receiving environment is a primary
4 objective although both objectives
5 really speak to the same thing."

6 At a minimum -- it says in the text -- it
7 says at a minimum the EQC will be set to maintain water
8 quality standards, but it also says that EQC can be set
9 lower than what is absolutely necessary to maintain water
10 quality.

11 So in a -- in -- you know, in a situation
12 like this where you've got a million times dilution we
13 may discover, you know, once we look at the numbers, we
14 may discover -- you know, once we look at the numbers we
15 may discover that, you know, you could have way more -- a
16 way higher level of -- of fecal coliforms than you do
17 because you've got this million times solution. That
18 doesn't mean that we would just set it a million times
19 higher because of that. We would also try to minimize --
20 you know, there's an idea that you can't -- that the
21 Board's principle is based on the principle of pollution
22 prevention. People don't have a right to pollute. It's
23 -- it's granted on a case-by-case basis essentially and
24 with an eye to pollution prevention. But if -- if -- so,
25 if people are doing what's reasonable then we'll sign a

1 EQC based on that.

2 So it's always first, it's going to be
3 meeting water quality objectives; second, will be
4 pollution prevention considerations. But they both --
5 both objectives need to be met.

6 Excuse me. Kathy for the Board. Does
7 anybody have any questions about the use of a third-party
8 consultant or are -- we'll be distributing the questions
9 that we give to this consultant either today or tomorrow
10 depending on how things go so that you'll know what kind
11 of questions we're asking the consultant to bring forward
12 as evidence.

13 MS. MARY KELLY: Mary Kelly with
14 Environment Canada. Just to -- to make sure that the
15 people at this table are seeing the same information that
16 that consultant would be seeing, there was mention that
17 there was planning of water resource data upstream.

18 And I'm wondering if that information is
19 best accessible on an INAC website, or if there's another
20 form that I haven't been privy to?

21 THE FACILITATOR: Kathy Racher from the
22 Board. I think the -- there is a Slave River water
23 quality study online on the INAC website already, but it
24 doesn't have all the data in it. So when we give the
25 letter and a go ahead to the consultant I've already

1 compiled all the information they need including some raw
2 data that INAC just gave to us yesterday and that will be
3 sent to everybody. So you can play to your heart's
4 content with all the numbers. I think there's a million
5 of them to -- to look at.

6

7 (BRIEF PAUSE)

8

9 COMMENT 5 - SNP

10 THE FACILITATOR: Okay. Kathy Racher
11 with the Board. Okay, I just wanted to explain that
12 because that's kind of new to the poor Town of Fort
13 Smith. And we'll just see -- see how that goes. And I
14 may make -- I have some questions about some things
15 later, but first I'd like to go through people's comments
16 with regards to the sewage discharge.

17 And we'll start with comment number 5 from
18 INAC.

19 MS. JEANNE ARSENAULT: This is Jeanne
20 with INAC. As per comment -- comment 5, INAC recommends
21 that CBOD be added to the list of parameters sampled at
22 SMP-567-2 in Part B, Section 1 of the current water
23 licence -- and I'll just get to it -- for a minimum
24 period of three (3) years. After the three (3) year
25 period the Town should be provided -- or should provide a

1 trend analysis to the Board for review and approval and
2 sampling requirements should be re -- revisited. So the
3 -- the way it was phrased in the Board staff initial
4 response would reflect accurately this recommendation.

5 THE FACILITATOR: Kathy Racher for the
6 Board. Does anyone have any comments on that? That was
7 the addition of CBOD. It seems to be -- I think the Town
8 of Fort Smith commented that they understood that that
9 would become a requirement anyway, so -- and that the
10 transitional period needed to be done.

11 Does anyone have any further comments on -
12 - on that?

13

14 (BRIEF PAUSE)

15

16 COMMENT 11 - SEWAGE EFFLUENT QUALITY STANDARDS

17 THE FACILITATOR: All right, then. That
18 would be a, No. Thank you.

19 Comment number 11 from Environment Canada
20 about effluent quality standards.

21 MS. MARY KELLY: This is Mary Kelly with
22 Environment Canada. The recommendation was to reduce the
23 effluent quality standards as a means to promote
24 pollution prevention. So currently the standards of
25 three hundred (300) and three sixty (360), I believe they

1 are, is what you'd typically find coming out of a sewage
2 truck. So it, in some ways, can be telling the Town that
3 they don't need to treat their sewage before discharging
4 it.

5 They have pipe system, which mean it's
6 much more dilute and it's probably coming into the system
7 at somewhere between one fifty (150) and three hundred
8 (300) CBOD-MTSS. And so the effluent quality standards
9 doesn't promote pollution prevention in any way. And
10 that's why we recommended that they be revisited, which
11 they will be with this water quality -- an effluent
12 quality management policy.

13 THE FACILITATOR: Okay. Thank you.
14 Kathy Racher, for the Board. Okay, that sounds good.
15 Comment number 12 on the sewage bioassay samples,
16 Environment Canada, could you clarify your comments
17 there, please?

18

19 (BRIEF PAUSE)

20

21 MS. MARY KELLY: Mary Kelly again, with
22 Environment Canada. We understood that the bioassay
23 sampling to date has been a collection of water that
24 actually comes from the river, and it's as close to the
25 diffuse location as possible. However, the -- the

1 standard way of collecting a bioassay sample for sewage
2 discharge is to collect the sewage itself and not having
3 it mixed with the receiving environment water.

4 For the Town of -- for Yellowknife and for
5 the Town of Hay River, the bioassay sampling point is
6 within the system. In their situation, there's a wetland
7 that separates the lagoon and the lake, and so their --
8 their point of collecting a bioassay sample is further
9 down in the wetland before it receives what is determined
10 to be the receiving environment, the lake.

11 And so we would recommend that that
12 bioassay sample be collected at the same location as 567-
13 2, and if there's a concern of not having enough volume
14 of water to collect through that culvert, that a
15 composite can be made, so collect a few litres at a time
16 and add it to the 20 litre container that I believe is
17 usually used to collect that sample.

18 THE FACILITATOR: Can I get a comment
19 from the Town of Fort Smith?

20 MR. JEAN SOUCY: Jean Soucy, Town of Fort
21 Smith. With respect to -- I understand -- and -- and
22 Fort Smith does not have a natural lagoon so,
23 essentially, what leaves the lagoon, it would be exactly
24 what the ba -- bioassay would -- the -- the sample
25 material. The end result is I don't think we'd have a

1 very good successful rate with -- with the samples sent.

2 Having said that, we could do it. I -- I
3 would suggest though, if -- if that's the case, then
4 instead of taking the sample from station 567-2, we could
5 -- we could take the sample from the outfall, from the
6 lagoon itself, which is volume right there, which would
7 be on surface level, of course.

8 The reason I say that is we actually send
9 60 litres of water as opposed to 20 litres of water.
10 We'd be there for a whole day and half, two (2) days, a
11 sample at a time, if that would be acceptable.

12 Having said that, I guarantee you that any
13 bioassay that we take directly from end pipe would result
14 in -- so far, we've ha -- we've had a hundred percent
15 successful rate in both species.

16 Having said that, with a -- with a new --
17 new location end pipe, I fully expect it will be zero
18 successful rate.

19 MS. MARY KELLY: Mary Kelly, with
20 Environment Canada. I can't predict what that -- if that
21 would be the case. Looking at the water quality data
22 from 567-2 in the fall, I wouldn't necessarily jump to
23 that conclusion. But part of the -- part of the logic of
24 taking the bioassay sample is to have that overall
25 assessment of is this water of a concern, instead of just

1 looking at the individual parameters, looking at the
2 whole param -- the whole spectrum of -- of the water and
3 to speak to the -- the volume requirement.

4 Actually before I even say that, we would
5 -- Environment Canada would be looking at a pass/fail
6 test, which would not require as much water. And also,
7 we would not be interested in the Daphnia component just
8 the rainbow trout. So that changes things a little bit.

9 And also, I'm not sure if it's been clear
10 at this point but with the City of Yellowknife and Town
11 of Hay River we've -- we've identified that Environment
12 Canada cannot be named in the licence as the -- the
13 people who will be doing the bioassay or paying for it.
14 And so that is something that needs to be better
15 reflected in the terms of the licence, as well; that the
16 Town is responsible to collect and pay for that sample.

17 THE FACILITATOR: Kathy Racher for the
18 Board. You're not named in this licence that I see. I
19 don't know what the practice has been. Jean...?

20 MR. JEAN SOUCY: Jean Soucy for the Town
21 of Fort Smith. So that's probably why it's been reduced
22 from 60 to 20 litres, you know.

23 I -- the past has been Environment Canada
24 samples were put together and the Town -- I believe the
25 Town was paying for it and I'm not -- I can't confirm

1 that, though. But I believe the Town has been paying for
2 everything for the sample itself. So, yeah, I don't
3 understand the relationship there.

4 MS. MARY KELLY: Mary Kelly with
5 Environment Canada. I am relieved to hear that that is
6 the arrangement, but I wanted to make sure that it was
7 understood at this stage if that was not the arrangement.
8 And part of the reason why we wouldn't look to have the
9 Daphnia tested is because Daphnia loves sewage and they
10 will always survive in sewage. So it would be -- there's
11 no real reason to have that analysis conducted.

12 MR. JEAN SOUCY: Jean Soucy from Fort
13 Smith. So would -- would there be any objections still
14 to take the water on the outflow of the lagoon itself as
15 opposed to from end pipe?

16 MS. MARY KELLY: Mary Kelly again. I
17 wouldn't want to say an absolute yes. I'd like to -- I'd
18 like to revisit the volumes that are required and see if
19 it would be practical to take it from the culvert. That
20 would be the more ideal location because it -- it's
21 flowing at that point. Whereas in the lagoon it could be
22 stagnated, like the -- the different water quality
23 through the water column. So something to consider.

24 THE FACILITATOR: Kathy Racher for the
25 Board. I just wanted to clarify like the last -- the

1 current licence does say:

2 "Samples in the water directly below
3 the effluent discharge point."

4 And I just -- I know it's the -- I know
5 like in the Regs and in the proposed Reg for municipal
6 waste and also in the current Regs for the metal mining,
7 it's always a hundred percent effluent that is -- is
8 tested in this way, but I -- I guess I'm not completely
9 sure on why that is.

10 And I -- I just wondered if you could
11 explain farther why that is better than right at the
12 bottom of -- of their diffuser in terms of -- because I
13 definitely understand why you need a composite sample
14 because you're testing for things that you just -- you
15 just can't know about, right. You're just wanting to
16 know whether the -- there's something nasty -- some nasty
17 combination of things, but just why one (1) versus the
18 other.

19

20 (BRIEF PAUSE)

21

22 MS. MARY KELLY: Mary Kelly again. I
23 guess I'm -- I don't necessarily have a very strong
24 advocacy for why it would be one (1) or the other. But
25 if the sample is collected from the river then it's a

1 mixture of the river water and the effluent. It's a
2 dilute sample and Environment Canada is concerned with
3 what's going into the water not what -- I mean we're
4 concerned about all water but in these scenarios we're
5 concerned of what is being deposited into the water.
6 That's the best I can say right now.

7 THE FACILITATOR: Okay. I won't grill
8 you anymore unless anyone else has a question on the
9 acute bioassay.

10 MR. WAYNE STARLING: Yeah, Wayne in Fort
11 Smith. I have a -- a question and that is: I wonder if
12 anyone has any knowledge of data that -- of this nature
13 that would have been collected on a study basis that
14 would be effluent from a sewage lagoon of a similar size
15 and -- and effluent characteristic that we could draw on
16 as opposed to just sampling from -- from this one.

17 Because I do -- I -- I have to go to the
18 bat for the community here, Mary, sorry to oppose, but I
19 agree with Jean. I believe that it's a -- almost a fait
20 accompli that -- I don't believe that any sample from the
21 -- directly from the -- the manhole will pass rainbow
22 trout bioassay.

23 And I'm not just speculating, but we've
24 had several fatal from the wetlands from Hay River, and
25 that after passing through their primary sewage lagoon

1 system and then about a kilometre or more of wetland and
2 neither have ammonia removal.

3 And the, of course, fish don't tolerate
4 ammonia very well, and I -- I really believe that every -
5 - every sample would -- would result in mortality. But I
6 just wonder if anyone has done this. It seems to me that
7 someone probably would have to analyse the effectiveness
8 of conventional sewage lagoon treatment on fish species.

9 So something that we may be able to get
10 from a desktop study that has already been completed, but
11 I -- I really would hate to see this established too as a
12 -- a reason to categorize the -- the system that is in
13 place and then just build on for future room to discredit
14 the functionality of -- of the system.

15 And -- and -- and I do understand the
16 concern from Environment Canada to the -- the discharge
17 to the river, what you're concerned about is the -- the
18 effluent quality. And I guess I would link that
19 similarly to the -- the exhaust from -- from vehicles.

20 I -- I know that air quality's an issue
21 and -- and improvements have been made but if we were to
22 ask people to breath the exhaust 100 percent coming from
23 any -- any exhaust pipe we wouldn't last very long. But
24 if we were 2 or 3 feet away from that our chances of
25 survival are a heck of a lot better.

1 And I -- and I believe that someone should
2 do this as a study and -- if it's not available already,
3 to sample bioassays from a sewage lagoon that doesn't
4 have sterilization or ammonia treatment and see what the
5 results would be, because it would save collecting that
6 from a whole bunch of others when -- then we'd know the
7 results ahead of time.

8 Thank you for the comment -- or providing
9 the opportunity for me to comment.

10 MS. MARY KELLY: Mary Kelly with
11 Environment Canada. I -- I guess I -- I wanted to pick
12 up on the suggestion that the collection of this bioassay
13 information is to -- to inform or to -- to make a study
14 of the system, and that's not at all what the purpose is.

15 The purpose is to do a check to say, is
16 the lagoon effluent quality okay to be discharged. It's
17 in the same vein as the surveillance network program.
18 It's to monitor what's coming out and make sure that it's
19 not exceeding the acceptable standards.

20 I can attempt to -- to see if there's --
21 if there's other information that already exists on
22 whether a lagoon system of this nature would be
23 discharging with the same CBOD-MTSS and ammonia numbers,
24 if they would pass or fail the bioassay. And I don't --
25 I don't have something in mind, but I can see what I can

1 pull up and that may inform our recommendation through
2 the intervention. But we would still like to see that
3 bioassay be included.

4 I would also like to point to the ammonia
5 data that -- that Wayne regarded as -- as -- as a problem
6 and as something he would expect would cause the bioassay
7 to fail. The total ammonia nitrogen which is reported,
8 although the numbers are very high, if they're calculated
9 in terms of the -- the deleterious portion, which is the
10 unionized ammonia, most of the time they're not exceeding
11 what rainbow trout can handle.

12 And so -- and so that's partly why I am
13 not necessarily convinced that we're saying, Do the
14 bioassay and therefore you're gonna fail your bioassay.
15 That -- that's not how I'm approaching this because the -
16 - the unionized ammonia values aren't that high most of
17 the time.

18 The other parameters can impact the -- the
19 test, but I just wanted to make that distinction that
20 although the total ammonia numbers are very high -- or
21 they're quite high, the unionized portions are not
22 necessarily.

23 So that's what I'll say for now.

24 THE FACILITATOR: Kathy Racher for the
25 Board. I also wanted to point out that they're -- the

1 way, in the current licence, although you require -- the
2 Town of Fort Smith is required to test -- to do the
3 bioassay there's no compliance associated with the result
4 of that test. So there's -- failing the test doesn't
5 imply any, you know, compliance issue that an inspector
6 would have to put an order to.

7 I don't know what Environment Canada would
8 do with that information if -- if the test was to fail.
9 I mean, my perspective, I see it mostly as it -- it just
10 means there's -- there's an indica -- and -- and if it's
11 not obviously ammonia, then there's maybe an indication
12 that maybe there's something that we're not even
13 monitoring for that may be a problem. So I -- I would
14 agree with Mary that I wouldn't necessarily think that
15 it's gonna fail on a hundred percent -- I -- I mean, I've
16 looked at the numbers myself and there's no guarantee
17 that it would fail.

18 But -- and I note that the -- the proposed
19 regulations for municipalities will include this
20 bioassay, but those haven't been approved yet, we don't
21 know on 100 percent effluent. So this isn't just Mary's
22 idea, this is -- this could be a requirement of the Town
23 of Fort Smith irregardless of anything the water Board
24 thinks or doesn't think. Although, albeit that that
25 would be a long time from now before that -- that

1 requirement be there.

2 But I think that -- that was a good
3 discussion, so I think we can probably leave that there
4 unless you've got anything more on that topic, Jean?

5 MR. JEAN SOUCY: Jean Soucy, Town of
6 Fort Smith. Not really, except for the fact that -- if
7 you -- if you're -- your last comment that currently the
8 impact of pass or fail with the bioassay doesn't
9 necessarily mean that there's -- the Town is not
10 compliant in one (1) way or the other if that remains the
11 same regardless if we -- if we take the -- the sample at
12 the end pipe or -- or currently where we take it now.

13 We just don't want to be in the scenario
14 three (3) years down the road that we haven't had one (1)
15 successful sample and then all of sudden, you know, all
16 these demands come -- come out of the woodworks. That's
17 the only -- that's the only issue that I -- I would have
18 at this point.

19

20 COMMENT 14 - SEWAGE EFFLUENT WATER QUALITY

21 THE FACILITATOR: Okay. Thank you.
22 Kathy Racher for the Board. So in comment 13 you were
23 commenting on the -- the exact site of sewage effluent
24 sampling but I think that was clarified during the talk.

25 I'm getting nods from Environment Canada,

1 so we'll move on to comment 14, where Environment Canada
2 is talking about identifying the moves -- the means of
3 improving effluent water quality.

4 And I just wondered if Environment Canada
5 could speak to that a bit more at this time?

6 MS. MARY KELLY: Sure. Mary Kelly again.
7 I recognize that the -- the comments, the recommendations
8 put forward at this point would not translate into terms
9 and conditions for the licence, except for how they may
10 affect the effluent quality standards.

11 Looking at the water quality data, and as
12 I mentioned earlier, piped effluent is -- it's quite a
13 bit dilute, and so I had concerns in the winter looking
14 at the -- the faecals, the faecal coliforms, and the BOD,
15 and noticing that there was very little biological
16 activity, and so there's water coming in and going out
17 for several months in the winter that is not getting
18 biological treatment.

19 So, many other systems -- the majority of
20 systems in the north retain that water either -- either
21 by having something in place to stop it or because it's
22 frozen and nothing can -- can leave the system. So I was
23 looking closely at this system because it continuously
24 discharges year round, and during that winter period
25 there's very little biological activity.

1 In the summer, TSS spikes probably due to
2 algae. Ammonia is affected in there. Again, there are
3 ways to manage a system that would prevent those -- that
4 water quality from leaving the system but it would mean a
5 bigger system. And I -- I realize that that means money
6 and that in order for a Town to be convinced that that's
7 what they need to do, they have to have really good
8 reason and push to do that.

9 So at this stage, those are -- are --
10 that's our interpretation of -- of the results, the water
11 quality results and our recommendations to consider what
12 can be done to improve the water quality, but I do
13 realize that that will not form part of the water
14 licence. And I don't necessarily -- I don't see a need
15 to -- to recommend a study be part of the water licence.

16 THE FACILITATOR: Kathy Racher from the
17 Board. I appreciate your clarity, but it's -- but it
18 sounds like if you -- I -- I don't know if Environment
19 Canada has various initiatives to do with wastewater. So
20 I -- I suppose if you are interacting with communities in
21 general, of course, you can interact with Fort -- the
22 Town of Fort Smith outside of the water licence, anyway.

23 MS. MARY KELLY: Mary Kelly again. It's
24 true that we are -- are doing an extensive wastewater
25 sampling program. Unfortunately, Environment Canada

1 doesn't have money to do expansions and that sort of
2 thing, and so that is not something we can pursue.

3 THE FACILITATOR: Any comment from the
4 Town of Fort Smith?

5 MR. JEAN SOUCY: Jean Soucy from Fort
6 Smith. Well, thank to -- thanks for those comments. It
7 kind of relieves me a little bit. Although the Town does
8 have substantial land reserved for expansion should we
9 need it, it's a four (4) month detention only in the
10 secondary -- secondary treatment. And we understand that
11 is an issue, so...

12 And not to say that we -- we're not going
13 to jump on it right away, but it is a concern and we --
14 we hope that in the future we can address it.

15 THE FACILITATOR: Okay, Kathy Racher for
16 the Board. Any other comments on the sewage system or on
17 the effluent quality criteria at this time or the
18 monitoring stations?

19 MS. MARY KELLY: This is Environment
20 Canada, again, Mary Kelly. It's sort of been alluded to
21 a little bit here that new regulations are -- are being
22 created for municipalities across Canada, they've been
23 proposed, and the north is exempt from that.

24 And so we're coming to the table with that
25 reality, that there are no new regulations that will

1 apply to the north in the short-term. But I just wanted
2 to acknowledge that within the term of this licence there
3 will likely be new municipal wastewater regulations that
4 apply in the north.

5

6 COMMENT 29 - CLOSURE AND RECLAMATION PLAN

7 THE FACILITATOR: Kathy Racher, from the
8 Board. Thank you. Yeah. No, we are always looking and
9 getting updates on that so that we're not -- not leaving
10 people too far behind.

11 Okay, the next exciting topic of the day
12 is closure and reclamation. And ENR had a comment,
13 number 29. DFO had a comment 25 but they're not here to
14 address it, so...

15 One (1) question -- sorry, I'll just
16 continue for a sec. One (1) question I did have for ENR
17 with regard to the closure and reclamation plan that you
18 -- you're -- you -- you are recommending an interim
19 closure and reclamation plan for the current site.

20 And I -- I guess I want to know if there
21 are specific concerns with this site, I guess part of my
22 -- my initial thoughts on closure and reclamation plans
23 for municipalities, municipalities have infrastructure,
24 it's sort of common, municipality to municipality. And
25 to be honest, my experience is mostly with mining, and in

1 the mining sector every mine is a whole different issue
2 from the other mines. So, you know, interim closure and
3 reclamation planning is essential because there's, you
4 know, research questions that nobody has -- nobody in the
5 world has the answer to for that site.

6 And I guess I see municipal infrastructure
7 as being kind of similar from site to site as so not --
8 as, you know, the -- the requirement for closure and
9 reclamation plan may not be -- especially the research
10 aspects of that, which are so important with the mining
11 sector, I didn't really know -- I don't know enough about
12 municipalities closure -- closing to know what the
13 specifics were.

14 So I'd just like to hear more from ENR on
15 -- specifically on the site.

16 MS. DIEP DUONG: It's Diep Duong with
17 ENR. Closure and reclamation planning for -- not just
18 for mining sites, but for municipalities when they're
19 developing conceptually, designing, constructing,
20 operating a landfill, actually occurs during the
21 permitting stage.

22 So they would have to submit some sort of
23 closure and reclamation plan, preliminary closure and
24 reclamation plan. So essentially what we would like is
25 some sort of interim closure and reclamation plan so that

1 the Town starts thinking about where is it going to get
2 its cover material from. How is the cover design going
3 to be -- how is it going to be developed? How it's going
4 to control leachate, treatment of leachate, remediate
5 contaminate soils, for example.

6 So all of those things need to be planned
7 for ahead of time before it actually closes the facility.
8 And I don't think six (6) months is sufficient time for a
9 -- for -- for the Town to have that kind of information
10 working with them because for twenty (20) years, for
11 example, you could be operating a certain way thinking
12 that something's going to happen and that you are going
13 to have cover material readily available, but then say
14 five (5) years you can be closed, all the material is
15 gone.

16 So I think it -- it needs to all sort of
17 be a part of the interim closure and reclamation plan
18 because of the things that I've said, and it -- it also
19 tells you how much landfill space do you have left, when
20 do you have to start planning for a new cell for example.

21 I know the Town right now has got about
22 twenty (20) years left, right? Have there been sort of
23 any calculation done to confirm that, and what are your
24 plans, say, if there is an industry that starts
25 developing within the Town of Fort Smith? That could be

1 contributing to a large volume, for example, that the
2 Town is now.

3 And I guess the other question is: What's
4 the current rate of waste acceptance at the -- at the
5 landfill?

6 MR. JEAN SOUCY: Jean Soucy, Fort Smith.
7 I don't know the actual calculations, how -- how the
8 number of twenty (20) years was -- was addressed, but I'm
9 sure in talking with Ken Johnson I can get that
10 information for you.

11 And -- and looking at twenty (20) years, I
12 mean, like I say, I'm -- I'm kind of new to the landfill,
13 so I'm just trying to catch up as -- as much as I can
14 here, but similar to any infrastructure the Town has, we
15 have a plan for our infrastructure replacement or -- or -
16 - i.e., closure would be for the landfill.

17 But we -- we surely -- it -- it's in --
18 it's in the -- it's in focus when it needs to be done but
19 the immediate plans aren't necessarily available twenty
20 (20) years prior to replacement because -- for -- for
21 numerous reasons, the fill required could be -- still be
22 there twenty (20) years down the road.

23 So there -- for that -- for those reasons
24 we -- we -- we don't have a closure plan yet because
25 we're that far away. Not to say that we can't have one

1 (1) in the next ten (10) years to prepare for it but is
2 it really required to be that far away and have a plan in
3 place for reclamation and then -- then closure.

4 MS. DIEP DUONG: Thanks, Jean. It's Diep
5 from ENR. We've actually sort of put this recommendation
6 in all of our water licence comments in the past several
7 years, and it's part of the City of Yellowknife, it's
8 part of each -- I believe it's part of many water
9 licences that we've commented on.

10 MR. GERALD ENNS: Can I just interject?
11 It's Gerald from ENR here. It's not uncommon in other
12 jurisdictions for hazardous waste receiving facilities or
13 even the hydrocarbon-contaminated soil treatment
14 facilities to develop a closure plan as soon as they're
15 started.

16 Like it's -- it's recognized that as soon
17 as, you know, you start up you eventually have to close
18 out and sometimes it's -- it's just a simple matter of
19 setting aside funds, it's a simple matter of saying,
20 Okay, we're going to have to do some assessments upon
21 closure. And part of that closure plan is just
22 maintaining inventories so that, you know -- or clearing
23 out inventories as you go, particularly with hazardous
24 waste.

25 So I can -- I think there's probably

1 countless forms of closure plans that you can come up
2 with but I don't think there's a template for a closure
3 plan. But I think even at the very outset operations
4 consider closure, especially if they know they have a
5 limited lifespan. And at the very beginning they might
6 be very simple and then as they get closer to the end
7 they just -- they finalize the details.

8 So I don't have too much to add as far as
9 structure of a closure plan but that's the idea of --

10 MS. DIEP DUONG: And -- it's --

11 MR. GERALD ENNS: -- a closure plan.

12 MS. DIEP DUONG: -- Diep from ENR. And
13 also the plan kind of changes regularly as to what the
14 Town's currently doing. So if -- if you're thinking
15 about develop a new -- developing a new cell then that's
16 your closure reclam -- closure reclamation plan is going
17 to reflect that. And if it changes within five (5) years
18 or ten (10) years then it's going to be sort of updated.

19 So it's sort of an ongoing process and it
20 always -- it's basically a -- it makes you think about
21 what you need to do when you close a facility.

22 MR. JEAN SOUCY: Jean, Fort Smith. Yeah,
23 I understand that and -- and, you know, with respect to
24 hydrocarbons or hazardous waste. The Town is not in the
25 business of acquiring -- looking for hazardous waste,

1 we'll take it when there's no -- absolutely no other
2 means to -- to dispose of it and the landfill will --
3 will make venues for it. So it's tough to plan that, I
4 mean, you don't know what the outcome will be. So
5 subject to evaluating the materials that we're currently
6 using from residential waste that could easily be done
7 and we can evaluate what our life cycle will be.

8 So I don't -- I don't particularly have an
9 opposition to this request because it -- it could be a
10 working document, but it'll be -- for typically hazardous
11 waste and other waste that we don't normally take unless
12 it's a -- it's a special requirement, that would be tough
13 to -- to judge the future with those aspects.

14 But as far as household waste, I'm sure we
15 can definitely be -- determine what lifespan we have and
16 -- and what needs to be prepared before that.

17 MS. DIEP DUONG: Thanks.

18 THE FACILITATOR: Kathy Racher for the
19 Board.

20 So I think as an IR it would be useful to
21 just have an indication of how it was determined that the
22 -- that there's twenty (20) years lifespan on the solid
23 waste disposal facility. If -- what do you think of
24 that, Jean?

25 MR. JEAN SOUCY: Yeah, I -- actually in

1 reading these comments can -- can answer that -- that
2 response. And I really didn't know -- I should have
3 asked before he went on holidays what -- how he
4 determined twenty (20) years. I'm sure there was some --
5 some data that he maybe utilized. But we can come up
6 with -- I'm sure he'll have the answer for me. Subject
7 to Fort Smith, though, having a huge population boom I
8 don't think that -- that number will be pretty steady, as
9 it will be in many years so we don't anticipate any -- a
10 huge population boom.

11

12 --- UNDERTAKING NO. 3: Mr. Soucy to advise as to
13 what's the current rate of
14 waste acceptance at the
15 landfill

16

17 DR. KATHY RACHER: Kathy Racher for the
18 Board. Just in terms of if the Board would consider
19 imposing a condition for an ICRP, if -- if say, twenty
20 (20) years is the number, I mean, you start -- is it
21 submitted within the three months, or five (5) years, or
22 ten (10) years, or what's your -- what's your -- you've
23 said six (6) months is not enough time, but -- so do you
24 have a time frame?

25 MS. DIEP DUONG: You ask about -- sorry,

1 it -- it's Diep from ENR. Are you asking about the time
2 frame when it should be submitted from before the
3 estimated closure time?

4 I think like I said earlier, there's
5 actually various iterations, it's sort of a working
6 document. So if one were submitted in the next couple of
7 years for the interim closure reclamation plan, and then
8 if plans changes -- like, if you're planning to take out
9 the land farm altogether or something else, any major
10 significant change then that -- your closure and
11 reclamation plan would reflect those major changes. So
12 it's sort of a working document, like Jean said, that
13 needs to be updated whenever there are major changes like
14 this.

15 MR. GERALD ENNS: Sorry, it's Gerald from
16 ENR here. I know in one (1) -- one (1) of your previous
17 counsellors, Don Webb (phonetic) , he -- he was a member
18 of the Solid Waste Association of North America. Are you
19 familiar with that -- SWANA? Yeah. That's -- I just
20 wanted to point out that that's an organization that's a
21 good resource for exactly that -- that type of a topic.
22 In other words, it's not a guidance document that MACA or
23 ENR or the water boards I don't think has developed,
24 unless there's another one (1) of these out there. But
25 they have -- they have a library that you can go to --

1 it's a worthwhile membership.

2 UNIDENTIFIED SPEAKER: (INDISCERNIBLE -
3 off mic).

4 MR. GERALD ENNS: Oh, there you go. Then
5 what I said was essentially redundant, but...

6 THE FACILITATOR: Kathy Racher from the
7 Board. Does anyone else have anything further on closure
8 or reclamation?

9 Okay. Just a couple more items here.
10 Some of the stuff was from DFO regarding the
11 stabilization of the water intake and sewage discharge.
12 I noticed you -- the Town of Fort Smith has submitted a
13 bunch of information on studies in that region, but DFO
14 is not here to talk about that.

15 Some other comments that didn't fit in.
16 Comment number 7, INAC Water Resources had a comment
17 about -- I was just a little confused, they said:

18 "The conditions of the existing
19 licences should stay the same ex --
20 with the exception of the following
21 revisions."

22 But you had made other recommendations for
23 changes, which isn't a big deal, but I just -- the -- I
24 take it these -- the -- your recommendations are just
25 sort of standard for making this licence harmonize with

1 others?

2 MS. JEANNE ARSENAULT: Yeah. In the
3 Scope and Definition, Part A section.

4 THE FACILITATOR: Say your name.

5 MS. JEANNE ARSENAULT: Jeanne with INAC.
6 Yeah, so those were specific to the Part A, Scope and
7 Definition section, and it's to bring precision to the
8 definition.

9

10 (BRIEF PAUSE)

11

12 THE FACILITATOR: I think it was
13 underneath -- I think we've discussed comment 35 from
14 ENR. I think we talked about that when we were talking
15 about other things, the -- accepting outsourced
16 industrial waste. And we talked about a couple comments
17 that we weren't -- we -- the relationship between the
18 water licence, but I think we've talked about this, Diep.

19 Did you have anything further to say on
20 that?

21 MS. DIEP DUONG: Yeah. Just that if the
22 -- if the Town is going to be accepting outsource waste,
23 then we would like to make sure that there's evidence to
24 the Board that it be designed, operated, funded, and
25 licenced to manage that particularly -- that particular

1 waste from that sector.

2

3

(BRIEF PAUSE)

4

5 THE FACILITATOR: Okay. Kathy Racher for
6 the Board. Any comments on that?

7

8 MR. JEAN SOUCY: Jean Soucy, Fort Smith.
I definitely agree.

9

10 COMMENT 37 - LANDFILL GAS:

11 THE FACILITATOR: Okay. Kathy Racher,
12 from the Board. It's good to get agreement near the end
13 of the day. Everybody's all happy. The other question -
14 - the last comment ENR had was 37, on landfill gas, and I
15 wasn't sure how that -- I had no initial comment for that
16 at all because I wasn't sure what -- what we needed to do
17 about that.

18 Any comments?

19 MS. DIEP DUONG: It's Diep, from ENR. I
20 guess we would like to get the Town's clarification on --
21 on the response, that there's no need since the size of
22 the landfill does not produce any methane gas, and there
23 should be no distinction, connection between water
24 licence and re -- water licence renewal for methane gas.

25 MR. JEAN SOUCY: Jean Soucy, Fort Smith.

1 Now, I mean, that comment is somewhat bold, I guess. But
2 to my knowledge, and of course nothing has been
3 evaluated, no -- no study has been done the landfill for
4 -- for whenever I've asked my landfill attendant, has he
5 ever smelled any gas, was there any -- was there any
6 evidence of -- of methane gas, he advised me that, No.
7 And -- and the last comment though is: How is gas of any
8 kind related to our water licence? How does that apply
9 to what is being discharged into the river by virtue of -
10 - of the landfill?

11 MS. DIEP DUONG: Would that be a question
12 for the Board or for ENR as far as how does that apply to
13 your water licence? Our -- our position is that a
14 landfill is going to produce landfill gas. The main
15 constituent would be carbon dioxide and methane, and we
16 can't necessarily smell carbon dioxide.

17 We -- we do understand that it's a small
18 facility compared to other large sites and we're not
19 asking for the Town to capture it and use it to heat the
20 entire Town, but it is -- sometimes it's actually a
21 safety hazard if there's enough of it and it's being
22 trapped somewhere and there's people working and there's
23 equipment around.

24 So we'd like some sort of assessment if
25 that's ever been done to see what are the levels that's

1 being generated and if it's even a concern.

2 MR. JEAN SOUCY: So by means of
3 assessment, are you simply talking about some moner --
4 monitoring device in different locations within the
5 landfill above ground and to identify if there is any
6 levels?

7 MS. DIEP DUONG: Something similar to
8 that, or even just a desktop study of similar sites of
9 size, of design, construction, to see if they're
10 producing any methane gas, and -- and actually monitoring
11 would not be a bad idea.

12 MR. JEAN SOUCY: Jean Soucy, Fort Smith.
13 Going back to that last comment though, how is that --
14 how is that a connection to the water and -- and anything
15 entering the Slave River?

16 MS. DIEP DUONG: Actually, there's a
17 direct correlation between leachate production and
18 landfill gas. So the more water there is -- so you've
19 got all of this waste that's sitting in a -- in a
20 landfill is reacting with the water that's in there, so
21 the water in there is actually helping the decomposition
22 of the waste, and the bacteria that's helping that
23 process is producing gas.

24 So it's all kind of interrelated with
25 water. And if you didn't have any water going in there,

1 you would be producing much less gas, as well.

2 MR. JEAN SOUCY: Jean Soucy, Fort Smith.
3 Yeah, we can definitely look at -- at some -- some
4 measure of -- of assessing methane gas by some electronic
5 sensing device and evaluate any -- any readings from that
6 point on.

7

8 DISCUSSION

9 THE FACILITATOR: Okay. Kathy Racher
10 here, from the Board. I think we've gone through all the
11 comments, and we've talked about the water quality
12 policy, and I have a lot more information.

13 I guess the next part of the timeline is
14 June 24th. We've asked a few extra things from Jean
15 who's been very forthcoming so far on our many requests.
16 And so that information will be distributed to reviewers
17 June 24th.

18 The revised date for interventions is July
19 4th, 2011, and the proponent will respond to those
20 interventions on July 11th. And I guess -- do you have
21 any comments, Zabey, about the public hearing?

22 MR. ZABEY NEVITT: Zabey Nevitt with the
23 Board. I guess we -- we've gone a long way, I think, to
24 getting through some of the issues that were raised by
25 reviewers in -- in -- in your initial round of comments

1 and the intervention deadline is -- will -- is the date
2 we said, July 11th we said? No, July 4th.

3 I guess what we'd like to said when the
4 interventions come in is the nature and extent to which
5 you feel these need to be dealt with at a public hearing
6 context and decide -- and make -- if there are specific
7 recommendations that you feel could be addressed through
8 a proponent response to these things it will help the
9 Board in determining sort of the -- the requirement at
10 the end of the day for a public hearing.

11 The Board's required to have -- hold a
12 public hearing if we get interventions, but I'd just like
13 sort of to make sure that everybody can say so we don't
14 end up basically holding a public hearing for an issue
15 for one (1) reviewer that could have been dealt with in
16 another forum.

17 So sort of bear that in mind as we -- as
18 you sort of develop your recommendations for the
19 interventions is -- is we -- we certainly want to provide
20 every opportunity for this discussion, but if you feel
21 there's something, and we encourage the kind of just talk
22 with the -- with the community prior to submission of
23 interventions to see if there are issues you can resolve
24 before that date just -- just to help everybody sort of
25 make sure that if we hold a hearing the issues we're

1 going to be discussing are substantive and really the
2 issues that are left on the table, and to make sure that
3 we use every opportunity before then to resolve issues
4 that we can.

5 So really just encourage as much dialogue.
6 We don't have to be privy to every conversation that
7 happens. We encourage reviewers in the community to
8 talk. Anything you want to get back to us to say how you
9 might have resolved an issue, that's great.

10 But, yeah, let's go from there.

11 THE FACILITATOR: So Kathy from the
12 Board. Is there any questions about the process going
13 forward, or what's expected?

14 MS. MARY KELLY: Mary Kelly from
15 Environment Canada. I had one (1) last information
16 question if that's okay.

17 Jean, you mentioned that forty (40) homes
18 in the Salt River First Nations would be added to the
19 infrastructure, the piped infrastructure, and I just
20 wanted to clarify. Is their sewage currently being
21 collected by a truck and deposited in the sewage lagoon,
22 or is this in addition to the sewage that wouldn't be
23 considered in what's already being discharged?

24 MR. JEAN SOUCY: No, the development plan
25 that Salt River First Nation has is all piped water

1 system. So there's currently no -- for that particular
2 location. The forty (40) homes that I -- that I alluded
3 to, that's the long-term plan.

4 We honestly believe that maybe ten (10)
5 homes might be built in the next two (2) years and it
6 could be a long time before anything else, but the plan
7 was originally forty (40) homes. And so all the sewage
8 coming from that subdivision will go directly to the pipe
9 system.

10 MS. MARY KELLY: And just specifically,
11 is their sewage currently being deposited in the sewage
12 lagoon?

13 MR. JEAN SOUCY: From that -- from that,
14 yes, that Band -- sorry, from that reserve there's one
15 (1) home on that reserve, sorry, two (2) homes on that
16 reserve. One (1) is a homeless shelter and the other one
17 (1) is a private home.

18 MS. MARY KELLY: Thank you. The nature
19 of the question was just to identify if there would be a
20 significant addition of waste water being produced in the
21 Town. Thank you for that clarification.

22 MR. JEAN SOUCY: Jean Soucy, responding.
23 Some of the comments that came out of that was the
24 population of Fort Smith hasn't changed and not likely to
25 change, but the homes are being built more and more and

1 more. So there'll be more homes in that one (1)
2 location, but I think the same population, so I think
3 we'll be safe.

4 THE FACILITATOR: Kathy Racher for the
5 Board. One (1) other thing I wanted to ask you for was
6 just if you could send us a picture of the outfall, the
7 sewage outfall with the -- the rocks and the diffuser.
8 We'll need that -- our -- our consultant will need that
9 to evaluate about applying the policy, just to know how
10 it goes into the receiving environment.

11 MR. JEAN SOUCY: Sure. Jean Soucy. The
12 pictures that I showed you earlier, would that be
13 sufficient or you want more detailed pictures?

14 THE FACILITATOR: I think that would be
15 sufficient. I think that would be -- that just lets us
16 know how it -- how it -- like it's basically a trickle --
17 almost a trickle/ filter, so that would be sufficient,
18 thanks.

19 MR. JEAN SOUCY: I can -- I can leave you
20 that disk with all the pictures on it if you'd like.

21 THE FACILITATOR: Even better. Thank you
22 very much.

23 Okay. Well, if we don't have any other
24 comments or questions then -- oh, Jeanne's back on, hold
25 on.

1 MS. JEANNE ARSENAULT: Jeanne from INAC.
2 Just to say that -- that great map that -- from the
3 landfill that Jean was looking -- I think it's from a
4 report, 2010 IEG Report. Do you want to just show us the
5 copy?

6 I believe it might not be on the public
7 registry. Or just the report itself.

8 MR. JEAN SOUCY: Well, the actual
9 report's --

10 MS. JEANNE ARSENAULT: Because I don't
11 think I've see it on the -- on the registry.

12 MR. JEAN SOUCY: Jean Soucy, Fort Smith.
13 I don't believe -- I thought that this had been
14 submitted. We received this last fall and I thought I
15 submitted a copy. Don't know if -- if you'd have so this
16 is the last 2010 IEG report for...

17 So if it hasn't been I'll make sure a copy
18 gets to the Water Board right away, but I thought for
19 sure it had been included.

20 THE FACILITATOR: Kathy Racher for the
21 Board. Okay, yeah, we'll ask for that to be submitted.
22 Perhaps we -- we hadn't -- we hadn't seen it or it didn't
23 get on the registry for some reason so that would be
24 excellent. Thank you.

25

1 --- UNDERTAKING NO. 4: Mr. Soucy to provide a copy
2 of the last 2010 IEG Report
3

4 THE FACILITATOR: Okay. I think we're
5 done here. Thank you very much for participating and --
6 and helping clarify things. I hope -- I hope this was
7 helpful. It was helpful for us so -- and give us a call
8 if you have any questions. Thanks.

9
10 --- Upon adjourning at 3:11 p.m.

11
12
13

14 Certified correct,

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Wendy Warnock, Ms.

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