

Crane Mountain Extension
CMEI Open House - Public Engagement
March 19, 2024, at St Matthew's Church

Presentation : (Commenced at 18:30)

CMEI Chair John Doubt Introduced himself and the CMEI Board Members and explained the purpose of the CMEI. He then presented the agenda for the evening with a focus on the points of the Presentation EXP was providing.

- The CMEI comprises of residents of the Host Communities (as defined by the FRSC charter).
- The CMEI are the watchdogs
- There are also Special Project awards of money (up to \$2M has been awarded)

At a Previous Extension plan hearing in 2004, the proposed project:

- Was not as high
- The proposal was ultimately withdrawn
- EXP was commissioned
- The FRSC was advised of seagull and odour problems
- Also, (in 2019) a proposal for the clay extraction on Acamac Backland Road was raised and quashed by opposition (sic). It was seen as a deterrent to future development of housing.
- Approved by the NB Dept of Environment
- The FRSC rejected it due to cost

Next John Sims took over the microphone.

John explained “who is” EXP

- Previously known as ADI Engineering, a member of a North American engineering firm providing services across the nation. They have been partnered with the CMEI since 2005.

The Proposal

- More waste than previously approved for the sited area.
- Double the volume of solid waste
- Extend the usage of the landfill from 2048 to 2070
- There were a submission of questions and concerns given to the Technical Review Committee (TRC) of the NB DOE

CMEI's Opposition to the proposal is based on:

- The siting is close to a hydrogeological flow.
- The extension was a desktop study based on the original design as presented in the first EIA.
- Inadequate alternatives were considered or given.
- The Liner is not double the strength and the life duration.
- Significant wells (depended upon for health) could be compromised and any mitigation could be very expensive.

Key Issues (presently)

- Odour
- Sight line
- Restricting any town development or expansion.
- And, groundwater

Engineered Landfills (vs an open dump)

- Depends greatly on the Liner construction.

Details of an Engineered Landfill Construction:

- 1.5m of till placed above the bedrock layer
- A 15 mil liner, HDPE, sealed seams to hold the leachate
- Underneath the liner is the gravel underdrainage (Underdrains)
- Leachate - contains the contaminants

All Landfills leak – Why?

- Liners can have “wrinkles” from the installation process. Pinholes can appear in these wrinkles or kinks.

- How much do they leak?
 - USEPA graph comparing Waste volume and leakage
 - Leak rates are stated as Liters per Hectare per Day (LpHpD)
- Liner design and Leakage Rate
 - Literature indicates a double liner system is the most reliable and efficient
 - Emerging Leachate Contaminants PFAS and PFOS (forever chemicals from manufacturing and fire retardant materials)
 - How much will Crane Mtn. Landfill leak?
 - Is there an acceptable amount of leakage?
 - There are implications of bedrock groundwater effects
 - Will Domestic well sampling be effective to catch or detect the problems?
 - CMEI's Opinion: Against the extension as the engineering has not adequately proven the liner will withstand the extended weight and service time.
- **Landfill Gas and Odour**
 - An example: The Fredericton Landfill extension has been reported to produce significant “rotten egg” odours.
 - Odours have been reported to be annoying at 1.5 kms away from the landfill.
- **Quality of Life**
 - View plane – being able to see the waste pile from many areas, especially where any new town development would occur.
 - (The photos from John Adams were presented) From these perspectives think of an additional 27.5 m higher to the waste pile. It is easily observable
- **Implications of Siting a Landfill on Bedrock versus Sand and Gravel**
 - The complexities of bedrock fractures and the velocities of groundwater.
 - Transition from bedrock to the lower areas.
- **Groundwater Flow Model**
 - CMEI commissioned a groundwater flow model.
 - It was completed in 2018(?), The Numerical Model

- There is a possibility a landfill leak will emerge above the ground at lower elevations and then flow into nearby streams and watercourses.

Summary – (Given by John Doubt)

- The FRSC wants to increase a significant height and stretch the landfill service to 2080 (correction: 2070).
- Due to waste diversion the landfill was previously extended to 2048.
- It is CMEI's opinion the Gemtec table-top study is not sufficient; it is not enough depth of investigation and proof.
- Fractured bedrock is a poor choice for an overburdened landfill.
- A liner change was recommended to the FRSC in the 2004 evaluation and the recommendation was rejected.
- The safety of our personal domestic wells are based on assumptions and no actual studies.

Questions and Responses (Floor Opened at 19:15)

Edward Powell – Resident of Grand Bay-Westfield

- a. Firstly, Thank you for hosting this meeting
- b. Question: What do we (residents) need to do to assist?

Response: John Doubt Contact the EIA Co-ordinator. If needed, consult our website (CMEI.ca) to find the EIA and where to contact. Let them know your objections and let your municipality leaders know. Make your opposition clearly known. The CMEI is also considering a lawsuit (forbid if it has to reach that point).

Dr. Kerry Rowe stated the underdrainage can plug, preventing proper and timely detection of liner leakage.

David Bowen – resident of Ketepec

Stated he was involved during the original hearings

Stated his disappointment at the lack of city councillors and officials in attendance.

Q1 – Did the CMEI respond to the first “output” on the extension

Q2 – Did the City of SJ have to approve the Conditions of Approval (being within city limits) for the height increase?

Q3 – The rest of the country used a double liner system. The City of Fredericton bale their waste to reduce volume and leachate. The City of Moncton redirects waste from the landfill to reduce volume. The Town of Sussex discussed the use of a transfer station and the decided to bury waste behind the Canadian Forces base.

Q4 – He was involved with Fundy S.W.A.T. – Crane Mountain was once taken off the siting list. as it was deemed unsuitable due to fractured rock and the presence of downstream residential wells. When the site for the Kingston Peninsula was determined to be prohibitive, Crane Mountain was placed back on the siting list. A site on the Black River Road on a base of sedimentary rock was ignored.

Q5 – The Acamac Clay Pit proposal was canned and now it is not reconsidered, (thanks to Crane Mountain?)

Q6 – Is there any feedback from the Lancaster Lagoon from accepting leachate? **Response:** John Doubt – Sometimes the Lagoon requests leachate when the Lagoon liquid is getting low.

Q7 – What were the other two NB landfills that were extended?

Response: John Sims – Fredericton and Edmundston (located on sedimentary rock and not upstream of residential wells)

Q8 – What are the City of SJ’s implications from this extension? (No responses)

- a. Included in application to operate was a condition that FRSC will be financially responsible to pay for drinkable water in the event of well water contamination.

Mike Bonga – Resident of South Bay and a previous CMEI Committee Member

Q1 – there is over 25 years worth of well data. Is that collected? **Response:** J. Doubt – Yes, the data sat on a shelf but recently the database was updated with the old data.

Q2 – The Committee (not clearly named, may be CMEI?) was formed in 1997. Was the CMEI ever consulted on what to do with the Landfill?

Response: John Doubt – No, despite our years of experience (+25 years) the CMEI was never consulted.

David Bowen – Resident of Ketepec

Q1 – The porosity of the clay, could not get an answer on that. What depth of leachate is acceptable? **Response:** John Sims – A 0.3 m depth maintained (reference to a diagram from a slide). This is what the 25 year breakthrough time is based on.

Q2 Is data available on the liner condition? **Response:** John Sims (switched to question microphone to be heard better) – The head of the leachate is being monitored in order to determine liner condition.

Q3 – Is the sump area of the liner thicker? **Response:** John Sims – It is not an issue for that area as the head (or height) of leachate is the key monitoring parameter.

Jack Stoffel – A new resident of Grand Bay-Westfield

Q1 – What was the original plan for the end of life of the Landfill plan? **Response** (Jim Sims): Cap the cells and monitor. Where else were site possibilities?

Q2 – Is there any conditions where the CMEI would accept the plans? **Response:** John Doubt – The CMEI wants to see more testing and more wells established. Also, the smell is not being properly mitigated. The LFG

wells of 55 of 70 operational shows there is a lack of response to the concerns. The visual site-line impact is also huge and large.

Q3 – Does this not make you lose confidence? **Response:** John Doubt – there is newer technology available.

Q4 – What about the domestic well monitoring? **Response:** John Sims – The privacy act affecting private wells is preventing any knowledge of contamination or trending issues. It's a complex problem.

Participant expressed thanks for the information.

Moira Adams – Resident

Q1 – Will the cell height increase start once all the cells are filled?

Response: John Doubt – There are only a couple of cells remaining, so yes, soon after.

Q2 – So why are they (FRSC) rushing? With the last answer, I believe we now know!

Q3 – there are 25 years remaining on the existing landfill (not completely audible) No response to follow.

Mike Murphy – Resident of Grand Bay-Westfield

Q1 – If a problem is found or discovered, then what happens? **Response:** John Doubt – As determined from previous information, the FRSC is to take action, but it is apparent there is no contingency planned.

Gary Crowley – Resident of Grand Bay-Westfield

Q1 – Are the 8 cells to be started going to be done with the newer technology? **Response:** John Doubt – Work is underway to prepare the ground and this is at a cost to the facility. (No speculation on new technology use)

Mary Reeves – Resident of Grand Bay-Westfield

Q1 – With respect to provincial funding and the FRSC, Funding to various groups in the province have been changed or reduced. It appears the FRSC is not well funded with provincial funding seen as parsimonious. This is a PNB issue. **Response:** John Doubt – This extension is clearly all about saving provincial funds.

Brittany Merrifield _ Mayor of Grand Bay-Westfield

- a. Wanted to make the residents clearly understand that she was opposed to the proposal of an extension during the FRSC meeting of which she is a board member, and voted against the idea and did not approve the idea.
- b. She wanted residents to understand that re-siting is an expensive process to the provincial funds.
- c. Currently, the EIA is in the hands of the Minister of Environment to consider for approval.
- d. The Minister of Environment will ultimately go to the Commission (FRSC) for the final decision.
- e. Wanted to stress to residents: Reach out to your members of local government to express your dissatisfaction or concerns.

Unknown person

Q1 - Can the top be removed just for the extension? **Response:** John Sims – that is exactly the process used.

Q2 - Can the Cells be added to without removing the cap? **Response:** John Doubt – No, because leachate can't be collected.

Colby Fraser – Resident of Grand Bay – Westfield

- a. Have they ever looked for other sites? They have had many years to do so. There are many acres of woods in this province so there is no lack of room! There must be a better site than here!

Closing Remarks (John Doubt)

Please remember to reach out to your contacts and make your opposition and concerns known!