
Port Fuels & Material Services, Inc.

Meeting Minutes - Community Liaison Committee

Date: Thursday, September 18, 2014

Time: 7:00 pm - 9:00 pm

Location: Boardroom, Eva Rothwell Resource Centre at Robert Land, 460 Wentworth St. North

Chair: Bob Clark, PFMSI

Facilitator: Greg Zilberbrant, JBI Environmental Consulting Inc. (JBI)

Participants: Bob Clark (PFMSI), Keith Reid (PFMSI), James Kaspersetz (Clean Air Hamilton), Laurence Smink (South Sherman Neighbourhood Hub), Stephen Rowe (Keith Neighbourhood Hub), Ilona Feldmann (Bay Area Restoration Council), Peter DeBoer (Hamilton Fire Department), Lynda Lukasik (Environment Hamilton)

Regrets: Chris McLaughlin (Bay Area Restoration Council), Lynn Stewart (McMaster University)

Welcome & Introductions

Greg Zilberbrant thanked everyone for attending and explained safety/emergency procedures for the facility.

Bob Clark asked everyone to introduce themselves around the table and welcomed everyone to the meeting, introducing the idea of the Community Liaison Committee (CLC).

Structure of PFMSI CLC

Greg explained the CLC structure and distributed copies of a draft Terms of Reference (ToR)

- Greg presented purpose and process of the CLC
 - Core group that represents stakeholders to feed information back to the community
 - It was an independent choice by PFMSI to start the process of the CLC earlier than typically done, during the approval process so key groups are represented
- Bob asked the group to discuss and identify examples from their personal experience as “Good Practices” for CLCs
 - Stephen Rowe, Keith Reid and Jason Kaspersetz shared positive experiences

- Bob suggested the purpose/process of the CLC in the ToR may not just be during the approvals time period, but instead it could be after that as well. It is tabled for discussion at the end of the approvals process and reviewed again.
- Lynda Lukasik indicated she is used to CLCs being setup post approval and typically they are very open to allow people from the broader community to participate. Bob explained that open public sessions can be evaluated separately but the focus with this CLC is to have discussion in a smaller group to allow better exchange. (Also all info is on the website so a larger audience has access to it.)
- Greg presented a ToR overview
 - Greg asked for comments prior to next meeting so that ToRs can be finalized at the next meeting.
 - Bob asked if other CLCs have requirements different from what is being recommended. Lynda suggested that they were similar in nature and stated that she will send Bob and Greg examples of other ToRs (AMD, USS)

Gasplasma 101

Bob gave the presentation, which has been available on the PFMSI website, on “Green Technology Solutions for Hamilton” aka “Gasplasma® 101”. It was reviewed in a smaller group so the CLC can ask direct questions and have a better background. Some selected points of discussion are as follows:

- Gasification is not incineration, no flame, no ash
- Explained the 2 stage process, distinct from other processes similar to it, self-sustaining process (once gasification started, does not require fossil additives/external fuel sources), much better energy balance
- Showed photos of the pilot facility (Swindon UK Facility – Tetronics, Advanced Plasma Power)
 - Three small scale industrial operating facilities (including 2-stage Gasplasma®) are co-located in Swindon.
 - Using a gasifier as step 1 allows you to shrink the process footprint. It does the “work” of gasification in a self-sustaining mode. As a result of this you are only processing a raw syngas in step 2 in the plasma converter, therefore overall site footprint is significantly smaller with less support equipment required.
- Lynda asked about the footprint of the proposal and capacity of the pilot facility
 - Bob explained it is a 17 acre site as addressed in the web site.
 - Design for proposed plant is a mid-scale meaning both the gasifier and the plasma converter have both larger and smaller operational examples in commercial use.
- Lynda asked about the plant and why there is both gas plasma and direct plasma
 - Bob explained that gas plasma is the waste-to-energy process using organic material, whereas direct plasma processes inorganic material
- Lynda asked how the direct plasma portion of the plant is fueled
 - Bob explained the direct plasma is an energy does not create net energy since it is used with largely inorganic material, but working in tandem, the Gasplasma® provides the energy for direct plasma

- Ilona Feldmann asked for more information on the virtually free emissions
 - Bob explained the process is essentially a closed loop system, except when gas goes into the engines which will have usual combustion emissions. The waste stream, depending on the material processed, will have minimal residual dust from gas cleaning captured in filters
- Stephen asked if the filters can be put back into the system
 - Bob explained they can be, but eventually you will have a residual to remove because it will not be efficient to keep adding the filters back in
- Bob presented the process flow diagram and explained that the permits are for a non-hazardous site. Desired design specifics are size, calorific value, and moisture content.
- Bob presented the Status of Activities, mentioning that Conestoga Rovers & Associates (CRA) is their environmental consultant. They are invited to attend and present status of their reviews.
- James explained that he was involved with a similar process for a facility in Niagara Falls who used CRA and they did an excellent job. The issue he sees is many pilot plants are successful but full scale plants have a lot of issues (uncontrolled releases during actual full scale practice. He hears people are worried of increased traffic, emergency situations, blow off valves).
 - Bob indicated that these are good issues to bring up and that the process is a mid-range so it is a scale down compared to other processes and that this system operates at close to atmospheric pressure.
- Stephen and James asked about feedstock and operation size
 - Bob explained they are still under commercial negotiations so he can't provide the information, however the goal is to look for local non-hazardous feed. They are focused on industrial waste, not municipal waste. They are also focused on "local" waste since that is a goal of the project.
 - 170k tonnes/year incoming for gas plasma, but once recyclables are removed, approx. average of 105-110k tonnes/year (300 tonnes/day)
- Laurence asked what the best material would be
 - Bob suggested examples of car fluff, plastics, railroad tiles, metals materials, construction materials, port materials
 - James indicated that he understands Bob can't provide the actual feedstock until negotiations are complete, but people ask a lot of questions about feedstock, so the message currently is not getting out there.
- Lynda asked about the environmental assessment process, whether the CEAA applies, and suggested PFMSI provide a process chart with dates on their website
 - Greg suggested this is a good topic for the next meeting to provide details to the CLC and on the website.
 - Bob indicated that the planned submittal date for the Environmental Compliance Approval submission is Dec 2014
- Bob discussed that they are involved in a number of different technologies and programs with McMaster (biosensors, fuel cells), because they want to get involved with the community. They

stand behind their technology, fund it, and only transfer the technology when it is ready but still maintain an active involvement.

Next Meeting & Future Topics

- Bob and Greg opened the floor to any other questions
 - Greg indicated if anyone has topic suggestions for the next meeting, to send them early so the agenda can be set
- The next meeting is scheduled for Thursday, October 16, 2014 from 7:00-9:00pm at the same location (Eva Rothwell Resource Centre at Robert Land, Boardroom)
 - All attendees agreed that the time and location will work
- Bob thanks all for attending and adjourned the meeting

Adjourn - Meeting adjourned at approximately 8:45pm.