Email to Lindsay Pearson TMBC, 21/9/2014 responding to Crest/GEI Validation Report for contamination at Isles Quarry

Dear Lindsay,

Please find below and attached my observations on the GEI Remediation Validation Report for Isles Quarry West dated September 2014.

I am very aware that I could now be risking accusations of impugning the professional competence of the Consultants, Contractor or Developer, but I would be failing in my duty as an elected Borough and Parish Councillor if I did not challenge the clear anomalies in the report and its preceding narratives that are obvious even to a layperson:

- 1. The clear and several warnings by URS of actual and possible contamination in Area 1 were completely ignored, and only one single in-situ sample (BG1)was taken during the entire reprofiling exercise.
- 2. The contamination quarantine bund was not completed until long after that reprofiling had commenced.
- 3. There is a clear contradiction in the report between the statement that because of the weather area 1 material was moved en masse to the bund, and the several mentions of stockpiles elsewhere of clean material from area 1.
- 4. Despite the number of large objects removed near the surface, there seems to be no thought process linking this to the various borehole and piling refusals, an unquestioning acceptance that the landfill is pure recovered hassock from past quarrying.
- 5. There are 21 exceedences of Arsenic levels, dismissed as statistically irrelevant.
- 6. Whether or not HC levels across Area 1 exceeded limits, or that being insoluble a pathway to a receptor did not exist, or that they could be safely used on site below the capping is irrelevant under the remediation terms they should have been subjected to testing, identification, classification, and their disposition recorded.
- 7. There have been clear written and verbal attempts to mislead us.

The word "validate" means to ratify, to prove the truth. I firmly believe the truth to be closer to my report dated 23/8/2014, and this validation report reinforces the conclusions I reached then, rather than "validating" a successful contamination remediation. If we cannot place trust in the major elements of the process, what faith can we put in individual samples?

But that is historical, and cannot now be changed - we are where we are today, and I believe there are two imperatives to be adopted to salvage this development as a safe place to live.

- 1. There must be a comprehensive borehole sampling down to the original made ground level across Area 3 & 4 to ensure the material below is identified and deemed safe by Planners and the EA, and this must happen before building commences.
- 2. The lessons learned in Area 1 must command the development of Area 5, to ensure any contaminants as yet unsampled because of hardstandings, are comprehensively tested and cleared as safe, or removed.

Kind Regards	
Mike Taylor	

Thoughts occasioned by reading the Remediation Validation Report from GEI 20/9/2014

The URS remediation Strategy noted in its map "Localised Hotspots Hydrocarbons" 6 Test points where HC odour was noted to depths of up to 1.3 mtrs, and this map also shows the stockpiles of Hanson access road materials to the north of the identified hotspots, precluding early testing. URS recommendations were quite clear that these needed sampling when infrastructure was removed, and that simply did not happen.

URS also note "sitewide elevated levels of TPH/PAH". And yet GEI by their own admission (bottom page 11) admit only <u>one</u> sample (BG1) was taken in this area prior to or during excavation. Ms Schoer insists that BG2 was also taken in this area, but the Remediation map 002, and other reports (4.2) show that BG2 was taken on 22 Nov on the southern Hornet boundary during machinery excavations (22 Nov photos 27,28 &29). That is of concern because there clearly was evidence of hydrocarbon contamination that seems to have completely disappeared, and the desperate dearth of sampling in Area 1 before and during excavation/ reprofiling means that we now have no idea where that contamination went, what the levels or volumes or spread was, nor even what it was.

3.2.1 Area 1 URS required separation into "High" and "Low" stockpiles, followed by sampling. It is clear from the narrative that due to inclement weather in November (p12), this visual separation couldn't happen, and it was decided to move all the material to the Quarantine Bund. But in the next para on p13, they say "clean materials went to stockpile 1 in Area 3. Was the material moved en masse to quarantine, or was it separated first? Again in para 5.1 it is stated that Stockpile 1 consists of clean material from Areas 1&2. But it has already allegedly been moved to quarantine, because it couldn't be visually separated because of the weather.

GEI have previously insisted this bund was built by 28th November, photographic evidence suggests that this was still not completed by the 8th December, and GEI now admit the bund was not complete until "beginning December". I believe this is still optimistic, and that when the initial excavations began in November, material was stockpiled in Area3, and later spread out to "dry", presumably on 5th Dec as evidenced by earlier pictures. I note that the only pictures of the bund supplied are dated 18 June, so the assurance that GEI had pictures taken in mid-November was clearly designed to mislead us into believing the bund was available for material from Area1 as it was excavated, rather than a month later when excavations had largely finished

Para 5.1 really puzzles me- We have earlier been told that Stockpile 1 consisted of clean soil from Area 1 (4.1) and was stockpiled in Area 3 adjacent to the machinery hole where it was sampled (BG2) on 22 Nov, but we are also told on several occasions that Area 1 was not excavated or reprofiled until late December.

In 5.1 we are told that stockpile 1 is clean soil from reprofiling Area 1 & 2, but it now seems to have returned on its own to "the eastern part of Area1". During the whole of 5.1 "clean soil from Area 1" is referred to on several occasions, but para 4.1 tells us all the material from Area1, which could not be separated because of the weather, is already in the contamination bund en masse, albeit a contamination bund that wasn't built for another month.

Page 12 3rd para notes 500mm potential contamination identified by sight and odour were removed in "late November", and the bund, by GEI's own admission, wasn't built until "early December", where did that acknowledged contamination go. And where are the records of the testing that prompt the statement "ground conditions were confirmed acceptable by laboratory testing".

Samples BG 3,4 & 5 taken from Stockpile1 in Area 3 and tested as clean. But this stockpile cannot have existed at that date, because allegedly only minor excavations have taken place at that point from Area 1, and they all went to quarantine.

In this report (table 5) BG9,10 & 11 are shown as taken from housing plots 74,75 & 81, although Albert's report in August gives us no location, and shows all samples BG6 - 11 inclusive as contaminated, but 9&10 in this report seem to have remediated themselves.

I think that most of the above suggests that despite protestations to the contrary, major excavations began on 14th November, and reprofiling was virtually complete in Area 1 by 8th December.

Samples BG 16, 17, 18 & 19, marked in Albert's report as "not used", and the subject of an angry assertation by Birgit that they had been used and tested, have now reappeared in table 7, Curiously 16 & 17 have arsenic exceedences noted, but 18 and 19 noted as passed but removed. Table 7 does raise interesting queries for those without the requisite expertise. Why have so many samples been deemed as "passed but removed"? What does removed mean? the sample only? a wider area? Removed from site?

In 7.1 I note a statement that "the mean arsenic value for this group is 20.58 mg/kg". Now the sample tables record 21 samples, spread across the site and the imported materials, showing exceedences of the 32mg/kg limit. I am most interested in the branch of mathematics that can project a mean of 22.58 from a range of samples between 33 and 90. I am aware of the difference between a mean and an average value. I am sure it will be a great comfort to those people poisoned by arsenic in the future that this arsenic is natural and not anthropogenic, makes it sound almost healthy and organic. It's all anthropogenic - it wasn't there until excavations uncovered it again, or it was imported in the guise of clean fill, Thanet Sand. I would be most interested in being advised which arsenic compound is involved here, its solubility, and the likelihood of it migrating downwards into the aquifer.

Para 5.4 reports samples BG9,10 & 11 as compliant, but noted in Albert's report table as contaminated

Para 6.1 reports material represented by BG1,7,13,15,19 and 24 were removed from site. BG1 is the only surface sample taken in area 1, but we know that much of this material could not have been bunded because the bund had not been built, and is elsewhere reported as "clean material from Area 1" which went to various stockpiles and was reused for surcharging and eventual fill. If the statement in 6.1 is true, and the materials represented by BG1 were removed from site, that infers all the arisings from the reprofiling in Area 1, where did the material in Stockpile 1 or the contamination bund come from?

P19 5.3 line 6 typo 115,116,116,118, should read 115,116,117,118

Sampling Anomalies I would like to know where BG 29, 40, 71, 94-98, 109 152 & 135 went to. What happened to sample BGTPMT1? Why were BG16-19 marked as unused in the August Observation report, and yet appear in this report as sampled on 28 Feb?

Conclusion.

As the various reports and information releases have been released, a clear narrative has developed, and each additional piece of information reinforces it.

Possibly because of the bad weather, there was a distinct lack of sampling on the surface in Area 1. Again, because of the weather, this material was then removed without sampling and without any audit trail of where it went or what it was

I suspect that the intention to build the quarantine bund in time for the start of reprofiling was attempted in earnest, but weather and breakdowns aggravated matters.

Had the concerns of BGPC been heeded at the very start, if a planning permissions for remediation and development had been kept separate as per Government Planning guidelines, if weather had not caused such serious delays, no doubt a different narrative would have evolved. I am particularly angry that attempts have been made to mislead us. It may well be that any contaminants that should have been removed have undergone multiple movements and machine working to the point where they are now so thoroughly diluted that they would be deemed safe. I do not believe that to be an acceptable process.

But we are where we are today, and I believe there are two imperatives to be adopted to salvage this development as a safe place to live.

- 1. There must be a comprehensive borehole sampling down to the original made ground level across Area 3 & 4 to ensure the material below is identified and deemed safe by Planners and the EA, and this must happen before building commences.
- 2. The lessons learned in Area 1 must command the development of Area 5, to ensure any contaminants as yet unsampled because of hardstandings, are comprehensively tested and cleared as safe, or removed.