

Questions from Havelock North Water Contamination Consultation Night

August 30 and 31, 2016. <https://youtu.be/UI01EkgZYx0> <https://youtu.be/n96IJAbXs3s>

| | QUESTION | RESPONDENT | RESPONSE |
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| 1. | Considering aged demographic, going forward what is communication strategy to ensure that information gets out to people that do not have access to technology/social media? | HBDHB HDC | Lessons learned from this event. Involve Age Concern in learnings. Social Media, and radio were used, as well as new technologies (app/text)- also need to look at phone calls and traditional ways of communication. Need to make sure better penetration into community |
| 2. | Are better water screening tests available? | HDC | Drinking water standards sets out the frequency of sampling and has criteria to ensure sampled on random days across a number of locations in the network. When an indicator is given a second sample is taken, however 24 hours is required before results can come back – a process which cannot be sped up. |
| 3. | Rivers, streams, soils to be cleaned up. | HBRC | No dairy farms within the area, trying to look at what the cause is. Plan for Tukituki river is underway. |
| 4. | Are the wells deep enough? | HDC | The bores are considered shallow 11-15 metres. There is a ceiling which separates the bore from ground water. Currently investigating whether ground water has made its way into the casing. The depth of the bores will be part of the investigation. An exploratory bore was tested down to 145metres, but no layers were good water bearing layers. |

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| 5. | Why would you have 3 bores within 200 metres of each other, when there was a contamination issue? | HDC | Location of bores are historical – first 2 bores over 30 years ago. 3 rd bore was 16 years ago. |
| 6. | Are you planning to diversify where Havelock North draws water from? | HDC | Medium to long term look at where we can source water from. With HBRC looking to reduce load in summer, also sourcing more water from Hastings bores – pumping with alternative infrastructure – all part of planning, we have capacity in terms of volume to extract from Hastings bore sites – ensure resilient infrastructure to get it from Hastings to Havelock North. Heretaunga Aquifer is Hastings, Havelock North is Te Mata aquifer. |
| 7. | Does this enquiry go back to looking at land use? | HBRC | Draft terms of reference in two parts. Will look at event, and second part is looking at broader focus, potential implications nationally, land use, regulation for those types of questions to be asked. |
| 8. | Why no criminal or civil liability proceedings in enquiry? | HDC | Because agencies have powers to investigate those courses of action outside the Govt. enquiry – HDC have powers under health act/HBRC have powers under RMA to investigate this matter – and there will be other agencies with criminal and other courses of action to pursue under the law. The enquiry operates on top of the existing powers that exist. |
| 9. | Have you consulted with police? Criminal contamination? | HDC | There have been discussion with the police, there has been no evidence so far of that sort of activity. We don't believe it's the case because the contamination has continued, it is unlikely under surveillance that has been going on that contamination would be able to continue. |
| 10. | Have you got an education programme happening for children scared to drink water? | HDC | If something we can help with, as part of recovery happy to do it. |

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| 11. | If Brookvale bores close down and long term requirement means new bores are required – has the science been done to indicate there’s enough supply? | HBRC | Greater Heretaunga plan change – extensive programme of science to build ground water model that will be used for that purpose to look at scenarios and set allocations and limits – in the middle of that process and science work is happening. |
| 12. | Knowing that HBRC is the owners of the aquifers and that they have granted resource consent to export water, how are we to trust the decisions made by your services? | HBRC | A matter that has been on public record – concern been expressed by community. Will be covered as part of plan change. |
| 13. | As a result of this event will there be a rates rise? | HDC | Not our intention, we need to look at infrastructure planning for the future. We will be meeting costs within budgets. |
| 14. | Would it not be prudent to put a plug on end of closed off taps at the bores. | HDC | The tap is for sampling purposes only. This will be rectified straight away. Water should only be used for sampling purposes. |
| 15. | Will we know what’s happening with sampling going forward regarding improving or not? | HDC | With the bores off there will be no further sampling. The valves are switched off, HDC will be carrying out tests only as part of the investigation. |
| 16. | Can we have a system where schools/playcentres/medical centres/rest homes communicate with one another? | HBDHB HDC | Main problem appeared on Friday not Weds but going forward routine sharing would be a good thing. Look at surveillance systems that are currently in place. Testing is now carried out daily to minimise risk |
| 17. | Why didn’t people in Havelock North get compensated more? | HDC | The councillors decided as a matter of good faith to give next instalment of water rates off, which cost ratepayers \$300K. |
| 18. | Does HDC have primary response (incident response) teams? | HDC | HDC has response capability which were mobilised for welfare purposes, civil defence and red cross. Perhaps something that can be improved through media and social media. |

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| 19. | Business require unchlorinated water for their work, will HDC help? | HDC | The drinking water standards is normal practice, the approach that HDC takes is that public health overrides the individual needs of the business. |
| 20. | What technology are you looking at to ensure safe water? | HDC | We are looking at 'treatment at source' but this does not have a failsafe that chlorination has. Need to have discussion with community about second barrier moving forward. |
| 21. | Why wasn't Section 258 of health act and/or sections 31-33 of coroners act invoked in regards to the 2 deaths? | HBDHB | Both cases referred to were discussed to with the coroner, and the decision was made that only one death would be referred to coroner. |
| 22. | Drinking water standards? | HDC | Regulatory supply and standards will be looked at enquiry process. |
| 23. | Is \$100K enough for council to provide to business< | HDC | Financial assistance to business at risk of being affected terminally. Compensation and legal liability are separate and will require cause to be identified. |
| 24. | Could the discharge of ferret chloride possibly causing the illness? | HBDHB HBRC | In terms of illness, it is due to campylobacter - unlikely to be chemical related. Unable to answer – do not know or understand |
| 25. | Has the power cut been factored into the event? | HDC | Yes, we are looking into all operational records to see if there was an effect. |
| 26. | Why has HBRC pre-empted the attorney generals enquiry announcing a potential prosecution against the HDC when we would like to see central/regional/district council work together as a team? | HBRC | Separate things, govt enquiry is looking at the event and potential ramifications nationally. HBRC has statutory responsibility under resource management act. |

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| 27. | Will renters receive any compensation? | HDC | No perfect mechanism for compensating renters, can only encourage land lords to pass on compensation to tenants. |
| 28. | Could WINZ set up a temporary office in Havelock North? | HDC | WINZ have a presence at Havelock North community centre. |
| 29. | Reeve Drive/Ritchie place area there are 3 sections where water is coming up into the road – when will it be looked at? | HDC | We rely on eyes and ears in the community to report faults and failures to us. HDC has a programme in terms of repairing leaks. Some are springs, and are not related to water supply at all. HDC can undertake further investigations but not always connected to water mains. |
| 30. | Why was nothing done in 2008 when the regional council said it should be done? | HDC | HDC and HBRC agreed to take strategic approach to moving away from Brookvale bores as primary source or reducing take which has been happening in background. |
| 31. | Where will the water come from if further 10,600 homes are supplied? | HDC | Hastings supply has sufficient capacity to provide water to Hastings and Havelock if we moved away from Brookvale bores. |
| 32. | What measure will be taken to eliminate biofilms that are not responsive to chloride? | HDC | Biofilms relate to surface fed water, the water from our aquifers is largely organic free – so biofilms in the network are in lower flow or dead end streets.. very thin film, we have regular flushing programme to manage and maintain biofilm. Flushing programme keeps those at bay. |
| 33. | Do you test for campylobacter in Tukituki? | HBRC | No we do not typically test for campylobacter, Tukituki water comes through ground that shows zero e-coli presence. |
| 34. | Why was the bore shut down in 2015? What were results? | HDC | In regards to bore 3, e-coli was present but after chlorination this disappeared. Regarding bores 1 and 2 investigations are ongoing as the e-coli continues to be present. |

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| 35. | Would a significant rain event effect the Tukituki catchment regarding flushing the wastewater ponds in Waipukurau | HBRC | Water feeds Te Mata aquifer, but takes months/years/decades to move through the soil and into the aquifer – very unlikely to have come from Tukituki river. |
| 36. | Is it possible that cracks in the ground from droughts caused e-coli to travel from Tuki tuki to aquifer. | HBRC | The crack would have to be very wide and there is no evidence that a source extends 2.5kms |
| 37. | Has there been disturbance in riverbed | HBRC | The aquifer is not disturbed by the river, the deeper the water goes the more compressed the sediments are which slows the water flow. |
| 38. | Could kohanga reo please be added to database | HDC | Lessons have been learned, channels were missed, systems will be improved. |
| 39. | Why were the avian samples not looked at | HDC | Evidence says that it is unlikely to have genome from avian sources. |
| 40. | Why did it take so long for DHB to action on the large numbers of red flags, why wasn't it seen as being urgent. Is information not shared? | HBDHB | There weren't a lot of red flags, found out more by phoning the schools. Nothing extraordinary was happening till late Friday and Saturday. When we first thought something was happening a meeting with council was called. At present there is no information sharing. |
| 41. | How do you explain the presence of new water at number 3 bore. | HBRC | Using dye tracing to check, |
| 42. | Are you looking at longterm solutions regarding the water? Chlorine leading to cancer/purchasing a UV filter as opposed to borrow. | HDC | There are many options, and decisions will be canvassed through consultation with the public. |