IN THE ENVIRONMENT COURT

ENV-2009-304-000521

AUCKLAND

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of appeals under section 120 of the Act and an application for

direct referral under section 87G of the Act

BETWEEN FLETCHER CONCRETE AND INFRASTRUCTURE

LIMITED

Appellant (ENV-2009-AKL-000497; ENV-2010-AKL-00009)

AND ENVIROWASTE SERVICES LTD

Appellant (ENV-2009-AKL-000500; ENV-2010-AKL-000501)

AND AUCKLAND REGIONAL COUNICL

Respondent (ENV-2009-AKL-000497; ENV-2009-AKL-000501)

AND AUCKLAND CITY COUNCIL

Respondent (ENV-2009-AKL-000500; ENV-2010-AKL-00009)

SUBMISSION OF ELIZABETH MARGARET WALKER ON BEHALF OF THE ST LUKES ENVIRONMENTAL PROTECTION SOCIETY (INC)

11 March 2011

Introduction

1. Experience and interaction with STEPS

My name is Elizabeth Margaret Walker. I reside at 24 Fergusson Ave, Mt Albert where I have resided for 7 years. In my professional role I lead the Asia Pacific Japan Project Management Office for Teradata Corporation. However my submission is given entirely in my private capacity as Deputy Chair and member of the Committee of the St Lukes Environmental Protection Society (Inc) (STEPS). The experience that I draw upon in presenting this submission is based largely on the following:-

- Membership of STEPS and maintenance of our membership and supporters database that currently lists approximately 120 adults, most of whom reside in the Mt Albert, Sandringham, and St Lukes areas
- Regular attendance at STEPS Committee meetings and at STEPS Annual General Meetings.
- Attendance at various community and Council meetings related to the Three Kings
 Quarry, including meetings with local board members and councillors.
- The evidence circulated to parties prior to the convening of the Court Hearing. I have not read all of the technical evidence, but I have read the circulated evidence from Professor Lewis, Mr Widdowson, Mr Harding, Mr Hodges and Mr Laws.
- Attendance at the joint ARC/ACC hearing on the consents sought by Winstone Aggregates to fill the quarry, which was held at the end of 2009. I presented a submission to the joint tribunal. The decisions from that hearing are now the subject of the appeals and the S274 notices of STEPS. STEPS is also as a party to the Direct Referral of the subsequent application to discharge contaminants which has been forwarded by the ARC directly to the Court.

2. Summary of my Submission

In this submission I will be providing information for the Court on the following matters:-

• The background to the involvement of STEPS in this case, and the nature of the involvement of STEPS with the Three Kings-Meola-Western Springs Aquifer

- which underlies the Three Kings Quarry Site. This involvement has now extended over about 6 years.
- STEPS' concern about the filling proposal that was approved following the initial ACC/ARC hearing. I believe that the concerns expressed by STEPS are shared by our wider membership
- The nature of the public consultation undertaken for this project, and the lack of clarity provided for the community concerning the nature of the fill proposed by the applicant for deposition in the quarry site
- The need to protect the aquifer, streams, lakes and wetlands on the one hand, and on the other, the need to seek end use options which will benefit the people of Auckland and New Zealand, as well as the existing and future environment.

3. STEPS

- 3.1 Our Society (STEPS) was established and incorporated in 2005. The major focus of STEPS is the Meola Creek, its surrounding wetlands and lakes and the underlying aquifer. Three of our particular goals are:
 - > To enhance and improve the Kerr Taylor Reserve as an open space for use by the people of the St Lukes-Mt Albert area, through working with the Community Board, the Auckland City Council, schools and other groups.
 - > To see the quality of the water in Meola Creek improved, and the public health, environmental and cultural values increased, through working to ensure that the Auckland Council and Watercare Services improve the water quality and upgrade inadequate drainage and sewerage systems.
 - > To maintain or expand the extent of the existing open spaces and walkways in the St Lukes area, through working with all groups who have an interest in the area.

In addition STEPS is well on our way to achieving our vision for a clean, rehabilitated Meola Creek – links to Chamberlain Park, Pt Chev- before the creek enters Auckland Harbour at the protected Te Tokaroa Meola Reef. We are advocating for Watercare Services to "Daylight" the upper section of Meola Creek, and we envisage in the future a "Mountain to Harbour walkway" between Owairaka Mt Albert and Te Tokaroa Meola Reef, which will highlight some of the key geological and hydrological features of Auckland's cones, creeks and springs.

- 3.2 In the past 6 years, STEPS has established several key partnerships and advocated on behalf of the Meola Creek and its community and this has been done, many times and in many diverse forums including:
 - ➤ Albert Eden Local Board (jointly with SEPG)
 - > Auckland City Council Development Committee
 - ➤ Eden Albert Community Board
 - Submission on Proposal for National Policy Statement for Freshwater Management (in conjunction with Friends of Oakley Creek) in 2009
 - Submission on the local government (Auckland Council) Bill in 2009
 - Submission on the Auckland City 10 Year Plan in 2006
 - More recent participation in the Auckland City District Plan update process

STEPS has received various Community Awards from Wai Care and from Eden Albert Community Board.

- 3.3 In conjunction with Te Kura Kaupapa O Nga Maungarongo, STEPS appealed Housing Corporation of New Zealand resource consent in Haverstock Rd and gained agreement from HNZC to undertake creek side planting on both their own land and that of DOC next to the overland flow path below the ESR building.
- 3.4 In conjunction with St Lukes gardens Apartments Body Corporate, STEPS succeeded in gaining funding for improvements in drainage and various rain gardens and swales next to Meola Creek at Lyon Ave.
- 3.5 Watercare Services has recognised STEPS as a key stakeholder in Meola catchment and regularly provides us with updates on the progress of planning for their Central Interceptor project. They also attend our AGM.
- 3.6 STEPS is very active in the community and in our short life we have successfully planted the streamside along the upper Meola catchment in the area known as "Roy Clements Treeway" between Haverstock Rd Sandringham and Alberton Ave Mt Albert. (Refer Map and aerial photo in Appendix 1).
 - This planting has been done by STEPS members and local individuals from our community in conjunction with the Auckland City Council, Metrowater, various

community groups including Rasheed Memorial Trust, and Bhaska, and Wai Care.

Moreover STEPS has replanted a wetland beside the Roy Clements Treeway. We believe that in granting us the opportunity to undertake this restoration, the Mt Albert Grammar School was also recognising STEPS' contribution to the local community. Financial support was also provided by ARC EIF, Teradata and Morphum Environmental.

4 Three Kings-Meola-Western Springs Aquifer and Creeks.

- 4.1 Due to Auckland's unusual geology and the presence of lava flows, Meola creek is perched above the aquifer and its floor largely is impermeable. Nevertheless, the creek is fed by springs and seepages from the surrounding aquifer, although the exact means by which this occurs and the precise points at which transfer of water between the two systems occurs is not entirely clear. The middle to lower reaches have high water clarity due to aquifer-fed spring flow through these areas. There is a large area of potential inanga spawning habitat at the stream mouth which borders the western side of protected Meola Reef in the Waitemata Harbour
- 4.2 Meola Creek and Motions Creek are inter-related stream systems, connected via Western Springs lake (where the aquifer surfaces). Motions Creek emerges on the East of Meola Reef Baseflow in the lower reaches of Motions creek comes from the Western Springs Lake, and a very rare aquatic moss (Fissidens berteroi) is found at several locations along the creek, including in Western Springs. Both creeks provide a habitat for eels, pukeko, ducks, grey warbler, tui, heron and spur wing plover. After heavy rains however, excrement, heavy metal and petro-chemical pollutants join the biodiversity
- 4.3 As the largest catchment on the isthmus, Meola Creek also suffers from being the conduit for the highest amount of combined storm water overflows and raw sewage of any creek on the isthmus ito the Waitemata Harbour (Watercare advises estimated overflows of 1,325,000m³ (735 OSP)). The most degraded portion in the upper catchment is near Roy Clements Treeway just behind Mt Albert Grammar School where Watercare Services overflows occur at both Lyon Ave and nearby Haverstock Rd.. This creek has very low base flows, especially in summer. However as noted

above the lower part of the creek is regarded as having higher ecological value because it is spring fed.

Every development including this proposal run a high risk of burdening an already overburdened Meola stream system; for example by removing more water from base flows; or by adding pollutants to either the creek or the aquifer.

5. STEPS Wetland Restoration project and the Aquifer.

- 5.1 The wetland restoration depends on a spring from the Meola aquifer, and was facilitated by the Roy Clements Treeway (RCT) Boardwalk project implemented by Metrowater (with support from Watercare Services) in response to STEPS concerns. This project was an innovative solution which in the short term mitigated some immediate public health issues from the overflowing creek, and provides safe pedestrian access during periods of flooding for about 600 metres. A culvert was "daylighted" and a rock cascading weir provided by Metrowater to improve the function and aesthetic quality of the wetland. Informally we are advised the budget was several hundred thousand dollars.
- 5.2 STEPS and other community groups are all very concerned at the potential for contamination of the Western Springs-Meola-Three Kings aquifer. I am not qualified to comment on the technical aspects of the potential for this to occur, but Professor Lewis comments on the consequences in her evidence.

STEPS believes that protection of the aquifer should be a key community objective. We have raised awareness of this aspect of the proposal on the grounds of public interest generally and in the interests of Auckland citizens in particular. The Western Springs-Meola-Three Kings.aquifer is extensive (approx 25 sq km) and we believe that this generation should not do anything that has the potential to compromise the aquifer for our children and future generations. We understand that the existing water is of high quality and that it has also been identified as a future source of potable water. I believe that placing anything other than 'clean fill' at its head will risk leaving future generations with a very undesirable legacy and that there will be no appropriate nor practical opportunity to address any contamination created should the site be fully developed for other uses and therefore the fill become inaccessible.

6. STEPS Views on the Winstone Proposal

- 6.1 As will become evident below, and from the evidence presented by our expert witness, STEPS has major concerns that the Winstones proposal currently agreed by the ACC and ARC carries the risk of contamination of the Western Springs-Meola-Three Kings aquifer which underlies the Meola Catchment., This concern is based on our view that should pumping cease and the fill resaturate, the current water will be once again returned into the Meola catchment leading to a very significant risk that additional pollutants will seep through the aquifer over an extended period.
- 6.2 STEPS realises that Winstone's holds a current consent to withdraw this water which is valid until 2030. At the time this consent was obtained, STEPS did not appreciate the impact that withdrawal of this water would have on the Meola creek (particularly low base flow). I believe that the area of dewatering at the head of the catchment removes about 2500 cubic metres per day and some fraction of this water would be expected to have flowed originally down Meola creek. Our members have noticed a decline in creek flows, but I am unaware of any records that have been kept that might allow the precise reduction to be quantified.
- 6.3 When the current dewatering consent expires, STEPS plans to seek a return of some or all of the flow to the Meola catchment, Meola creek and the aquifer. It is for this reason that we are concerned that the applicant may be permitted to place contaminated fill at Three Kings and that leachate from that fill would have the potential to deliver contaminants into the aquifer when pumping ceases. I do not believe that it would be reasonable for the Court to approve a scheme that would have the effect of removing that flow permanently from the catchment. The stream does desperately need its fair share of water and that water should not be contaminated and thus have the potential to cause adverse effects on the stream biota. The evidence of Professor Lewis highlights this problem.
- 6.4 STEPS would like to see the quarry site be allowed to refill and become a lake which would have inherent future value to the local and wider Auckland community
- 6.5 Consequently, when the supplementary application was lodged to discharge contaminants, STEPS decided also to become a party to the Direct Referral. At this

- stage it became evident to our group that the discharge of contaminants would have many undesirable consequences and that should these reach the aquifer, the discharge would generate adverse effects on the environment.
- 6.6 STEPS is committed to exploring planning solutions based on the best available technical expertise and community engagement. We believe that any filling of the quarry (should this be approved by the Court) must be carried out to a high environmental standard with negligible impact upon the environmental integrity of the surrounding area and the underlying aquifer.
- 6.7 STEPS's concerns therefore can be summarised as:-
 - As indicated above, Winstones already have a resource consent to remove water from the Three Kings-Meola-Western Springs Aquifer. This "pumping" or "dewatering" and rerouting of water over the hill to a different catchment contributes to some degree to the problematic low base flows of Meola Creek, as water is no longer able to breach the crater and spill into the Meola Catchment as it formerly did. STEPS might reasonably expect that this dewatering will cease at some time in the future and in that case would expect Meola Creek to benefit from regaining its original natural water source.
 - When dewatering does cease, STEPS expects that the water flowing back into the Meola Catchment will be of high quality.
 - Winstones' 2009 application sought approval to deposit "cleanfill", whereas the
 second (2010) application seeks a consent to approve discharges which will be
 derived from material that does not meet the Proposed Auckland Regional Plan:
 Air Land and Water (ARPALW). STEPS is concerned that the definition of
 'clean fill' in the 2010 application is not properly in accord with that specified in
 the ARPALW.
 - Taken together STEPS believes that, in its present form, the applicant's proposal
 will have adverse effects on the environment and indeed runs the risk of creating
 a permanently contaminated site that leaches contaminants into the ground for
 many years.

In summary, our current membership continues to be concerned about the future of the quarry site and its impact on our community, the creek and the aquifer. I form this

judgement from the various responses we have received to Society communications, conversations with members of the local community, and the positive response we receive to our various submissions.

7 Conclusions

- 7.1 STEPS looks forward to Meola Creek base flows being replenished when dewatering ceases. STEPS is seriously concerned at the future threat to our water of any fill operation of a standard which does not meet ARPALW clean fill standards.
- 7.2 Of particular concern to STEPS, and also I believe to the wider community, is the need to keep end use options genuinely open and to deposit only material that meets the definition of 'clean fill' that falls within the letter and spirit of the definition contained in the ARPALW. Of prime importance is the need to protect the underlying aquifer from contamination.
- 7.3 In summary STEPS believes that the environmental impacts of the proposed filling that would be generated by the activities agreed between the applicant and the respondent Councils will carry with them a significant and unnecessary risk that the aquifer will be at risk of becoming contaminated when pumping ceases. Therefore we believe that the consents sought should be declined by the Court or, alternatively, that they should be substantially modified in recognition of the evidence presented by our expert witness and those appearing for the appellant and SEPG.

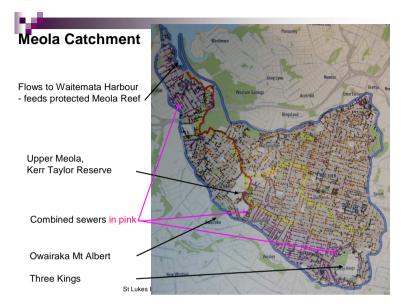
Elizabeth Margaret Walker,

Deputy Chair,

St Lukes Environmental Protection Society (Inc),

11 March 2011

Appendix 1



Upper Meola Creek – between Westfield St Lukes Mall and "DSIR" on foothills of Owairaka/ Mt Albert



Note several Status keeps Earneiro remember de Protections & Occinetyri (& Triss P. 6) to

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