

Exhibit B.15a

Testimony of Laulani Teale, MPH
10/5/16

My name is Laulani Teale. I am a Kanaka Maoli traditional practitioner and advanced student of many customary practices, such as laau lapaau and hooponopono. I also hold a Master's degree in Public Health, and have worked in peacemaking and community health development professionally for 16 years. Much of my work focuses on health issues affecting Kanaka Maoli. My mentor in this area was Dr. Richard Kekuni Blaisdell, M.D., with whom I was very close from 1992 until his death this past year.

Earth/Sky/Human Alignments

I have studied with many other kupuna as well. My first strong connection to Mauna Kea came through mentorship by Kamakahukilani Von Oelhoffen, a traditional Kanaka Maoli astronomer from a long navigational lineage who died in 1999, strongly connected to Mauna Kea, and a close student/assistant to Kupuna Pilahi Paki.

It was through Kamakahukilani, an early member of Mauna Kea Anaina Hou, that I originally learned of that organization, of which I am a longtime member. Mauna Kea was her favorite site for observation and worship, and she taught about it a lot. Her focus was on the importance of alignments – between stars, between Earth landmarks and stars, between landmarks and other landmarks, and between people and all of the above. She also had a specific teaching about sound in relation to air/breath, water, foundations, and the individual person.

She taught that alignments in the heavens are reflected in alignments on earth, and that these directly relate to alignments within and between human beings. Our relationships to one another, to the Earth, to pono within ourselves are all affected by natural alignments that are the product of Wakea and Papa relating to one another in the context of creation. She used strings, hands, and her wooden staff to measure these alignments. Human interference with this great act of continual alignment is very harmful. We can only relate to it as part of this great creation.

Laa Lapaau

My laau lapaau studies have been under Papa Henry Allen Auwae, a master healer who was recognized broadly (by the National Cancer Institute and others) for his great knowledge and wisdom. He was based on Hawaii Island and strongly connected to Mauna Kea. Following basic medicinal practices I learned from my own kupuna, I studied with Papa Auwae (who I met at the hospital my grandmother was in, where he came to her room to help her recover) until his death December 2000.

I continue to work and study with my fellow students and am an active member of Na Haumana Laau Lapaau o Papa Auwae, our haumana (student) organization. Many of those who studied with me are strongly connected to Mauna Kea, as Papa Auwae was. Some gather specific herbs and waters from Mauna Kea. We were taught that some of these are life-saving and extremely sacred. Their sanctity, and therefore their healing power, depends upon the wellness of the land that holds them.

The integrity of the mountain as a whole is very important to the waters that are in it and on it, because those waters are protected by the mountain as a whole. Their ability to heal comes from the protection of that sanctity, so it is important that no harm come to any part of the mountain. The same is true of the herbal medicines that are gathered.

Different areas – North, East, South, and West – have different orientations and different weather patterns, which make for different medicinal qualities that may be needed by specific practitioners, or for specific patients or illnesses. Like waters, herbs are very sensitive, particularly in sensitive areas such as the slopes of Mauna Kea. Herbs are affected by human activity for miles around, above and below. Papa Auwae specifically taught the haumana that telescope development causes harm to Mauna Kea's medicines.

In the case of Mauna Kea, the Northern side of the mountain is very important. The alpine and subalpine regions of this northern area are important for gathering. Part of the reason for this is that they are relatively untouched; the air and rains and land are very clean and free from a lot of human activity. This is important medicinally. The patterns of winds and rain are also different from any other place on earth, which means that the medicines of that area are different from all others.

When I studied with Papa Auwae, he was extremely meticulous about our gathering practices, and very sensitive to shifts in the relationship between people as a whole and specific plants. Several times, he suddenly stopped us from gathering a specific herb that he had previously been using regularly. We were never told why, but came to understand that the relationship between that herb and people had shifted in such a way that had done some harm to its healing properties, at least for certain ailments.

Because of his emphasis on spirituality (which is essentially the foundation of all genuine cultural practices), energy shifts are extremely important and not to be overlooked. Destruction of sacred land was certainly something he was concerned about. It affects everything – people, plants, waters, medicines, prayers and much more.

Pollution is also a serious concern. The healing waters of Mauna Kea and its surrounding areas are sourced deep within the mountain. Placing a 5,000-gallon hazardous chemical storage tank directly above such a sacred source is extremely harmful to all healers who practice in the area or surrounding area. The level of digging and disturbance required to construct an 18-story structure on a fragile mountain could also cause harm to waters and plants for a great area, as

well as to prayers. Plants, waters, and minerals are all used in laau lapaau, and all are affected by destruction of this magnitude. All are affected not only by what is seen and measurable, but also what is unseen and unmeasurable.

Laa lapaau patients must put all of their faith into the process of healing, as must all laau lapaau practitioners. There can be no doubt. Healing is extremely serious. What if a practitioner is not certain whether a water or mineral source or plant is affected by the energies and possible contamination or not? Unless we are able to determine for certain that it has not been affected, that plant or water source or mineral cannot be used for intensive healing by a genuine healer. This could be devastating for the practice of laau lapaau.

I also need to include some additional specific thoughts given to me by Haunani Kalama, leader of Papa Auwae's haumana on Hawaii Island. She is a well-studied practitioner with a strong relationship to Mauna Kea, as well as a 40 year veteran in health education and an independent researcher. I quote her thoughts here:

- Islands, by their very nature are *contained ecological systems*, which argues to the point of what is lost, is permanent, unless we take action and create intervention conducive to retaining and restoring the health of this ecological system.
- Dry land and wetland forests found on many islands hold *rare species* that are unique to our island environments and can be found *nowhere else in the world*. For example: of Hawaii's endangered species, 87% of endemic plants face threats of *extinction*... 87% is no small number, when considering biodiversity and supporting its retention. Any kind of direct or indirect increase in stressors only raises that number.
- Deoxygenation, as a result of climate change and other anthropogenic stressors mostly affects the marine environment at the local level nevertheless economic and socio-economic impacts will impair the human society at the regional and global level. Though this statement concerns the marine environment - the water from the mountain feeds directly in to the fragile ecology of the shoreline with 60% of the mountain's height underwater. The reason we survived well over 1500 years on this land, is because of our fierce protection of that balance. And imbalance has serious economic and socio-economic impacts.
- Mountain to the sea and all the ecological life in between are directly affected by activities on the mauna - going back to the original statement 'islands are contained ecological systems' - contained in the ecological world means there is no where else to go.

Hooponopono

In addition to my studies in my family and Papa Auwae, I was also trained in hooponopono and have over a decade of hands-on experience in this practice of cultural problem resolution. I received training from Auntie Malia Craver while she was alive, and worked closely with Kupuna Lynette and Kupuna Richard Paglinawan when I operated the NHBA/NHLC Peacemaking Project out of the Native Hawaiian Legal Corporation from 2007 to 2011, to which they were our project's Kupuna Advisors.

I continue to operate a cultural peacemaking project, the Hoopae Pono Peace Project, under Seventh Generation Fund for Indigenous Peoples. We work with families, youth, communities and organizations to build pono solutions using cultural methods and/or mainstream peace methods (I also have graduate-level "Western" training through the Spark Matsunaga Peace Institute at the University of Hawaii, and the Communication Department, where I wrote my Senior Thesis on Hooponopono in 1991, as well as many years of experience in mediation, Ohana Conferencing, group facilitation, flipchart recording, etc.).

Hoopae Pono Peace Project helped to facilitate or assist in several peaceful community empowerment actions surrounding Mauna Kea. We were involved in negotiations, cultural conflict resolution, organizing supporters, and more. A petition we helped to launch gathered 66,655 signatures for the protection of Mauna Kea from TMT. Upon request, we also assisted with the filing of 125 people's formal complaints of desecration (a criminal act according to HRS 7-11-1107) with the Department of Land and Natural Resources. This was only one part of the total number filed. To our knowledge, none of these complaints was addressed, or even responded to. This is not good for peace in the community.

As a hooponopono practitioner I am very concerned about the effects this project is already having on peace in our community, which would only be worsened if it were built. The issue is extremely divisive.

The root of hooponopono is pono. One thing about pono is that it never changes. It is therefore impossible to build a lasting false or constructed consensus, as might sometimes be possible in colonial cultures, and erroneous to think that cultural practitioners will ever "adapt" and eventually accept something that is known to them to be hewa (wrong) as pono (right), no matter how much time has passed, or how many benefits are offered. This is just not the way deeply rooted Hawaiian cultural practice works.

Therefore, if some in our community support TMT or are dependent upon monies from it, deep divisions are to be expected. These would continue as long as TMT were to exist in any form. Hooponopono could not heal these divisions until the problem was stopped (TMT stopped/removed), because pono is tied intrinsically to a sense of oiaio (deep truth) that cannot change a wrong, once that wrong is known as such. No other peace method could do so, either.

This tenacious aspect of culture is exemplified by Hawaii's sovereignty movement, which has never showed any signs of waning, no matter the odds or the amount of time passed. A famous song, "Kaulana na Pua", said in 1893 that the people would rather eat stones than give up what is right. The song is still being sung (and lived) today. It is a fundamental tenet of the original culture of Hawaii that when people understand something to be hewa (wrong) in their naau (gut), the only way to achieve pono (rightful balance) is to kue (fight in opposition). For this reason, as an expert in cultural conflict and its cultural resolution, I can definitively say that there is simply no means to real peace as long as TMT continues to threaten or harm Mauna Kea. As it is, much healing will already be needed. If TMT were to be built, my assessment is that the pilikia (problem) would probably take generations to resolve. This is a terrible burden of conflict for the community to carry.

Public Health

My Master's Degree studies in Public Health centered on the health of Kanaka Maoli, the native people of Hawaii. During my studies, I worked with Dr. Kekuni Blaisdell, my longtime mentor, in hands-on community situations involving the relationship of people to the land, and the health effects thereof. Since that time, I have worked on many health-related issues in the community.

Most recently, I completed the building of a website (olakanaka.org) dedicated to community health issues through Papa Ola Lokahi and the National Library of Medicine. Part of that work was to collect community voices on health. Interviewees included Pele Hanoa, Skippy Ioane, Puhipau, Richard and Lynette Paglinawan, Kaliko Kanaele, Palikapu Dedman, Ku Ching, Keomailani Von Gogh, the Paikuli-Stride Ohana, the Compehos Ohana, the Flores-Case Ohana, Kauhi Maunakea-Forth, Attwood Makaanani, and several others. Almost everyone emphasizes the importance of the relationship between land and people as a crucial component of health. Another aspect of health that I worked on for the website (and around which I have done much work in the community) was the health of warriors, including both war veterans and activists. This is part of a broader picture of trauma within the Hawaiian culture.

There is no doubt that the impending threat to the sanctity of Mauna Kea is already having severe trauma-related impacts on the community, particularly on those tied deeply to the well-being of such a sacred place, and especially the many cultural practitioners to whom protection of Mauna Kea is of utmost importance, due to their family ties, cultural practices, and/or other inextricable bonds. Amongst these, there has been a known surge of heart attacks, stroke and other impacts that can be directly linked to the stress brought on by the impending threat of telescope development, and the requirement to fight it even at the cost of one's health. It is well-known that the bond between indigenous peoples and their land is so strong that this is truly not a choice, amongst those with strong aloha aina (love for land). There is no option NOT to fight.

Within the broader community, there is also a general heightening of stress brought on by the TMT issue. This is significant, considering the relative fragility and existing cumulative stress burden on the native population. Stress-affected conditions such as heart disease and cancers are already extremely high amongst Kanaka Maoli. Adding to this even a little is significant; it is like the rising oceanic temperatures due to global warming. Even a few degrees makes a big difference when a system, community or individual is already fragile and/or overburdened.

Current Kakoo Position

Currently, I am Kakoo (cultural apprentice) to Liko Martin, a Haku Mele (traditional composer) who uses sound for healing and cultural perpetuation. He is also a general and well-respected practitioner of malama aina/aloha aina (care for/love of land) with great traditional expertise in stone work. When we recently visited the proposed site of TMT (after he, an elder, was made to walk to the site by a University of Hawaii ranger), he immediately identified a traditional observation platform within the proposed footprint. This was visible to everyone, and directly aligned to the "Ring of Shrines" noted at that altitude. He demonstrated the use of this platform to all who were present (Clarence Ku Ching, Candace Fujikane, Puanani Ikeda, Leinaala Sleighton and Mehana Kihoi). It was easy to see, and very clear, offering a unique vantage point. He bonded with the platform and area, as those strong in the practice of aloha aina often do. This site would be destroyed entirely by TMT. If it were, a part of his heart and soul would be destroyed, too.

In short, my practices of public health, laau lapaau, hooponopono, aloha aina, haku mele and celestial/Earth relationships all would be harmed by TMT and lead me to believe that it is harmful to our whole community.