

## FAQ RELATED TO LYNAS (M) SDN. BHD.'s PROJECT

NO.	QUESTION	ANSWER
1.	When did the radiological monitoring start?	For Lynas, the radiological monitoring started in late 2008 i.e. since Lynas gave AELB the letter of intent to build its facilities. AELB has continued to monitor since then. Lynas has to collect the background data and AELB will verify it. Even before Lynas, AELB was already monitoring Kuantan. AELB also has a few other monitoring stations including in Sri Aman, Sarawak and will be adding more such stations around the country.
2.	Apart from Lynas, are there other stations nationwide?	Yes, and even before the monitoring systems were built, AELB was doing in-situ measurements. In-situ means direct measurements at that location.
3.	How many stations are there?	Seven stations are continuously monitoring but AELB also has other stations for in-situ measurement.
4.	Is there a station at the Lynas area?	There is one permanent station for continuous monitoring in Lynas and another one in Kuantan. AELB also has officers stationed in Lynas to measure several locations at different times on a daily basis in order to determine whether there is seasonal shift. We have found that the radiation is higher during high tide and lower during low tide. This is due to the mass of the water that contributes to the daily radiation levels. Therefore, there is a seasonal variation.
5.	Has anyone outside AELB verified the findings?	AELB uses the services of a certified agency to calibrate the equipment. The equipment is calibrated against international standards which are traceable to the primary standards of the US, Japan and the IAEA. Since the instruments are regularly calibrated, the

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		readings are taken to be accurate. There are also other companies that are monitoring their premises as well. AELB will do a comparison against the data that is available.
6.	The YB Minister stated that the government has suggested that Lynas sends back their waste to Australia. Do you think this is possible?	It was not YB Menteri that had put in the condition; it was the Atomic Energy Licensing Board. Yes, Lynas will need to provide the Letter of Undertaking that they will accept the return of the residue to its place of origin, if necessary.
7.	Why are you only now talking about the radiological monitoring when the Lynas issue has been going on for so long?	AELB has been diligently working unnoticed for many years, nobody had bothered to ask. AELB has been doing this as a routine for 20 years to ensure that the environment and workers are safe and secure. AELB is monitoring the environment to establish the normal background reading so that should there be an allegation that there is high radiation in certain areas, it would be easy to ascertain whether it has inherently been high or it is as a result of certain activities in those areas. There are Uranium and Thorium in tin and iron so the background radiation level would naturally be higher in areas which have an abundance of those minerals. Many buildings in Perak and Selangor were built using sand from Uranium and Thorium-rich areas. AELB is looking at this very carefully. In collaboration with universities, AELB is monitoring some of the amang and tin tailing industries to see whether the workers and the activities have to be regulated.
8.	Were there any monitoring programs during ARE?	The Atomic Energy Licensing Act 1984 and the Board were non-existent during ARE. There was only the

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		Radioactive Substance Act 1968 which looks at the use of radioactive substance for medical purposes only. The IAEA had not set standards for mining activities that may produce or enhance Naturally Occurring Radioactive Material (NORM). There are differences between the ARE time and now. One of the reasons ARE closed down was because they were moving to China since it was cheaper to produce rare earth material in China.
9.	There is report that claims there are leakages in Lynas. Will AELB suspend the TOL while investigating this?	Firstly, there is no radioisotope in the plant and no license has been issued. However, AELB will be investigating this allegation.
10.	Perhimpunan Hijau shows that all of AELB's efforts in engaging the public have failed.	AELB has done its best. Perhaps the newspapers have also failed to deliver information. One reporter who visited the old ARE plant wrote that she was surprised that there are no "No Trespassers" sign posted there. There have been allegations that AELB has not resolved the ARE issue when in fact, AELB has resolved it and has formally declared the site free of contamination. It has been returned to the state government. The final repository is in a remote area, away from population. AELB has tried to assure the public that things are under control. In the case of Lynas, AELB will continuously monitor the waste water and to make sure that it leaves the plant as water that is acceptable according to international standards, and not as contaminated water or industrial waste water.
11.	What are included in the	AELB will sample water, soil and air, and measure

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	sampling?	background radiation. Once Lynas becomes operational, monitoring will be further intensified. The frequency of sampling will also be increased.
12.	What is background radiation?	It's the natural radiation that is received by everybody continuously, even from sitting beside another person. For example, the background radiation level in Perak is 0.2 $\mu$ Sv/hr but here in the AELB office building, it is 0.3 $\mu$ Sv/hr. It is higher because of the nearby granite hills. So the radiation that we receive is from the rock, the soil and also from cosmic rays. This is background radiation and it is natural.
13.	The people in Kuantan have taken this matter to court, how will AELB respond to this?	AELB will respect any court that issues a summons against us. AELB also takes public interest into consideration. It is about ensuring people's safety and the standards that must be adhered to. If the claims are supported with facts and substance, AELB will take them very seriously.
14.	Is the radiological monitoring at the reference point done on a daily basis?	The radiological monitoring is conducted on a daily basis. AELB has at least four people on site that are monitoring the background reading on a daily basis for the last 18 months. The areas in Kuantan and Gebeng are slightly above the average for Malaysia but lower than here in Dengkil. We are constantly being exposed to natural radiation and in some professions, from occupational radiation.
15.	Despite all of AELB efforts to explain, the protest will still go on and it doesn't look like the momentum is waning. Does AELB think this has become	AELB is independent of politics. In order to ensure safety of the people, AELB's decisions are based on technical and scientific facts. The safety standards will remain as the guiding principles irrespective of political changes and the AELB will still be ensuring

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	purely a political issue rather than about safety?	and monitoring safety of the public and workers.
16.	Has AELB fulfilled all the standards and safety measurements?	Yes and AELB intends to do more. Safety standards are reviewed from time to time. For instance, the dose limit for a radiation worker was 50 mSv/yr but because it can be lowered, it has gone down to 20 mSv/yr. The standards are improving with new instrumentation, better control of processes and the source, and more advanced technology.