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To:

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Dr Ahmad Parveez Hj. Ghulam Kadir, Chairperson, Genetic Modification Advisory Committee (parveez@mpob.gov.my)

Re: The controversial issue of genetically engineered Aedes aegypti mosquitoes

I, the undersigned in support of the public health, environmental, consumer and other movements, am very concerned by the recent approval to release genetically modified (GM) male Aedes aegypti mosquitoes OX513A(My1), for the purpose of a field experiment. I am even more worried that the field releases may have already happened, without adequate notification or information provision to the public. I urge the government to be transparent on the issue and to immediately disclose the details and specific sites of the releases.

1. Risky approach to dengue control

While dengue is a very serious problem in Malaysia and needs to be urgently addressed, going down the GM path takes us into risky territory. Genetic engineering often results in unintended effects. I do not know enough about the GM mosquitoes and how their interactions with non-GM mosquitoes in the wild, other species in the ecosystem, the dengue virus and human populations, will be affected.

There are several health and environmental risks associated with the field releases. For example, a small proportion of the GM larvae will survive – some of which would be female – despite claims that the technology is safe because the larvae will die. As female mosquitoes bite humans and transmit disease, has the risk of an increased disease burden been assessed? The surviving GM larvae would also lead to the persistence of the GM genes in the environment, with unknown consequences.

2. Field trials a first step to large-scale release

Although the field releases are characterized as small-scale and limited, we are extremely concerned that they are but one step in a technological approach to dengue control that is based on dependency and 'locking-in'. At the commercial

release stage, the continuous release of millions of GM mosquitoes at several places in Malaysia would be needed in order to successfully suppress mosquito populations. The risks would be greatly amplified at such large numbers.

One serious concern is the likely possibility that other closely related and disease-transmitting species would take over the ecological niche of *Aedes aegypti* once its populations are successfully reduced. This would continue to cause, or even worsen, the dengue problem and may even cause a rise in other mosquito-borne diseases.

While I realize that large-scale and eventual commercial releases would have to undergo a separate approvals and risk assessment process, the government cannot afford to ignore the implications of going down the GM path and must consider these concerns, even at this early stage.

3. In the public or private interest?

I understand that Oxitec Limited, a UK-based company, holds the patents on the technology used in these GM mosquitoes. While Oxitec will presumably collect rewards for their invention, will they bear the liability should anything go wrong?

A review of Oxitec's accounts (available from Companies House, which is the UK government agency responsible for registering limited companies) shows that it made losses in 2008 and 2009 of £1.7 million a year. While Oxitec has received grants for its research, it is clear that the company expects to gain income from continual releases of GM mosquitoes in large numbers in several countries.

4. My demands

a. As a citizen of Malaysia, I demand a wider and broader public debate on the issue than there has been to date. This field experiment will have tremendous implications for Malaysia's health and environment. There must be a national discussion as to whether GM mosquitoes are indeed the right approach to address dengue. The general public are integral to effective dengue control and there must be consensus on this issue.

b. The prior informed consent of the communities living in and around the proposed field release sites must be obtained. This means that they must also have the potential risks of the study adequately explained to them, and information about the sources of funding and any possible conflicts of interest provided.

c. I ask the government to call off the experiment and field releases of the GM mosquitoes, and to instead invest in safer approaches to addressing dengue.

Thank you.

Yours sincerely,