IN THE GRAND COURT OF THE CAYMAN ISLANDS

Cause No. : G 130 of 2016

IN THE MATTER OF AN APPLICATION FOR JUDICIAL REVIEW UNDER ORDER 53 OF THE GRAND COURT RULES 1995

IN THE MATTER OF A DECISION OF THE NATIONAL CONSERVATION COUNCIL UNDER SECTION 35(2) OF THE NATIONAL CONSERVATION LAW 2013

BETWEEN:

DWENE EBANKS

APPLICANT

AND

THE DEPARTMENT OF THE ENVIRONMENT

FIRST RESPONDENT

AND

THE NATIONAL CONSERVATION COUNCIL

SECOND RESPONDENT

HEARD:

IN OPEN COURT, 19, 25 and 26 JULY 2016

BEFORE:

MANGATALI

DRAFT JUDGMENT

DELIVERED:

26 JULY 2016

APPEARANCES:

Mr. Stephen Tromans QC, Ms. Deok Joo Rhee, and Mr. Kerrie Cox,

instructed by HSM Chambers for the Applicant.

Ms. Jacqueline Wilson, Solicitor General, and Mr. Kashka Hemans,

of the Attorney General's Department for the Respondents.

HEADNOTE

Judicial Review —Illegality, Irrationality, Failure to provide prior consultation regarding NCC decision to release 22 Million Genetically modified mosquitoes in West Bay, Grand Cayman- Previous release occurring twice before, in 2009-2010 - Environmental Law and Public Health- whether Decisions fettered by inappropriate considerations- Considerations of Detriment to Good Administration.

JUDGMENT

- 1. The Cayman Islands are a British Overseas Territory located in the Caribbean Sea. The Islands are comprised of three islands, of which Grand Cayman is the largest, with an area of about 75 square miles. Grand Cayman, by the latest 2015 polls is said to have a population in the region of 60,000. If you are minded to jump in a motor vehicle and drive, the entire Island can be seen in just a few hours. Because of the small size of both the land and population, it does not take long for news about what happens on one end of the Island to be known elsewhere on the rest of the Island. Albeit surrounded by certain alleged concerns and criticisms on the international environmental scene some years ago, the fact of the matter is that Grand Cayman was the first place in the World where the release of Genetically Modified Mosquitoes ("GMMS") has taken place. This occurred between 2009-2010, on the East End side of the Island.
- 2. This is an application for Judicial Review. It is brought with leave which I granted on 13 July 2016. The ex parte application came before me on that afternoon, in the midst of a very busy Court Schedule, all week and that morning in particular. I suddenly had before me more than 598 pages worth of evidence and documents to review in order to decide whether to grant the applicant Mr. Dwene Ebanks' leave. I understood the urgency of the application, since the application sought, amongst other relief, a stay of events and actions scheduled for the very next day. However, I also understood the weightiness and importance of the subject matter to the public bodies concerned, and indeed, to the public in general. Thus, I ordered that the Attorney General's Department, who had also received a pre-action protocol letter from the Applicant's Attorneys some time before

warning of an intended application, be given notice of the hearing that evening. I so ordered so that I could have, as much information to try and absorb in the limited time available, and in order to make a decision that I felt was appropriate and just, in all of the circumstances.

- 3. I granted leave and ordered an expedited substantive Judicial Review hearing on 19 July 2016. I had regard to the subject matter and to the evident need for an early decision. I also made case management orders for the filing of affidavit evidence and skeleton arguments. I wish to express my profound appreciation to the parties and their Counsel for the skilful and cooperative manner in which the case has been conducted.
- 4. I ordered that the grant of leave, operate as a stay of the challenged decision, initially until the 19 July 2016 when I heard the substantive matter, and then until yesterday when I gave my decision refusing the relief sought, orally. I further extended the operation of the stay, until today, 26 July 2016 so that I could deliver draft reasons to the parties.
- Needless to say, I have had to put aside other pressing cases, in order to review a great deal of documents, evidence and legal authorities in a short space of time. I am not alone in having to do that quite frequently. The Cayman Islands, Grand Court and Summary Court alike, in my view, have an extraordinary amount of commercial, civil and criminal work of the highest calibre. This type of work requires great attention and needs time for quiet, focused undistracted judicial thought and consideration in order to be done properly, thus maintaining the considerable reputation of these Courts.
- 6. I granted the stay for a short period. A stay allows for an appropriate pause while the Court considers the challenge mounted by a citizen against the decision of a public body, and in respect of which the citizen claims to be aggrieved. As stated in Michael Fordham QC's invaluable work, *Judicial Review*, 6th Edition, at paragraph 2.1, "...*Judicial review is a special supervisory jurisdiction which is different from both (1) ordinary (adversarial) litigation between private parties and (2) an appeal (rehearing) on the*

merits. The question is not whether the judge disagrees with what the public body has done, but whether there is some recognisable public wrong."

- 7. The decision which is challenged in these proceedings was taken by the Department of the Environment, the First Respondent ("the DoE"), acting on behalf of the National Conservation Council ("the NCC"), on the 18 May 2016 to permit the open release of up to 22 million genetically modified mosquitoes (GMMS) into the West Bay area of the Cayman Islands. The GMMS are imported in egg form, and the judicial review challenge extends to the grant by the Department of Agriculture (the DoA) of a licence for such import based on the advice of the DoE. Although it was agreed at the leave application hearing that the DoA would not be included as a party to the judicial review application, it would follow, as Mr. Tromans QC postulated, that any flaw found in the decision of the DoE/NCC to allow the release would extend to the decision to grant the import licence.
- 8. The release of the GMMS is a programme set to be rolled out over a 9 month period, and was scheduled to have commenced on the 14 July 2016. It is because the planned operation appears to be extremely time sensitive in a number of ways, and allegedly involves the critical issues of public health and the environment, that I have taken the step of expediting the substantive hearing in such a heightened way.
- 9. The applicant Mr. Dwene Ebanks is a Grand Cayman National and resident of the West Bay area. He has in his affidavit explained that he has very serious concerns about the lack of publicity surrounding the first release of GMMS which took place in the East End of the Cayman Islands in 2009/2010. His evidence is that these concerns are shared with other NGOs and other relevant entities active and /or concerned with the region and the environment. He explains how he attended a public meeting in West Bay on the 24 May 2016, where he felt that a full picture was not being presented by the MRCU and Oxitec, and including how a video produced by the Cayman Islands Government ("CIG") edited out audience questions. Following this meeting he set up an on-line petition to oppose the proposed release. Mr. Ebanks claims that some 673 people have signed the online petition and another 223 people have signed a hard copy. Mr. Ebanks has also expressed

concerns as to the inaccuracy of information being disseminated to the public, for example whether the release includes a proportion of female (biting) mosquitoes and the ability of offspring to reach maturity.

- 10. The application seeks the following relief:
 - a. A declaration that the Contested Decision, the advice to the DoA on the application for the import of GMMs, and the grant of the import licence by the Department of Agriculture are legally flawed.
 - b. Orders quashing same.
 - c. (i) Orders prohibiting the open release of the GMMs; and
 - (ii) The further importation of GMMs pursuant to same.
 - d. A stay of the Contested Decision and all further imports of GMMs pursuant to the said import licence pending the final determination of the matter; and
 - e. An order for costs of and incidental to this application may be paid by the First Respondent and/or the Second Respondent.
- 11. There are five grounds of challenge, which appear to be based upon the wide range of illegality, irrationality and procedural impropriety, essentially as follows:
 - (1) Failure to carry out an independent risk assessment of the consequences of the proposed release.
 - (2) Flawed reliance on a risk assessment carried out in October 2009.
 - (3) Failure to carry out a public consultation.
 - (4) Predisposition or taking into account an immaterial consideration, hence fettering the exercise of a discretion.
 - (5) Irrationality.
- 12. It is the Respondents' case that the grounds for challenge put forward by the Applicant are not supported by any cogent evidence and are entirely misconceived. The Respondents' case is supported by the following five affidavits:

- a. 2 Affidavits of Dr. William Petrie, Director of the Mosquito Research Council Unit ("MRCU"), sworn to respectively on the 15 and 18 July 2016;
- b. First Affidavit of Christine Rose-Smyth, Chairman of the NCC, sworn to on 15 July 2016;
- c. First Affidavit of Gina Ebanks-Petrie, Director of the DoE, and Member of the NCC, sworn to on 15 July 2016;
- d. First Affidavit of Dr. Samuel Williams-Rodriquez, Acting Medical Officer of health, sworn to on the 15 July 2016 also.
- There is also before the Court the affidavit of Dr. Simon Warner, sworn on 18 July 2016, which has also been filed in support of the Respondents' case. Dr. Simon Warner is the Chief Scientific Officer of Oxitec Limited, the parent company of Oxitec (Cayman) Limited which has partnered with the MRCU in the Project. Dr. Warner has expressly in his affidavit stated that his purpose was to explain, in as simple terms as possible, the science behind the genetically engineered mosquitoes developed by Oxitec, the introduction and release of which, are at the centre of the Project.

The Court's Role

- As the learned Solicitor General Ms, Wilson, has put the matter in her helpful written Skeleton Argument, in these proceedings, the Court exercises a supervisory function. Therefore, the Court is not concerned to determine the merits or demerits of the Project, no matter how controversial they may be; that is a matter for the appropriately qualified and mandated public bodies. The question for determination is whether, in arriving at the Contested Decision, the NCC and the DoE acted within the scope of their powers, took all relevant considerations into account, did not take into account irrelevant considerations, and weighed in the balance the appropriate considerations.
- 15. However, whilst the Court is concerned not with the merits of a decision, but rather with its lawfulness and procedural propriety, it is fair in my judgment to say, that in the area of public health and environmental concerns, Courts must, in examining the process carried

out by public bodies entrusted with these vital tasks, examine the rationality of decisions taken against the backdrop of considerations in this area of the Law. Some examples would be the precautionary principle, and to ensure that the risks to human health have been taken into account. There is an interest in seeing that citizens are not only to be properly informed after the fact, but to be properly informed before, and consulted within reasonable bounds, prior to implementation of decisions that will have a direct, and possibly profound effect upon their lives. Thus the Court will give such decisions anxious consideration. On the other hand, the Court has to appreciate that in complex technical situations, the intensity of review may well have to be low. In appropriate circumstances the Court will limit itself to asking whether the assessment by the particular public body was manifestly unreasonable, where the challenge is irrationality. The Court has no power to impose what it perceives as ideal solutions under cover of the Wednesbury principles application.

- 16. As the World -renowned Scientist Albert Einstein is said to have famously said "the environment is everything that isn't me". Matters concerning the interaction of environment, public health and technology have to be handled with care. It is clear that informed public involvement is critical. After all, we are existing in the environment together. At paragraph 58 of the well written Skeleton Arguments of Mr. Tromans QC, it is stated as follows, with regard to the World Health Organization ("WHO") Guidance:
 - "58. The WHO Guidance states (at para 30, page xx1v): "Democratic governance of technology requires that proposals on issues such as the testing of GMMs be discussed and debated openly in a manner that receives the attention of scientists and decisions-makers, and in a manner that ensures that stakeholders' voices can be heard" and goes on to outline recommendations for community engagement and consent. It also states (para 43, page xxv) that "informed public involvement and consent in the GMM regulatory decision process is a necessity if implementation is to occur without adverse public reaction. Regulatory processes often include formal public consultation opportunities."

- 17. The background to the Project is set out in the affidavit of Dr. William Petrie, who is the Director of the Mosquito Research and Control Unit ("the MRCU"). Dr. Petrie states that he is the holder of a Bachelor of Science degree in Zoology and a Doctorate in Mosquito Biology. He has been involved in mosquito research and control in a professional capacity for 32 years and has worked at the MRCU for all of that time. He states that he has been the Director of the Unit now for 18 years, starting in 1998.
- 18. The MRCU was established under section 3(1) of the Mosquito (Research and Control) Law (2007). The MRCU presently falls under the aegis of the Ministry of Health and Culture. According to Dr. Petrie, the MRCU "was established in 1965 as an agency of the Cayman Islands Government responsible for suppressing nuisance biting mosquitoes in the Cayman Islands, to enhance the quality of life of residents and to support the economy, as well as to protect residents and visitors from mosquito-borne disease."
- 19. At paragraphs 6-9 of his Affidavit, Dr. Petrie states as follows:

"6. In the mid-2000s I became aware that a genetic modification technique had been developed to target Aedes aegypti. I became exposed to Oxitec and their technique through various mosquito control conferences around that time.

The keeping with my duty as Director to keep up to date with technologies relating to mosquito control, I did background research into Oxitec and the technique they used. Based on my research it appeared that the Oxitec technique was safe and potentially effective. I was impressed by the science behind the technique which had been developed at Oxford University in the United Kingdom. The technique involves genetic modification of the Aedes aegypti genome to produce, among other strains, the OX513A mosquito (hereinafter referred to as "the Oxitec mosquito"). The male Oxitec mosquitoes are rendered essentially sterile; they can mate and the female produces eggs which hatch, but the progeny inherits a gene that causes them to die before adulthood. Overtime, with repeated releases of Oxitec male mosquitoes, the wild population of Aedis eegypti will decline.

- 8. There are inherent safeguards built into the genetically modified system in that the transgene is self-limiting and, therefore, cannot become established in the environment. It disappears from the eco system whenever releases are stopped.
- 9. The method used by Oxitec is not entirely new. It forms part of an established pest control method known as the Sterile Insect Technique, a method that has been in use in various parts of the world from as long ago as the 1950's. Ordinarily, sterilisation of insects is achieved by using radiation or some other chemical process to trigger a mutation in the male insect that will render it sterile. The innovation introduced by Oxitec, and the factor that stood out to me as an improvement on the traditional method, is that rather than exposing the target species to radiation or chemicals, Oxitec makes changes to the insects' DNA which render the male of the species incapable of producing viable offspring. Male insects treated with radiation or chemical tend not to compete as well as wild males."
- 20. Dr. Petrie goes on to explain that the Project is the third in a series of trial exercises by the MRCU using Oxitec's genetically engineered mosquitoes, the first two of which were conducted in a designated area of East End in 2009 and 2010.
- 21. The first trial exercise, Dr. Petric continues, was conducted in October to November 2009 to examine the ability of OX513A males to mate competitively with wild females. The second trial was conducted in May to October 2010 to determine whether the release of OX513A could suppress the wild Aedes aegypti population. The current Project, according to Dr. Petric, has the same objective as the second trial exercise, but is to be conducted on a larger scale and in a different location, this time in West Bay. Approximately 3.3 million mosquitoes were released in East End over the six month period between May and October 2010. The current Project involves the release of 22 million GMMs in a designated area of West Bay over a 9 month period.
- 22. Sections 18 and 19 of the Cayman Islands Constitution Order 2009 provide as follows:

"Protection of the Environment

- 18(1) Government shall, in all its decisions, have due regard to the need to foster and protect an environment that is not harmful to the health or well-being of present and future generations, while promoting justifiable economic and social development.
- (2) To this end government should adopt reasonable legislative and other measures to protect the heritage and wildlife and the land and sea biodiversity of the Cayman Islands that-
 - (a) limit pollution and ecological degradation;
 - (b) promote conservation and biodiversity, and
 - (c) secure ecologically sustainable development and use of natural resources.

Lawful administrative action

- 19. (1) All decisions and acts of public officials must be lawful, rational, proportionate and procedurally fair.
- (2) Every person whose interests have been adversely affected by such a decision or act has the right to request and be given written reasons for that decision and act."
- 23. Mr. Ebanks has complained that the people of Grand Cayman did not know about the release of GMMs beforehand. He claims this was done "in secret".
- 24. On the other hand, Dr. Petrie says that around the time of the 2009 and 2010 studies, there was public engagement focussed on residents of communities in and around the study area. Public aurouncements he claims were made on each occasion and house to house visits were conducted to give information to and receive feedback from residents.
- 25. As Mr. Tromans QC who appeared along with Ms. Rhee for the applicant, indicated, whilst there is no challenge being made to the old decisions, the matters were put before the Court so that the full picture could be seen.

- 26. Ms. Rhee made the observation that the fact that the right to Judicial review has even been provided for in the Constitution, the fact that the Bill of Rights post—dates the first import of the GMMS, the fact that the NCL is now on the Books, must make a difference to the regulatory regime. Indeed, section 44 of the NCL expressly recognises the right to Judicial Review.
- 27. Be that as it may, whatever may have been the position in 2009 and 2010, it seems clear that there has been discussion of the GMMs technology in Grand Cayman disseminated by public authorities prior to the challenged decision. Further, there has as a matter of fact been previously not one, but two, previous releases of the GMMS here in Grand Cayman.
- 28. The National Conservation Council was established under section 3 of the National Conservation Law 2013 ("the NCL"). Amongst its several functions, subsection 3(9) provides as follows:
 - "3(9) The Council has the following functions....
 - (b) Promoting the biological diversity and the conservation and sustainable use of natural resources in the Islands.

Section 35(2) provides as follows:

"(2) A person who wishes to introduce or release in any part of the Islands a live or viable specimen of an alten or genetically altered species shall apply to the Council under this Law for a permit to do so."

ILLEGALITY

29. The illegality test is well-known and was set out authoritatively by Lord Diplock in the *GCHQ* case [1985] ac 374. A decision maker must understand correctly the law that regulates his decision-making power and must give effect to it.

IRRATIONALITY

- 30. In relation to irrationality, the test was laid down long ago, where in the well-known case of Associated Provincial Picture Houses Ltd. V Wednesbury Corporation [1948] 1 KB 223. Lord Greene stated:
 - "In considering whether an authority having so unlimited a power has acted unreasonably, the court is only entitled to investigate the action of the authority with a view to seeing if it has taken into account any matters that ought not to or disregarded matters that ought to be taken into account. The court cannot interfere as an appellate authority to override a decision of such an authority, but only as a judicial authority concerned to see whether it has contravened the law by acting in excess of its powers."
- 31. However, it is important to note, that as the learned authors of Fordham, Judicial Review Handbook, 6th Edition, state at paragraph 57.1, cited by the Solicitor General, the test of unreasonableness is "flexible and contextual". At paragraph 13.1 the authors also state as follows:
 - "13.1 "Soft" review: reasonableness

Public authorities have important roles and functions and there must necessarily be questions which it is for them to decide, and not for judges to second-guess. Judicial vigilance is needed under the rule of law, but judicial restraint is as necessary under the separation of powers. In considering whether a public body has abused its powers, Courts must not abuse theirs."

- 32. At paragraph 13.4.3, the learned author discusses the Court's approach to specialized Judgments, which whilst not necessarily directly applicable, provides useful parameters and a principled approach, as follows:
 - "13.4.3 Specialised judgment. R (Mwanza) v Greenwich London Borough Council [2010] EWHC 1462 (Admin) [2011] PTSR 965 at [95] (as to assessment of need for care and attention, "the courts will give considerable respect to the professional judgment of the local authority in question"); R (Downs) v Secretary of State for Environment, Food and Rural Affairs [2009] EWCA Civ

664 [2010] Env LR 81 at [75] (formidable hurdle of "manifest error" in EUbased challenge in highly technical field); R(Mabanaft) v Secretary of State for Energy & Climate Change [2009] EWCA Civ 224 at [48] ("In any assessment of proportionality in a technical field, the court must allow a proper margin of discretion to the decision maker, because of the complexity of the assessment he is called upon to make in this field.....The Court therefore exercises restraint in reviewing any decision of this kind"); R (Gampaign to End All Animal Experiments) v Secretary of State for the Home Department [2008] EWCA Civ 417 at [1] ("scientific judgment is not immune from lawyers" analysis. But the court must be careful not to substitute its own inexpert view of the science for a tenable expert opinion...the court should be very slow to conclude that this expert and experienced Chief Inspector reached a perverse scientific conclusion"); R v Hampshire County Council, ex p W [1994] ELR 460, 472A(" a question of professional judgment upon which a court would embark at the peril of everybody concerned Reproduction and Gynaecology Centre) v Human Fertilisation Fertilisation and Embryology Authority [2002] EWCA Civ 20 [2003] I FCR 266 at [15] ("It is not the function of the court to enter the scientific debate, nor is it the function of the court to adjudicate on the merits of the[defendant]'s decisions or any advice it gives"), [65]; Begum v Tower Hamlets London Borough Council [2003] UKHL 5 [2003] 2 ac 430 AT [56] (referring to areas of the law such as regulatory and welfare schemes in which decision-making ts customarily entrusted to administrators"[104]

33. In this case, the Applicant accepts that there is no express legal requirement under the NCL for the NCC to conduct an independent risk assessment in respect of an application under section 35(2). Indeed, when the matter was being heard, in answer to a question from me, Mr. Tromans conceded that the Existing Risk Assessment can be done by the particular exporter. However, learned Counsel stated that the relevant authority must nevertheless carry out an independent assessment of the material. The NCC were not under a duty to perform an Existing Risk Assessment themselves. However, Mr. Tromans

expressed the view on this point by saying, if the risk assessment is not done properly, then it may have to be done over.

- 34. The Applicant asserts that such an obligation may be inferred, having regard to the statutory framework of the NCL and, in particular, the provisions of section 3(9) under which it is the NCC's function to promote biological diversity of natural resources, and section 3(12)(h) under which the NCC has the power to develop procedures for regulating and controlling the import, introduction and release of genetically modified organisms. Reference was also made to section 5(2) under which the Director of the DoE has the power to develop criteria for determining whether proposed introductions of genetically altered species might cause harm to the Islands' natural resources and procedures for regulating and controlling such populations and introductions.
- 35. It is the Respondents' submission that the absence of a regulatory or procedural framework for determining applications under section 35(2) of the NCL, although inconvenient, does not go to the root of the exercise of the NCC's power under that section.
- 36. At paragraphs 12 and 13 of her Affidavit, Ms. Gina Ebanks-Petrie, the Director of the Dob states as follows:
 - "12. Section 6(1) of the Law specifies the functions of the Director of the DoE to include, among other things, administering and enforcing the provisions of the Law and advising and supporting the NCC in the performance of its powers and duties under the Law. Section 6(2) of the Law provides a comprehensive and multifaceted list of discretionary powers that are conferred on the Director of the DoE to facilitate the discharge of the functions prescribed by section 6(1). Under section 6(2)(a)(k) of the Law, the discretionary powers include the development of criteria for determining whether wild populations or proposed introductions of alien or genetically altered species might cause harm to any of the natural resources of the Islands and procedures for regulating and controlling such populations and introductions.

- 13. Since the Law took effect, the focus of the DoE and the NCC has been to develop procedures, supporting documents and guidance for subsidiary legislation required for the full implementation of the Law (in particular Parts 5 and 7). In the circumstances, neither the DoE nor the NCC has as yet commenced work on the procedures and criteria contemplated by section 6(2)(a)(k).."
- 37. However, at paragraph 14, Ms. Ebanks- Petrie also states as follows:
 - "14. In determining applications under section 35(2) of the Law for the introduction or release of genetically altered species, the DoE and the NGC view their role primarily to be that of considering the impact of introducing or releasing such species on the natural environment and resources of the Islands?"
- 38. In my judgment, the Respondents' evidence does show that both NCC and the DoE considered the potential risks for the Project. It seems plain to me that both agencies conducted research efforts which I accept included a review of reports by regulatory organizations such as the FDA and WHO. In the case of WHO, the guidance suggested that the GMMS technology could be used on a trial basis, with ongoing evaluation of the results before full use was deployed.
- 39. Ms. Rose-Smyth indicated that in meeting with Ms Ebanks-Petrie on 5 May 2016, she focused her review on the historical background to the application while Ms Ebanks-Petrie focused on the more recent international approvals of the genetically modified mosquito trial exercises that were being conducted as a result of the zika virus epidemic in other jurisdictions.
- 40. The NCC considered a report by the Centre for Veterinary Medicine United States Food and Drug Administration Department of Health and Human Services entitled "Preliminary Finding of no Significant Impact." The FDA Report was issued in response to Oxitec's Draft Environmental Assessment for Investigational Use of Aedes aegypti OX521A in relation to a proposed field trial in Florida. The FDA Report "made the

- preliminary finding that the proposed field trial would not individually or cumulatively have a significant effect on the quality of the human environment in the United States."
- 41. The applicant asserts that Oxitec did not comply with the requirements of EU Regulation 1943/2006 and argues that this alleged non-compliance undermines the NCC's decision on the MRCU's application. The non-compliance is said to arise in relation to Oxitec's failure to comply with the advance notification procedure in respect of the shipment of Oxitec's genetically modified organisms to the Cayman Islands in June 2016.
- 42. The Applicant contends that while breaches of Regulation EC 1943/2006 are not enforceable in the Cayman Courts, Oxitec's non-compliance with its requirements is relevant in light of the NCC's obligation to consider the risk imposed by the Project.
- 43. However, Ms Rose-Smyth responded as follows in relation to this assertion, in paragraph 21 of her Affidavit:
 - "21. The NCC made inquiries to determine whether notification procedures for the shipment of genetically modified mosquito eggs to the Cayman Islands were carried out and was advised by copy of an email from DEFRA that only the first shipment of eggs to the Cayman Islands in 2009 (pursuant to the trial exercise that was conducted by the Unit at that time) engaged the application of the EU Regulation EC 1943/2006."
- 44. In my judgment, the Solicitor General is correct in her submission that in relation to the 2009 Assessment, the relevant concern is whether, in considering the MRCU's application, the NCC gave appropriate weight to the 2009 Assessment. The evidence demonstrates, that in considering the MRCU's application, the NCC sought considerable further information from the MRCU, including details about the authors of the 2009 Report, and spent time and effort ascertaining whether its findings remained current. The NCC also appear to have considered findings from other more recent reports. In this regard, the NCC reviewed subsequent Reports such as from Malaysia, Brasil and the United States. Included amongst those, were, on the Respondents' evidence, the WHO Guidance, and the March 2016 FDA Report. The NCC's research further appears to have

included other material on GMM technology, some of which was supportive of the technology and some of which were not.

- On balance, it seems to me that there is no proper basis for saying that the NCC or the DoE misunderstood or failed to carry out their functions lawfully. As stated earlier, public authorities have important roles and functions to carry out and there must necessarily be questions which it is for them to decide, and not for the Courts to second-guess. As stated by Michael Fordham QC, in the passage I quoted from earlier, "In considering whether a public body has abused its powers, Courts must not abuse theirs".
- 46. It is relevant to observe that by virtue of section 3 of the NCL, the NCC shall consist of 13 voting members as specified in Schedule 2 to the Act, along with such persons as may be co-opted in accordance with sub-section 6. The composition provided for in Schedule 2 represents a wide cross-section of personel, with diverse relevant qualifications, and expertise, as follows:
 - (a) The DoE or his nominee from the DoE;
 - (b) Deputy Director of Research from the DoL;
 - (c) DoA or his nominee from the DoA;
 - (d) Director of Planning or his nominee from the Department of Planning;
 - (e) A person nominated by the National Trust and appointed by Cabinet;
 - (f) And eight persons appointed by Cabinet, at least four of whom shall have relevant scientific and technical expertise.
- 47. Another assertion made by the applicant at paragraph 55 of his Affidavit is that the signing of a partnership agreement between MRCU and Oxitec prior to the submission of the MRCU's application to the NCC raises concerns that the NCC's discretion may have been fettered.
- 48. However, the agreement itself makes it clear that a deployment of the Oxitec solution was "subject to appropriate approvals and funding". I agree with the Respondents that there is nothing in the Applicant's evidence to suggest that in arriving at its decision the

NCC considered the Partnership Agreement or gave undue weight to it. I agree with the Respondents' submission that the Applicant's statements in this regard really amount to no more than speculation.

49. There is also no proper basis for a finding that the NCC acted irrationally or unreasonably in arriving at the challenged decision.

Lack of Public Consultation

- The applicant has asserted that there has been a failure by NCC to carry out public consultation prior to making its decision. The NCC's response is that the general meeting of 18 May 2016 at which the application was determined was held in public as are all of its general meetings. The Respondents evidence is that in keeping with its, NCC's usual practice, notice of the general meeting was given in the local media and the MRCU's application and supporting documents were published on the DoE's website in advance of the meeting as part of the Agenda package.
- Dr. Petrie's affidavit also refers to a wide range of public outreach efforts, including, but not limited to, press releases, television programmes, media appearances and door-to-door visits. A number of leaflets have been produced to the Court. Dr. Petrie points out that when on June 8 2016, the DoE issued the permit to the MRCU, one of the conditions imposed was that of public outreach.
- 52. The applicant has also suggested that there is a vested interest by MRCU in its partnership with Oxitec. That is a serious type of allegation, which has been denied by Dr. Petrie, "robustly", as the Attorney General's Department puts it in their written submissions. At paragraph 34, Dr. Petrie states:
 - "34. The interest of the Unit in partnering with Oxitec is purely scientific for the purpose of improving mosquito suppression in the Cayman Islands. I and other personnel within the Unit carried out extensive background research into the efficacy of the Oxitec Technology as a suppression strategy and also the risks relating to human health. While the Unit collaborates on a scientific basis with Oxitec, it remains independent and would

- not engage with Oxitec if there was any compelling scientific evidence that the technique posed a risk to human health or the environment of the Cayman Islands".
- In my judgment, the assertion that there was a failure to carry out public consultation must be seen against the backdrop that there have been two earlier releases of the GM Mosquitoes, in the Cayman Islands. Indeed, the applicant himself in his affidavit states that he was aware, and remembered, that there had been GM Mosquitoes previously released in the East End District of the island in 2009/2010. However, of course that background is not a substitute for prior consultation with the persons who would be most immediately affected, i.e. the residents of West Bay.
- I accept that and find, there has not been a failure to consult prior to the decision by the NCC. The meetings when the challenged decision took place took place in public and there was notification to the public via the media in advance. Relevant documentation concerning the application was also available on the DoE's website. It seems that there was quite intense public outreach carried out in West Bay. It should be noted that although prior consultation is important, there must be a cut- off point as we do not live in an ideal world. It is also the case, that at the end of the day, there is no telling whether everyone will agree on the course to be adopted; indeed that would seem highly improbable. We live in a democratic society with duly elected officials and government departments with functions to carry out. In Grand Cayman there have already been two earlier releases of the GMMS. The point I am making is that what is a fair procedure to be adopted will depend upon the subject matter of the decision, circumstances preceding the decision, and the stage and context during which consultations are taking place.
- 55. In his affidavit, Dr. Williams-Rodriquez states as follows (at paragraphs 7-10):
 - "7. I am not aware of any public health concerns arising out of the 2009-2010 Pilot Project spearheaded by the Mosquito Research & Control Unit and Oxitec, which involved the release of Oxitec mosquitoes in East End, Grand Cayman, over a period of time between 2009 and 2010. As far as I am aware, there is no documented evidence that

there were any adverse effects to humans, animals or the environment from the release of the Oxitec mosquitoes in the pilot project in 2009-2010.

- 8. On the 15 June 2016, I contacted Dr. Taraleen Malcolm (Advisor, Sustainable Development and Environmental Health PAHO/WHO Jamaica, Bermuda and the Cayman Islands) and canvassed the views of the PAHO/WHO position in relation to Genetically Modified Mosquitoes. Dr. Malcolm advised that PAHO/WHO recommends countries to subscribe to pilot projects and is willing to provide support to such countries which undertake the said pilot projects. The PAHO/WHO views the Genetically Modified Mosquitoes as a promising technology and recommends continuous monitoring and evaluation.
- 9. Generally, the Public Health Department follows the advice from PAHO/WHO and supports the deployment of Genetically Modified Mosquitoes and recommends the continuous monitoring and evaluation of the said project.
- 10. I have reviewed the current data or information available and the advice from PAHO/WHO and I am of the view that there is no evidence that justifies any concerns regarding the deployment of the Oxitec mosquitoes. The said documentation reviewed does not highlight any risks to humans, unimals or the environment associated with the Oxitec mosquitoes."
- 56. I note, that it is not necessary in a Judicial Review application based upon an allegation that the public body acted unlawfully, for the applicant to file any expert evidence. However, whilst the applicant has exhibited a number of documents from different organizations, it is true that he has not produced any expert evidence to support his position that the decision of the NCC or the DoE was irrational.
- 57. In addition, this is what Dr Petrie, who has spent 30 years with the MRCU has stated in his evidence, at paragraph 33, regarding the urgency of the situation:
 - "33. There are important scientific and technical reasons why the release should not be delayed for any extended period of time:

- a. We are already in the rainy season locally. The current weather conditions represent the ideal conditions for Aedes egypti breeding, which means the wild population is currently increasing.
- b. In order for the sterile male mosquito technique to function optimally, it is best conducted at a time of low Aedes aegypti wild populations rather than very deep into the rainy season when populations will increase. The longer that the project is delayed and the deeper into the rainy season that the Oxitec mosquitoes are released, the more difficult it will be to achieve a successful outcome and the longer it will take to achieve success, if at all.
- c. The sterile male mosquitoes have been carefully reared in preparation for release. Should the release be delayed even for a short period, this could seriously disrupt the Project as these male mosquitoes will not survive for more than a few days.
- d. As the population of wild Aedes egypti continues to increase with the rains and the increased movement of persons at this time of the year from countries with a current Ziea outbreak, the public health threat posed by Zika is heightened.
- e. Given the above considerations, should the releases be delayed, the risk of local transmission of disease is increased."
- I have carried out my supervisory role. I have to recognize that the NCC and DoE have important functions to perform and there are necessarily questions which it is for them to decide, and not for judges to second-guess. I have to accord the decision of the NCC respect and only interfere if solid grounds have been made out that there has been breach of the rights of a citizen, including fundamental human rights. I have examined the evidence, case law, and exhibits and materials carefully. In my judgment, the Applicant has failed to establish the grounds set out in the application and the relief sought by way of Judicial Review must be refused.
- 59. Even if the applicant had made out his grounds about lack of prior public consultation, it seems to me that, in light of the fact that those responsible for public health issues have expressed the view that they are not aware of any public health concerns arising out of

the 2009-2010 Project for the release of the GM Mosquitoes, and have stressed the importance of the Project getting underway as one of the tools for combating public health threats presented, in particular by the current outbreak of Zica in other countries, I am entitled to look at the case overall. In so doing I am of the firm view that, on the evidence before me, it would be detrimental to good administration and disproportionate for the decision of the NCC on 18 May 2016 for the release of the GMMS or the MoA's decision to grant the import licence to be quashed or prohibited. The challenged decisions affect or may affect large numbers of people, indeed all residents, inhabitants of, and visitors to Grand Cayman. Many other administrative decisions have plainly been made on the basis of these decisions and action has been taken on them and put in train. The path has been set, and indeed, was accepted in principle many years ago as being the approach to take here. It is not for the Courts to interfere with those types of decisions unless they are flawed or procedurally unfair. There is no such finding here and hence I exercise my discretion to refuse the relief sought.

- 60. The Court would, however, recommend and expect that the NCC, DoE and MRCU in carrying out the public functions with which they are entrusted, will ensure that ongoing rigorous monitoring and independent evaluation, such as that recommended by the WHO takes place throughout the Project. Public outreach and feedback must continue in earnest, as Dr. Petrie has said it would. For the future, when planning to use any new technology, which, unlike the GMMS has not already been introduced in the Island, a non-binding survey(as distinct from information) such as that being carried out in Florida by the Florida Keys Mosquito Control District(see the second page of the joint response by MRCU and Oxitec to challenges to the Project in the Form of a Fact Sheet, press release of 14 June 2016) might well be considered to have some benefit and go a far way in enabling the public to feel a part of a process before implementation. That is not, however, the stage we are at in relation to the current Project here in Grand Cayman.
- 61. The Court would also expect that the DoE and the NCC will now set about with dispatch, developing the criteria, procedures and subsidiary legislation, referred to in paragraphs 12 and 13 of Ms. Ebanks-Petrie's Affidavit.

62. The application for Judicial Review is therefore refused, and I will now hear any consequential matters arising.

