



SUBMISSIONS ON DRAFT BIOSAFETY POLICY, GOVERNMENT NOTICE

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INTRODUCTION

On the 26th August 2005, eight years after South Africa began commercially growing GM crops, the Department of Agriculture published a draft Biosafety Policy for public comment.

Generally, we find the “biosafety policy” to be dismally disappointing because it is in fact not a biosafety policy but a simplistic 19 page document that describes a few biosafety concepts, presents a cursory overview of the risks (problem statement) and outlines national legislation and international agreements impacting on GMO regulation. There is no part of the document dedicated to laying out exactly what the government’s “coherent” **biosafety policy** entails, and its response to challenges, and proposed plans, activities and programmes to achieve biosafety objectives within a clear time frame. In particular, we find it extremely odd that the policy document does not link up and discuss the on-going legal reform project underway to amend Genetically Modified Organisms Act and the implementation of South Africa’s obligations under the Cartagena Protocol on Biosafety in the context of this project.

Although the stated objectives of the policy include the establishment of common measures, requirements and criteria for risk assessments, environmental impact assessments and assessments of socio-economic impacts; recognition of the constitutional rights to access to information; capacity building and co-operation with countries in the region with respect to harmonisation of legislation, **the document in fact does not deal with these issues.**

While the bulk of the document provides an overview of the various national and international policy instruments dealing with or impacting on GMO regulation, yet, this discussion fails to provide any critical insight into these instruments in regard to for instance, implementation strategies, on-going reform initiatives, possible areas of conflicts, strengths and weaknesses, inter-governmental co-operation and government policy regarding implementation of obligations under international environmental agreements.

We have come to the conclusion that the National Department of Agriculture (NDA) is not the suitable government department to spearhead a national biosafety policy because it does not have adequate knowledge of biosafety. This explains why its administration of the Genetically Modified Organisms Act is implemented like a permitting system for GMOs.

Our key submission is that government needs to go back to the drawing board and come up with a clear biosafety policy that deals *inter alia* with the following critical biosafety issues:

1. How government will address the ecological risks and “management change impacts” of South Africa’s biodiversity of planting GM crops, taking into account extensive plantings of several GM crops across agricultural landscapes?
2. What does a comprehensive, locally relevant assessment of risks and benefits entail, taking also into account long-term efficacy of GM crops?
3. How does/will government address dependence on external resources such as patented crop varieties by small-scale farmers and how GM technology and the biosafety policy relate to national agricultural policy and food safety and food security issues and the well-being of resource-poor communities;
4. What government’s commitment towards improved protocols for food safety assessment and evaluation entail, taking into account its 8 year experience with GMO regulation and the evolving nature of the science;
5. What government’s position is regarding the use of antibiotic resistant gene markers, taking into account the risks it poses to human health;
6. How government intends to deal with “GM Seed Bulking” by multinational agrochemical companies on the pretext of conducting “field trial experiments;”
7. Clear policy guidelines for applications for commodity clearance permits, with special emphasis on applications for approvals for GMOs not yet approved by the country of export/not been grown commercially anywhere in the world;
8. The measures government intends to take within clearly defined time periods, post-commercialisation monitoring of the impacts of GMOs on human and animal health;
- 9. Transparent and fair mechanism for public participation that go well beyond the seriously flawed and restricted application of the public input procedure provided by the Regulations of the GMO Act;**
- 10. Clear policy guidelines from government regarding our rights to access to information in the light of the successful outcome in favour of the NGO, Biowatch South Africa, in its litigation against the Minister of Agriculture with respect to access to information;**
11. Policy guidelines on the labelling of GM food in order to overcome the inherent shortcomings in current legislation which do not require mandatory labelling of GM food; and
12. Guidance for measures regarding documentation requirements for bulk shipments of GMOs in order introduce and enforce zero tolerance for

unapproved GMO including GM food aid shipments being milled in South Africa and destined for use as such in other countries in Africa; modalities for sampling and testing of such bulk shipments and establish a threshold for adventitious presence of approved GMO content in non-GM at 0.1%.

DISCUSSION OF SHORTCOMINGS OF BIOSAFETY POLICY

BIOSAFETY AND THE PRECAUTIONARY PRINCIPLE: CONFLICTING PARADIGMS

We find that the understanding of “biosafety” as it is described in the biosafety policy as a risk management tool, focussing on “reducing accidental exposure to and release of biological materials” (p.2) to be erroneous.

Biosafety is a holistic approach to the assessment and regulation of genetic modification (GM) and genetically modified organisms (GMO), based on the precautionary principle because the application of recombinant DNA technology is characterised by scientific uncertainty. This uncertainty stems from several factors including the inherent imprecision of currently employed recombinant DNA techniques, the use of powerful, often viral, promoter sequences in genetic constructs and the generation, as a result of genetic modification, of novel proteins to which humans and animals have never previously been exposed¹. Additionally, the gaps in the knowledge regarding composition and functioning of the genomes that are often subjected to genetic manipulation and ill-designed experiments compound such scientific uncertainty.

Uncertainty is a key element of the Biosafety Protocol. The lack of sufficient relevant scientific information and knowledge regarding the extent of potential adverse effects allows the Precautionary Principle referenced in the Biosafety Protocol to be triggered. The precautionary principle states “where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.”

Notwithstanding, government has chosen to turn its back on the precautionary principle on the spurious grounds that differences exist in regard to its applications and that it has the potential to cause conflicts with international trade rules. We dispute in particular, the view that the precautionary principle conflicts with trade rules and point out Article 5.7 of the SPS (Agreement on the Application of Sanitary and Phytosanitary Measures) Agreement of the WTO (World Trade Organisation) embodies the precautionary principle. It allows members in situations where relevant scientific evidence is insufficient, to adopt measures, including restrictions, not based on scientific principles and available pertinent information such as socio economic and environmental consideration. We point out that the approach taken by government in the biosafety policy document is not consistent with precautionary decision-making, as required by environmental policy in South Africa, the National Environmental Management Act (NEMA) and the Biosafety Protocol as discussed earlier.

RISKS

Risks to human, animal and plant health

The biosafety policy lists some “potential” risks to human, animal and plant health but does not deal with government’s policy in relation to addressing such risks.

We expected the policy document to address at a minimum, the following issues:

Scientific bias & flawed protocols for safety assessments Currently, testing and assessment of GMOs is left up to the developer of the transgenic organism because there are no standardised agreed-upon protocols for such testing². South Africa relies heavily on the approvals granted by the Environment Protection Agency (EPA) in the US, who test *inter alia*, for allergenicity of pesticidal proteins etc. However, the protocols used by the EPA are out-dated and fail to meet international standards as expressed in FAO-WHO (Food and Agriculture Organisation, World Health Organisation). Our detailed inputs on these issues can be found in our objections to permit applications by Dow Agrosciences and Pioneer Hi-Bred in respect of GM maize events, 59122; 59122x TC1507; 59122 x NK 603 (<http://www.biosafetyafrica.net>).

Antibiotic resistant marker genes Civil society groups have on a number of occasions pointed out to the Executive Council (EC of the GMO Act) and various Ministers, our serious concerns about the use of antibiotic resistance marker genes in the development of transgenic crops and have made several requests for its prohibition.³ Additionally, the ACB has pointed out to the EC that where there are antibiotic resistant marker genes, as in for instance, Monsanto’s infamous MON863 (*nptII*) GM maize, there is a potential for gene transfer of these markers to pathogenic organisms. In MON863 the encoded product inactivates aminoglycoside antibiotics such as kanamycin and neomycin. Kanamycin, contrary to popular belief is still used in medical applications, e.g. prior to endoscopy of the colon and rectum⁴ and to treat ocular infections⁵. It is well known that there is cross-resistance between antibiotics. Neomycin was found to cross react with kanamycin B in inhibiting RNase P ribozyme 16s ribosomal RNA and tRNA maturation⁶. Other aminoglycoside antibiotics including streptomycin, gentamycin and tobramycin, which are used to treat human disease, have exhibited cross resistance. The possibility of transfer of the marker by HGT, and subsequent adverse effects on human and animal health, cannot be ruled out in those cases where these antibiotics are still being used.

We reiterate our calls for a ban on the use of antibiotic resistant marker genes and point out that several European countries including Austria, Luxembourg, France, Norway and the United Kingdom have expressed grave concerns about the presence of antibiotic genes in GM products and the EU has as a result, decided to prohibit GMOs with antibiotic resistance genes after the 31st December 2004 (directive 2001/18EC and Revising Directive 90/220/CEE)⁷

Conservation of the environment

The policy lists some of the factors arising from GMOs that could adversely impact on the environment, but fail to say what government's approach will be with regard to environmental risks and the development of appropriate tools to evaluate such risks taking into account local conditions.

South African researchers have pointed out for instance, if one takes the case of Bt maize, that maize is ineffective against the attack by the maize stalk borer, *Busseola fusca*, which is in fact responsible for higher levels of ear damage than *Chilo partellus*, the spotted stalk borer which Bt maize apparently addresses. These researchers point out that even Bt maize suffers ear damage from *Busseola fusca*.

A problem associated with kernel damage by pests is the production of mycotoxins that have adverse effect on human health. Since one of the advantages of Bt maize in Africa is considered to be reduced risk of mycotoxin related ailments, the question that researchers have been asking is thus the following: "...how important is ear damage caused by ear damage caused by stem borers in the production of mycotoxins in relation to, for example, damage caused before and during storage by *Stiphophilus* grain weevils, against which *Bt* maize is not resistant or because of inadequate storage facilities?"⁸

The policy does not even begin to deal with issues of this nature.

It is also important to note what the position currently is, regarding environmental risk assessments. Currently, the EC established in terms of section 3 of the Genetically Modified Organisms Act No. 15 of 1997 ("GMO Act") acting in consultation with the Advisory Committee established in terms of section 10 of the said Act, is responsible for conducting biosafety assessments (evaluations) of GMOs. These institutions have to date, applied the "substantial equivalence" principle, which relies on the concept of "familiarity" with conventional varieties of especially genetically engineered crop plants, to judge whether a transgenic plant requires a full environmental assessment.

The principle assumes the validity of the simple linear model of "precise" single gene modifications that do not significantly alter other plant processes. This may explain why, to date, not a single environmental assessment has ever been conducted in South Africa

We are also taken aback that the policy document ignores the most urgent regulatory challenges confronted especially by the Department of Environmental Affairs and Tourism (DEAT), namely, the implementation of section 78 of the National Environmental Management Act of 1994, dealing with impact assessments concerning GMOs.

The National Environmental Management Biodiversity Act, 2004 ("Biodiversity Act") came into effect on the 1 September 2004. Section 78 of NEMBA creates the possibility

for the Minister of Environment to require an environmental assessment prior to a GMO being released into the environment. However, section 78 of NEMBA is not an ideal regulatory tool for controlling the environmental risks posed by GMOs. It does not create legal certainty, and is speculative regarding the environmental assessment of GMOs. It will also facilitate devices by industry to get around the discretion conferred on the Minister of Environment.⁹

Socio-economic factors

The biosafety policy using its restrictive interpretation of “biosafety”, does not believe that socio-economic factors is part of the biosafety enquiry, but says that it must be taken into account mainly because it is dealt with by the Biosafety Protocol, a view we do not share. Nevertheless, The biosafety policy, obviously lacking in vision, does not deal with government’s approach to the numerous socio-economic impacts that may arise/have arisen from the use of GMOs in South African agricultural systems. These include the impact of the import of subsidised and cheap GM maize from Argentina and the US on food security strategies in South Africa; the impacts of the use of herbicide tolerant crops and the concomitant reduction in agricultural labour and job losses.

A key question being posed by South African scientists is whether the use of GM crops will accelerate the loss of genetic diversity in key crops such as maize? It is pointed out that dependence on external resources such as patented crop varieties is not only expensive for small-scale, developing world farmers, but makes them vulnerable to external shocks. “One of the most important internal resources of farmers is seed that is saved from previous harvests. In this way, farmers select for high levels of horizontal resistance. This practice was largely responsible for saving maize production from destruction in tropical Africa after unintentional introduction of the fungal disease, tropical rust.”¹⁰

So far, we have not been convinced that socio-economic considerations have been factored into decision-making in the granting of GM permits to the biotechnology industry. The sloppy manner in which these important issues have been glossed over, reinforces our suspicions.

PUBLIC AWARENESS, PARTICIPATION, ACCESS TO INFORMATION AND LABELLING

The policy pays nothing but lip service to the various issues concerning the public including public awareness, public participation, access to information and consumer choice/labelling of GM food. The policy does not deal with the intricacies of these issue in the context of current debates and discourses.

In respect to **public awareness**, we support the submissions made by the South African Freeze Alliance on Genetic Engineering (SAFeAGE) with respect to the experience of

NGOs and other civil society groups with the government sponsored Public Understanding of Biotechnology (PUB) programme.

With regard to **public participation**, we are on record for raising our extreme disquiet with the lack of public participation in the decision-making concerning GMOs. The approval process in South Africa concerning GMOs does not make provision for public participation. Rather, a mechanism for “public input” has been created¹¹ which deals with an invitation by an applicant to members of the public in the area where a release is intended to take place, to submit comments not less than 30 days from the date of publication.

This type of public input is inherently unfair, prejudicial and obstructs the administrative of justice. It is not in compliance with constitutional legislation called the Promotion of Administrative Justice Act (“PAJA”).¹²

The whole notion of publication of advertisements in the area where the release is to take place (in rural areas) is designed to utterly cut out public interest organisations from the process completely. Nothing in the GMO Act, or its Regulations oblige the public to furnish comments and objections within 30 days. PAJA requires the EC to give affect to parties reasonable notice and opportunity to make representation and that such representations must be taken into account even if they are submitted after the limit stipulated in the advertisement.

We once again reiterate our demands that proper, clear and transparent mechanisms for public participation be created that go well beyond the seriously flawed and restricted application of the notice and comment procedure provided by the Regulations of the GMO Act.

With regard to **access to information**, we are astounded that the policy totally ignores the implications of the outcome of the court case won by Biowatch South Africa, in its legal action against the Minister of Agriculture and others for access to information (High Court of South Africa, Transvaal Provincial Division) Case Number 23005/2002). Throughout its work on the GMO permit applications, the ACB and other groups including Biowatch and Earthlife Africa have received an astonishing paucity of information, with the result that it has been severely hamstrung in conducting any meaningful assessment of permit applications. Indeed, it has become evident that the NDA gives Applicants *carte blanche* to decide what information the public is in fact entitled to. However, since the outcome of the Biowatch court case, we have had arbitrary access to information to industry dockets. For instance, we have been given more than 2000 pages in respect to Dow Agrosiences/Pioneer Hi-Bred’s application for commodity clearance for GM maize 59122, but in respect to Monsanto field trials of GM stacked cotton (MON 810 x NK603) in the Limpopo province, we had access to only a meagre 65 pages!

We require clear policy guidelines from government regarding our rights to access to information in the light of the Biowatch court case. We find it unacceptable that government ignores the outcome of the case in its policy documents and continue with its business as usual policy of giving the biotechnology industry *carte blanche* to decide on our rights to information. We are not satisfied with empty promises as set out in the policy document that "the Department of Agriculture shall provide measures to ensure effective management of information and documentation pertaining to activities under the GMO Act. And the disclosure of decisions, including reasons for decisions."

With regard to **consumer choice and labelling**, the policy notes that consumer should make an informed choice on whether they wish to consume a GMO product or not, and that labelling plays an integral part but nothing further is discussed about the serious shortcomings of the current labelling Regulations made in terms of the Foodstuffs, Cosmetics and Disinfectants Act, 1972 (Act No. 54 of 1972).

The Regulations made under the Foodstuffs, Cosmetics and Disinfectants Act promulgated only as recently as January 2004, follows the United States model where the use of GM techniques *per se* is not itself a trigger for labelling. These Regulations do not apply to GM foods currently imported, marketed and released in South Africa (or elsewhere in the world for that matter). It is only when there is a 'significant difference' in the final food that labelling is required. The circumstances where this is considered to be significantly different is if there are human/animal genes; allergens; requires different cooking; or has altered nutritional composition. **There are no GM foods currently commercialised that would fall within this scope. Therefore, South African consumers will be given no choice over the current generation of GM foods. GM animal feed have thus also been excluded from the scope of the Regulations.**

POLICY ON GMO CONSIGNMENTS IN TRANSIT

We welcome the initiatives taken by the Executive Council in putting together a Transit policy for GM food aid destined for Southern Africa but note that we were not aware of this policy until we read about it in the biosafety policy document.

We note that the transit policy sets out measures to ensure that GM food aid entering South Africa for milling purposes does not cause any contamination within our borders. While we welcome these measures and look forward to their implementation in Regulations, we are extremely concerned about GMOs entering South Africa that have not been approved for commercial use here. We believe that contamination is likely to take place irrespective of risk management measures being taken and therefore believe that such GMOs should be prohibited from being milled in South Africa. We believe that South Africa should adopt a zero tolerance for unapproved GMOs even for GM food aid shipments being milled in South Africa.

We also note that the transit policy sets out procedures for transit consignments for GM food aid shipments transiting through South Africa without being milled. We believe that these procedures should be distributed to civil society groups in Southern Africa for their consideration and input.

GM SEED BULKING

During the course of our work in objecting to Syngenta's applications to conduct field trials of GM cotton, in respect of events COT120, COT200, Cry1AB, CTON102-Cry1AB and CTON200-Cry-1AB,¹³ we ascertained that the proposed experimentation was really an opportunity for the multinational agrochemical company to use the land of South Africa as a nursery for the production of seeds. These seeds are re-exported to the United States for further cultivation there during their growing season. The data generated in South Africa during these trials are important to these companies to support permit applications in the European Union and elsewhere. Despite our vigorous objections to Syngenta's application, the EC granted the application and the only issue of importance to one of the members was whether or not a fee should be levied on the biotechnology industry for its seed bulking activities! We gleaned this information from a summary provided to us of the minutes of a meeting of the EC.

We reiterate our profound disquiet with this abuse of our environment. We believe that this situation has arisen because of the lax biosafety legislation and policy vacuum that exists. Clearly our environment is being placed at risk. We require government to tackle this issue and set out clear policy guidelines regarding field trials and GM seed bulking.

POST COMMERCIALISATION TESTING AND MONITORING FOR THE EFFECTS OF TRANSGENIC FOOD AND FEED

To date, neither the NDA, the National Department of Health nor any other government agency has conducted any post commercialisation testing and monitoring for the effects GMOs on animal and human health.

The reasons for post commercialisation testing and monitoring include *inter alia*, the need to determine if pre-commercialisation testing protocols adequately assess the risks; record trends in predicted effects and to detect effects which were not predicted; for quality control; confirm the accuracy of pre-release protocols; observe smaller and less frequent health risks and so forth.

The biosafety policy must set out comprehensive measure for post-commercialising testing and monitoring of the impacts on the environment, animal and human health of GM food, feed and plants. We have already made recommendations to the EC on several occasions during the course of our objections to various applications for commodity import permits on the kinds of measures that can be taken.

SAFETY APPROVAL OF NON-EXISTENT GMOS

During January 2004, Monsanto South Africa approached the EC for a food safety approval of non-existent GM wheat.¹⁴ Monsanto could do this with impunity, because the GMO Act allows them to do this, notwithstanding that GM wheat is not being grown commercially anywhere on earth. Worst still, had Monsanto Corporation not announced its decision to abandon its ambitious GM wheat project globally, it is highly likely that the EC would have declared Monsanto's non-existent GM wheat as safe for animal and human consumption. If this had happened, then Monsanto South Africa would also have been exempt, in terms of the extremely trade friendly provisions under the GMO Regulations, from any further permit requirements and hence, further biosafety oversight! This is so because there are no explicit regulatory mechanisms or processes in either the GMO Act or its Regulations dealing with commodity clearance permits. However, once a GMO is cleared or a commodity clearance permit is granted, no further permit will be required for the **import to or export from South Africa, the development, production, use, release or distribution throughout South Africa of the GMO in question.**¹⁵

Monsanto sought the clearance from the South African authorities because this would have greatly assisted it to capture the lucrative African wheat market once the GM wheat had entered commercial production. The major wheat importers in Africa include Egypt, Morocco, Algeria and Sub-Saharan Africa. North Africa imports approximately 18 million tons of wheat per year, and Sub-Saharan Africa approximately 10 million tons.

Since the GM wheat application, we have come across numerous applications by Dow Agrosciences/Pioneer Hi-Bred (59122, 59122xTC1507; 55122xNK603) and Syngenta (MR604) for commodity clearance permits in respect of GM maize that do not yet exist, because these GM events have not yet been approved by the Environmental Protection Agency (EPA) in the US where it is under investigation because of food safety concerns.

The processing of these applications cost the tax-payer scarce resources that is better spent on the protection of public goods. For as long as government does not provide clear policy guidelines for GMO approvals, the system will continue to be abused by the biotechnology industry. We call upon government to establish clear rules and procedures for commodity import permits, setting explicitly the obligations that the relevant role players (Applicant, importer, exporter) must comply with, with an emphasis on implementation of the Biosafety Protocol.

DOCUMENTATION ACCOMPANING BULK SHIPMENTS OF GMOS

The public has a right to know that the most controversial issues that could not be agreed upon during the Biosafety Protocol negotiations was the rules for the identification of GM content in bulk agricultural trade. Article 18(2)(a) of the Biosafety

Protocol, which embodies only interim arrangements, allows bulk shipments of GMOs traded directly as food, feed and processing (FFP), be identified ambiguously as “may contain” GMOs. This interim arrangement is unsatisfactory because it is an open invitation for contamination of the global food supply by approved and unapproved GMOs and makes it impossible for the implementation of traceability and labelling systems.

Already, Syngenta has contaminated shipments of GM maize with unapproved GM maize in the well publicised contamination scandal involving Bt10 GM maize.

We require government to be upfront on this issue and set out clear commitments towards the measures that exporters are required to take regarding the testing of bulk shipments in order to introduce a zero tolerance for unapproved GMO; require that exporters verify in writing exactly what the shipment contains (the GMO content as well as the individual variety/genetic transformation event of GMOs) and to indicate that it has been approved in South Africa for FFP. In this regard, we require government to indicate the modalities for sampling and detection that need to be utilised.

Furthermore, and crucially, we require a commitment from government that it will establish a threshold for adventitious presence of approved GMO content in non-GM in such shipments at 0.1%, which the scientific and technical community has agreed is a reliable detection and practically feasible level.

¹ European Communities - Measures affecting the approval and marketing of biotech products (WT/DS0291, 292 and 293). *Amicus Curiae Brief*. June 1, 2004.

http://www.ciel.org/Publications/ECBiotech.AmicusBrief_2June04.pdf

² European Communities - Measures affecting the approval and marketing of biotech products (WT/DS0291, 292 and 293). *Amicus Curiae Brief*. June 1, 2004.

http://www.ciel.org/Publications/ECBiotech.AmicusBrief_2June04.pdf

³ African Centre for Biosafety, the South African Freeze Alliance on Genetic Engineering, Biowatch, and the Safe Food Coalition (2004) Demand for a ban on imports of bt176 and for a public enquiry into safety of food derived from genetically modified crops. May 2004.

⁴ Ishikawa, H. Akedo, I., Minami, T., Shinomura, Y., Tojo, H. & Otani, T. (1999) Prevention of infectious complications subsequent to endoscopic treatment of the colon and rectum. *Journal Infect. Chemother.* 5, 86.

⁵ Hehl, E. M., Beck, R., Luthard, K., Guthoff, R. & Drewelow, B. (1999) Improved penetration of aminoglycosides and fluoroquinolones into the aqueous humour of patients by means of Acuvue contact lenses. *European Journal of Pharmacology.* 55(4), 317.

⁶ Mikkelsen, N. E., Brannvall, M., Virtanen, A. & Kirsebom, L. A.I (1999) Inhibition of RNase P RNA cleavage by aminoglycosides. *National Academy of Sciences, USA.* 96, 6155.

⁷ African Centre for Biosafety, the South African Freeze Alliance on Genetic Engineering, Biowatch, and the Safe Food Coalition (2004) Demand for a ban on imports of bt176 and for a public enquiry into safety of food derived from genetically modified crops. May 2004.

⁸ Meldie A. McGeoch and Ken L. Pringle Science and advocacy: the GM debate in South Africa. *South African Journal of Sciences* 101. January/February 2005.

⁹ See M Mayet obo ACB, *Implementation of Section 78 of the National Biodiversity Management Act: Key Issues and Challenges*, August 2004 <http://www.biosafetyafrica.net>.

¹⁰ Meldie A. McGeoch and Ken L. Pringle Science and advocacy: the GM debate in South Africa. *South African Journal of Sciences* 101. January/February 2005

¹¹ By way of Regulation 6 of the Regulations made under the GMO Act.

¹² Promotion of Administration of Justice Act No 3 of 2000.

¹³ <http://www.biosafetyafrica.net>.

¹⁴ For the public notice, see <http://www.earthlife-ct.org.za/ct/article.php?story=20030815154828541>. For a full briefing on Monsanto's GM wheat application and the loopholes in the South African legislation, see M Mayet, TWN Briefings for MOP 1 - No. 5 *Undermining Biosafety: Monsanto Pushes GM Wheat to Secure Future Access to Lucrative African Markets*.

¹⁵ The wording of section 2(2) is peremptory, and read together with section 2(1) provides as follows " ...a permit ..**shall not be required** [for the import, export, development, production, use, release or distribution of any GMO in the Republic of South Africa]...for those organisms specified in Table 3 of the Annexure." (own emphasis).