**THE SUPREME COURT OF APPEAL OF SOUTH AFRICA**

**JUDGMENT**

**Reportable**

Case no: 934/2023

In the matter between:

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| **AFRICAN CENTRE FOR BIODIVERSITY NPC** | **APPELLANT** |
| and | |
| **MINISTER OF AGRICULTURE, FORESTRY AND FISHERIES** | **FIRST RESPONDENT** |
| **DIRECTOR-GENERAL: DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES** | **SECOND RESPONDENT** |
| **EXECUTIVE COUNCIL FOR GENETICALLY MODIFIED ORGANISMS** | **THIRD RESPONDENT** |
| **APPEAL BOARD, GENETICALLY MODIFIED ORGANISMS** | **FOURTH RESPONDENT** |
| **MONSANTO SOUTH AFRICA (PTY) LTD** | **FIFTH RESPONDENT** |
| **BAYER (PTY) LTD** | **SIXTH RESPONDENT** |

**Neutral citation:** *African Centre for Biodiversity NPC v Minister of Agriculture, Forestry and Fisheries and Others* (934/2023) [2024] ZASCA 143 (22 October 2024)

**Coram:** MOLEMELA P and PONNAN and NICHOLLS JJA and KOEN and COPPIN AJJA

**Heard**: 19 September 2024

**Delivered**: This judgment was handed down electronically by circulation to the parties' representatives by email, publication on the Supreme Court of Appeal website, and release to SAFLII. The date for hand down is deemed to be 22 October 2024 at 11h00.

**Summary:** Genetically Modified Organisms Act 15 of 1997 – application for a permit to conduct activities in respect of genetically modified organisms – s 5(1)*(a)* – failure by decision-makers to determine whether applicant must submit an assessment in accordance with the relevant provisions of the National Environmental Management Act 107 of 1998 – approval of application set aside – application referred back to decision-makers for reconsideration.

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**ORDER**

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**On appeal from**: Gauteng Division of the High Court, Pretoria (Tolmay J, sitting as court of first instance):

a The appeal is upheld with costs including those of two counsel to be paid by the respondents jointly and severally, the one paying the other to be absolved.

b The order of the court *a quo* is set aside and replaced with the following order:

'1 The application succeeds with costs including those of two counsel to be paid by the respondents jointly and severally, the one paying the other to be absolved.

2 The following decisions are reviewed and set aside:

2.1 The fourth respondent's approval during or about June 2015, of the fifth respondent's application for the general release of MON87460;

2.2 The third respondent's decision of 1 September 2016, dismissing the appeal lodged by the appellant against the fourth respondent's approval of the fifth respondent's application for the general release of MON87460; and

2.3 The first respondent's decision of 2 December 2016, confirming the dismissal of the appeal lodged by the appellant against the fourth respondent's approval of the fifth respondent's application for the general release of MON87460.

3 The fifth respondent's application for the approval of the general release of MON87460 is referred back to the fourth respondent for re-consideration.'

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**JUDGMENT**

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**Ponnan JA (Molemela P and Nicholls JA and Koen and Coppin AJJA concurring):**

[1] The use of genetically modified organisms (GMOs) in South Africa is regulated by the Genetically Modified Organisms Act 15 of 1997 (the Act) and, the Regulations framed thereunder, the Genetically Modified Organisms Regulations (the Regulations).[1] The purpose of the Act and the Regulations is, inter alia, to promote the responsible development, production, use and application of GMOs within the

[1] GNR 120 of 26 February 2010.

framework of the Constitution and the National Environmental Management Act 107 of 1998 (NEMA).

[2] The Act establishes an Executive Council for Genetically Modified Organisms (the Executive Council) (s 3), and an Advisory Committee (the Advisory Committee) (s 10). A permit is required for the release of GMOs.[2] Whether or not a permit is granted falls to be determined by the Executive Council in consultation with the Advisory Committee.[3] The process envisaged is a fact and science-based investigation into whether there are any risks posed by the release of a particular GMO into the environment and whether these risks can be effectively managed. To enable this, the Advisory Committee evaluates the scientific components of applications for permits and reports to the Executive Council, which ultimately decides whether to approve the application, and issue a permit.

[3] An application for a permit: (a) must be advertised and any interested party may submit comments to the Executive Council in respect of the application;[4] (b) must include a scientifically based risk assessment in respect of the potential adverse effects of the GMO on the environment as well as human and animal health and safety;[5] and, (c) requires an assessment in terms of NEMA or any other applicable laws, if this is called for by the Executive Council,[6] or if there is reason to believe that the release of the GMO would pose a threat to an indigenous species or the environment.[7] In considering whether a permit should be granted, the Executive Council and Advisory Committee are required to determine whether a proposed activity poses a risk to human and animal health or the environment.[8]

[4] On 14 July 2014, the fifth respondent, Monsanto South Africa (Pty) Ltd (Monsanto), applied to the Executive Council for a permit for the general release of a genetically modified variety of maize, described as MON87460. MON87460,

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[2] Section 5 read with Regulation 2.
[3] Section 5(1)*(b)*.
[4] Regulations 9(1), 9(5)*(f)* and 9(6).
[5] Regulation 3(3)*(a)*.
[6] Regulation 3(3)*(d)*.
[7] Section 78 of the National Environmental Management: Biodiversity Act 10 of 2004.
[8] Regulations 3, 4 and 7.

according to Monsanto, has been genetically modified to reduce yield loss in water limited conditions. Monsanto asserts that:

'The reduced yield loss of maize containing MON 87460 is achieved by the expression of the inserted *Bacillus subtilis* cold shock protein B ("CSPB"). This protein has been extensively studied and is known to facilitate adaptation to environmental stress (such as water scarcity) by binding secondary RNA structures thus helping to preserve normal cellular function. Maize containing MON 87460 also expresses the neomycin phosphotransferase II ("NPTII") protein derived from *Escherichia coli*. The NPTII protein in MON 87460 confers resistance to Kanamycin antibiotic. The purpose of inserting the gene encoding for the NPTII protein was so that there was an effective method for selecting cells after transformation (in other words so that there was a way of selecting plant cells which contain the CSPB gene during early product development).'

[5] Monsanto submitted both confidential and non-confidential versions of the application, which included an assessment of the risks relating to human and animal health, toxicology, allergenicity and nutrition. It was advertised in the Rapport, Business Day and Beeld newspapers during March and April 2014. Interested and affected parties were invited to comment or object. No comments or objections were received in response to the advertisements. The Advisory Committee, having considered the application, issued a recommendation on 17 December 2014 that the application be approved. On the strength of the Advisory Committee's recommendation, the Executive Council granted a permit to Monsanto on 12 June 2015 for the general release of MON87460.

[6] On 7 August 2015, the appellant, the African Centre for Biodiversity NPC (ACB), a non-governmental advocacy organisation, with a focus on biosafety and agricultural biodiversity, appealed in terms of s 19 of the Act against the approval granted by the Executive Council to Monsanto for the general release of MON87460. Monsanto submitted a response to ACB's appeal on 13 July 2016. The Appeal Board, by a majority, dismissed the appeal on 1 September 2016, and the Minister of Agriculture, Forestry and Fisheries (the Minister) confirmed the Appeal Board's decision on 2 December 2016.

[7] In April 2017, ACB applied to the Gauteng Division of the High Court, Pretoria (the high court), for the following relief:

'1. the following decisions are reviewed and set aside:

1.1. the Fourth Respondent's [Executive Council's] approval during or about June 2015, for the general release of MON87460;

1.2. the Third Respondent's [Appeal Board's] decision of 01 September 2016, dismissing the appeal lodged by the Applicant against the Fourth Respondent's approval for the general release of MON87460;

1.3. the First Respondent's [Minister's] decision of 02 December 2016, confirming the dismissal of the appeal lodged by the Applicant against the Fourth Respondent's approval for the general release of MON87460 by the;

2. the Fifth Respondent's [Monsanto's] application for the approval for the general release of MON87460 is referred back to the Fourth Respondent for reconsideration with such guidelines as this Honourable Court deems fit;

. . .'

[8] The Minister, the Director-General: Department of Agriculture, Forestry and Fisheries, the Appeal Board and the Executive Council (collectively referred to as the State respondents) were cited as the first to fourth respondents, respectively. Monsanto was cited as the fifth respondent in the application. After the launch of the application, Bayer (Pty) Ltd (Bayer) acquired ownership of Monsanto and, as a result of the permits and licences relevant to MON87460 having been transferred to it, Bayer came to be joined as the sixth respondent to the proceedings.

[9] The high court (per Tolmay J) dismissed the application on 27 June 2023, but granted leave to ACB to appeal to this Court.

[10] The thrust of the appellant's case is that the State respondents accepted, at face value, the claims made by Monsanto and failed to independently and critically evaluate Monsanto's application to satisfy themselves that the health and safety risks associated with the general release of MON87460 had been properly addressed. The appellant contends that the expert evidence that served before the State respondents, ought to have triggered the application of the precautionary principle enshrined in s 2 of NEMA. This, for two main reasons: first, there was a lack of scientific data from which conclusions about the safety of MON87460 could be drawn; and second, the

data that had been made available supported concerns about health risks arising from the use of MON87460. Accordingly, so the contention proceeds: (a) the Executive Council accepted the data submitted by Monsanto without any consideration of the veracity, accuracy and completeness thereof; (b) the Appeal Board did not engage with the grounds of appeal and the expert evidence, but simply rubber-stamped the decision made by the Executive Council; and, (c) the Minister further rubber-stamped the Appeal Board's decision by way of a confirmation letter that furnished no reasons at all.

[11] Parenthetically, it is perhaps necessary to touch (albeit briefly) on the precautionary principle, given its centrality to the debate. The precautionary principle, in essence, requires that where there exists evidence of possible environmental harm, decision-makers ought to adopt a cautious approach and are compelled to take protective and preventive measures before the anticipated harm materialises. Whilst there has been reference to the precautionary principle since at least the 1970s, it has more recently firmly taken root and has been referred to in almost every recent international environmental agreement, including the 1992 Rio Declaration on Environment and Development (informally described as the Earth Summit) (the Rio Declaration), the 1992 UN Framework Convention on Climate Change (Article 3(3)), the June 1990 London Amendments to the Montreal Protocol on Substances that Deplete the Ozone Layer (Preamble, para 6) and the 1992 Convention on Biological Diversity.[9]

[12] Principle 15 of the Rio Declaration provides:

'In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. 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.'

[13] The Cartagena Protocol on Biosafety to the Convention on Biological Diversity reaffirmed the precautionary approach contained in Principle 15 of the Rio Declaration. The objective of the Protocol is set out in Article 1 as follows:

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[9] *Director-General National Parks & Wildlife Service v Shoalhaven City Council* [1993] NSWLEC 191 (*Shoalhaven*) at 15-16.

'In accordance with the precautionary approach contained in Principle 15 of the Rio Declaration on Environment and Development, the objective of this Protocol is to contribute to ensuring an adequate level of protection in the field of safe transfer, handling and use of living modified organisms resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity, taking into account risks to human health, and specifically focusing on transboundary movements.'

South Africa ratified the Cartagena Protocol in August 2003 and it is included as an Annexure to the Act for information purposes.

[14] In *Fuel Retailers*, the Constitutional Court, in examining the duties imposed on environmental authorities (such as the State respondents in this case), emphasised that the approach adopted in our environmental legislation (a reference in that case to NEMA) is one of risk-aversion and caution, which entails 'taking into account the limitation on present knowledge about the consequences of an environmental decision'.[10] The Court held that the precautionary principle 'is applicable where, due to unavailable scientific knowledge, there is uncertainty as to the future impact of the proposed development'.[11]

[15] In *WWF South Africa v Minister of Agriculture, Forestry and Fisheries and Others*,[12] faced with a challenge to the determination of fishing quotas, the court (per Rogers J) made clear that the determination ought to have been informed by binding principles of environmental protection, conservation and sustainability, including the precautionary principle. Any decision taken therefore could only lawfully be taken with regard to all of these objectives and principles.[13] Indeed, the failure by the decision-maker to apply the precautionary principle – and the fact that the decision ultimately taken was at odds with the precautionary principle – were cited as grounds upon which the determination was found to be unlawful, resulting in a declaration of invalidity.[14]

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[10] *Fuel Retailers Association of Southern Africa v Director-General: Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province and Others* 2007 (6) SA 4 (CC) (*Fuel Retailers*) para 81.
[11] Ibid para 98.
[12] *WWF South Africa v Minister of Agriculture, Forestry and Fisheries and Others* [2018] ZAWCHC 127; [2018] 4 All SA 889 (WCC); 2019 (2) SA 403 (WCC) para 104.
[13] Ibid para 83.
[14] Ibid para 117.

[16] In the course of the judgment, where reference is made to several comparable international jurisdictions,[15] Rogers J observed:

'The risk-averse and precautionary approach mandated by NEMA and MLRA also has a bearing on this aspect of Ms Ndudane's reasoning. The precautionary principle features widely in environmental legislation around the world. It entails that where there is a threat of serious or irreversible damage to a resource, the lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation (Jan Glazewski *Environmental Law in South Africa* 19-20; cf *Space Securitisation (Pty) Ltd v Trans Caledon Tunnel Authority & others* [2013] 4 All SA 624 (GSJ) paras 45-48)'.[16]

[17] The Constitutional Court adopted a similar approach in *Fuel Retailers*,[17] which was concerned with the review of a decision to grant authorisation for the construction of a filing station. In outlining the duties of decision-makers in that context, the Court held:

'Before concluding this judgment, there are two matters that should be mentioned in relation to the duty of environmental authorities which are a source of concern. The first relates to the attitude of Water Affairs and Forestry and the environmental authorities. The environmental authorities and Water Affairs and Forestry did not seem to take seriously the threat of contamination of the underground water supply. The precautionary principle requires these authorities to insist on adequate precautionary measures to safeguard against the contamination of underground water. . . In these circumstances one would have expected that the environmental authorities and Water Affairs and Forestry would conduct a thorough investigation into the possible impact of the installation of petrol tanks in the vicinity of the borehole, in particular, in light of the existence of other filling stations in the vicinity. The environmental authorities did not consider the cumulative effect of the proliferation of filling stations on the aquifer.'[18]

[18] The high court's rejection of the appellant's reliance on the precautionary principle was based on its finding that the precautionary principle does not find direct application in review proceedings. However, such an approach disregards the fundamental role that the precautionary principle plays in directing decision-makers in

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[15] Ibid para 101–104. See also J Glazewski and L Plit [2015] 'Towards the Application of the Precautionary Principle in South African Law' (2015) 26(1) *Stellenbosch Law Review* at 190.
[16] Ibid 100.
[17] *Fuel Retailers* fn 10 above.
[18] Ibid paras 98-99.

the exercise of their discretion. The current state of knowledge and uncertainty, the potential for serious or irreversible harm and the adoption of a cautious approach is clearly consistent with the subject-matter, scope and purpose of the Act. In *Director-General National Parks & Wildlife Service v Shoalhaven City Council*, Stein J observed that:

'In my opinion the precautionary principle is a statement of common sense and has already been applied by decision-makers in appropriate circumstances prior to the principle being spelt out. It is directed towards the prevention of serious or irreversible harm to the environment in situations of scientific uncertainty. Its premise is that where uncertainty or ignorance exists concerning the nature or scope of environmental harm (whether this follows from policies, decisions or activities), decision makers should be cautious.'[19]

[19] Delineating the role of the courts in circumstances such as this, the Constitutional Court stated:

'The role of the courts is especially important in the context of the protection of the environment and giving effect to the principle of sustainable development. The importance of the protection of the environment cannot be gainsaid. Its protection is vital to the enjoyment of the other rights contained in the Bill of Rights; indeed, it is vital to life itself. It must therefore be protected for the benefit of the present and future generations. The present generation holds the earth in trust for the next generation. This trusteeship position carries with it the responsibility to look after the environment. It is the duty of the Court to ensure that this responsibility is carried out.'[20]

[20] The experts, who provided opinions in support of the appellant, highlighted several fundamental concerns, all of which were articulated in the appeal document that served before the Appeal Board. Those concerns include:

(a) When regard is had to the Cartagena Protocol, which requires that claims of scientific certainty be substantiated with evidence to prove lack of potential for scientific hazards; Monsanto's risk assessment was inadequate in identifying plausible hazards;

(b) Monsanto's claims of lack of allergenicity are unsubstantiated;

(c) Monsanto itself identified a fragment of the protein used in MON87460 (cspB) that was resistant to pepsin digestion, meaning that it is not fully digestible by gastric juices,

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[19] *Shoalhaven* fn 9 above.
[20] *Fuel Retailers* fn 10 above para 102.

further experimentation (such as serum analysis or animal testing) was thus required to assess potential allergenicity;
(d) The data that Monsanto had included in its application showed high expression of cspB in pollen, but Monsanto has not conducted any studies on the potential and likelihood of allergenic responses to pollen;
(e) There is no history of the safe use of MON87460 in the form in which it is expressed inasmuch as the data submitted by Monsanto in support of its safety claims were based on fermented and digested forms of the product;
(f) There was no evidence in the record before the Executive Council, the Appeal Board and the Minister on the effects of food processing and the safety of human exposure via cooked MON87460 in South African diets, the only data included was summaries of the following –
(i) A chicken feeding study in which raw maize was fed to chickens;
(ii) An acute toxicity study on the effects on mice of a bacterially derived isolated protein, which has limited application to human exposure and is in any event not a study of all proteins associated with MON87460;
(iii) A rat feeding study;
(iv) A broiler chicken study, which was concerned with food quality standards and not with any adverse impacts on health; and,
(v) Aggregated field trial summaries, which contain insufficient information to interpret and apply the findings to the application for approval for the general release of MON87460.

[21] These are the precise circumstances, so contends the appellant, that ought to have triggered the application of the precautionary principle by the Executive Council, the Appeal Board and the Minister. Instead of adopting the prescribed cautious approach and requiring Monsanto to address the safety concerns that had been identified, each of the State respondents proceeded to accept the say-so of Monsanto without any further consideration of safety risks. The precautionary principle ought to have guided the decisions taken by the Executive Council, the Appeal Board and the Minister. To the extent that they did not have regard to the precautionary principle and took decisions that were at odds with its prescripts, so the contention proceeds, their decisions are liable to be reviewed and set aside. However, as interesting a discussion that a consideration of these issues is likely to generate in the light of the competing

contentions by the respondents, for the present, they need hardly detain us. This, because a further complaint by the appellant, that the State respondents had failed to comply with s 5(1)*(a)* of the Act, appears to have gone unanswered.

[22] Section 5(1)*(a)* of the Act provides that the Executive Council shall:

'[W]here an applicant applies in the prescribed manner for a permit to conduct activities in respect of genetically modified organisms determine whether that applicant must, in addition to his or her application, submit an assessment in accordance with the relevant provisions of [NEMA], of the impact on the environment and an assessment of the socio-economic considerations of such activities'.

This provision, which is framed in peremptory terms, places an obligation on the Executive Council to make a determination as to whether or not an applicant must submit an assessment in accordance with NEMA.

[23] The Rule 53 record contains no express evidence of any determination by the Executive Council as contemplated by s 5(1)*(a)*. The argument advanced at the bar was that it would be safe to infer that the Executive Council had indeed determined that Monsanto did not have to submit such an assessment. However, such evidence, as there is, points in the opposite direction. The dissenting voice on the Appeal Board recorded:

'Environmental Impact Assessment (EIA): There are no Indications/evidence/information to show that Monsanto was requested to submit an assessment of the impact on the environment and socio-economic considerations'.

That recordal strongly suggests that, at the time that the Executive Council assessed the application for a permit for the general release of MON87460, it failed to consider or determine whether an environmental impact study in terms of NEMA was necessary.

[24] The high court conflated the obligation arising from section 5(1)*(a)* of the Act with the applicability of the precautionary principle, finding that an environmental impact study would only be required in the event of the precautionary principle being triggered. First, as addressed above, the precautionary principle was triggered and ought to have been applied. Second, whether the Executive Council, as a matter of fact, complied with section 5(1)*(a)* by considering the necessity of an environmental

impact study to ascertain the impact on the environment of the proposed general release of MON87460, was a separate and distinct inquiry from whether the precautionary principle was triggered and should have been applied. It ought to have been a relatively simple and straightforward matter for the State respondents to have adduced evidence that a determination, one way or the other, had been made. They did not. The ineluctable conclusion is that the Executive Council failed to comply with a mandatory statutory prescript contained in section 5(1)*(a)*. This means that the Executive Council's decision cannot stand. Nor, for that matter, it must follow, can the decisions by the Appeal Board or the Minister.

[25] In the result:

a The appeal is upheld with costs including those of two counsel to be paid by the respondents jointly and severally, the one paying the other to be absolved.

b The order of the court *a quo* is set aside and replaced with the following order:

'1 The application succeeds with costs including those of two counsel to be paid by the respondents jointly and severally, the one paying the other to be absolved.

2 The following decisions are reviewed and set aside:

2.1 The fourth respondent's approval during or about June 2015, of the fifth respondent's application for the general release of MON87460;

2.2 The third respondent's decision of 1 September 2016, dismissing the appeal lodged by the appellant against the fourth respondent's approval of the fifth respondent's application for the general release of MON87460; and

2.3 The first respondent's decision of 2 December 2016, confirming the dismissal of the appeal lodged by the appellant against the fourth respondent's approval of the fifth respondent's application for the general release of MON87460.

3 The fifth respondent's application for the approval of the general release of MON87460 is referred back to the fourth respondent for re-consideration.'

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V M PONNAN

JUDGE OF APPEAL

Appearances

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|---|---|
| For the appellant: | K Pillay SC with N Stein |
| Instructed by: | Legal Aid South Africa, Johannesburg |
| | Legal Aid South Africa, Bloemfontein |
| For the first to fourth respondents: | J Rust SC |
| Instructed by: | The State Attorney, Pretoria |
| | The State Attorney, Bloemfontein |
| For the fifth and sixth respondents: | P Lazarus SC with I Learmonth |
| Instructed by: | Webber Wentzel, Johannesburg |
| | McIntyre Van Der Post, Bloemfontein |