THE SUPREME COURT OF APPEAL OF SOUTH AFRICA

JUDGMENT

Reportable

Case No: 1369/2017 and 790/2018

In the matters between:

MINISTER OF MINERAL RESOURCES	**APPELLANT**

and

JOHN DOUGLAS STERN NO & 15 OTHERS	**RESPONDENTS**

and

TREASURE THE KAROO ACTION GROUP	**FIRST APPELLANT**
AFRIFORUM	**SECOND APPELLANT**

and

DEPARTMENT OF MINERAL RESOURCES	**FIRST RESPONDENT**
MINISTER OF MINERAL RESOURCES	**SECOND RESPONDENT**
THE HEAD OF THE DEPARTMENT OF MINERAL RESOURCES	**THIRD RESPONDENT**
MINISTER OF ENVIRONMENTAL AFFAIRS	**FOURTH RESPONDENT**

Neutral citation: *Minister of Mineral Resources v Stern & others* (1369/2017) and *Treasure the Karoo Action Group & another v Department of Mineral Resources & others* (790/2018) [2019] ZASCA 99 (4 July 2019)

Coram: Cachalia, Mbha, Mathopo and Van der Merwe JJA and Davis AJA

Heard: 16 May 2019

Delivered: 4 July 2019

Summary: Statute – whether Minister of Mineral Resources empowered by s 107(1) of the Mineral and Petroleum Resources Development Act 28 of 2002 to make the Regulations for Petroleum Exploration and Production, 2015 (the Petroleum regulations) – Petroleum regulations regulate process and requirements of application for environmental authorisation under the National Environmental Management Act 107 of 1998 (NEMA) and set a regulatory framework and norms and standards for management of environmental impacts of petroleum exploration and production – Minister of Environmental Affairs empowered by NEMA to make regulations regarding these matters – Minister of Mineral Resources not empowered to make regulations regarding environmental matters – impractical to sever invalid regulations from the Petroleum regulations – Petroleum regulations set aside in their entirety.

ORDER

On appeal from: Eastern Cape Division of the High Court, Grahamstown (Bloem J sitting as court of first instance) (Stern matter) and Gauteng Division of the High Court, Pretoria (Dippenaar AJ sitting as court of first instance) (TKAG matter):

In the Stern matter:

1 The appeal is dismissed with costs, including the costs of two counsel.

In the TKAG matter:

1 The appeal is upheld with costs, including the costs of two counsel.

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

'(a) The Regulations for Petroleum Exploration and Production, 2015 that came into effect on 3 June 2015, in accordance with Government Notice R466 in Government Gazette 38855, are reviewed and set aside.

(b) The respondents, jointly and severally, are ordered to pay the costs of this application, including the costs of two counsel.'

JUDGMENT

Van der Merwe JA (Cachalia, Mbha and Mathopo JJA and Davis AJA concurring)

Introduction

[1] On 3 June 2015, the Minister of Mineral Resources (the Minerals Minister) promulgated the Regulations for Petroleum Exploration and Production, 2015 (the Petroleum regulations).[1] Whether the Minerals Minister was empowered to make these regulations, is the central issue in this consolidated appeal.

[2] On 20 November 2015, the trustees of the Stern Family Trust and several other farmers and farmers' organisations launched an application in the Eastern Cape

[1] GN R466, *GG* 38855, 3 June 2015.

Division of the High Court, Grahamstown for an order reviewing and setting aside the Petroleum regulations (the Stern matter). All of the applicants in the Stern matter have interests in farming in the Karoo districts of Graaff-Reinet, Cradock and Jansenville. The Minerals Minister was cited as the only respondent. Several grounds for review were raised, but by the time that the matter came before Bloem J, only two remained. They were whether the Minerals Minister had the power to make the Petroleum regulations and whether their making was procedurally fair. The applicants relied on the provisions of the Promotion of Administrative Justice Act 3 of 2000 (PAJA) and in the alternative, on the constitutional principle of legality. The Minerals Minister argued that necessary parties had not been joined in the application. He admitted that PAJA was applicable, but maintained that the Petroleum regulations were validly made under s 107 of the Mineral and Petroleum Resources Development Act 28 of 2002 (the MPRDA). He denied that an unfair procedure had been employed.

[3] Bloem J rejected the non-joinder plea. He also held that the Minerals Minister was not empowered to make the Petroleum regulations, and that their making was procedurally unfair. He thus granted an order reviewing and setting them aside in terms of ss 6(2)*(a)*(i) and 6(2)*(c)* of PAJA, with costs, but granted leave to the Minerals Minister to appeal to this court. The issues in the appeal relating to the Stern matter are the same as those determined by Bloem J, save that the Minerals Minister contended in this court that PAJA did not apply to the making of the Petroleum regulations.

[4] On 27 November 2015, some seven days after the commencement of the Stern matter, two non-profit organisations, Treasure the Karoo Action Group and AfriForum, launched a similar application in the Gauteng Division of the High Court, Pretoria (the TKAG matter). The first three respondents in the TKAG matter were the Minerals Minister, the Department of Mineral Resources and the Head of the Department of Mineral Resources. Unless the context indicates otherwise, I refer to these three respondents collectively as the Minerals Minister. The fourth respondent was the Minister of Environmental Affairs (the Environment Minister). The applicants in the TKAG matter sought the review and setting aside of the Petroleum regulations on various grounds. The matter was opposed by the Minerals Minister and the Environment Minister. It came before Dippenaar AJ, who found for the respondents and dismissed the application, but directed that each party pay its own costs. She also

granted leave to appeal to this court. The sole issue in the appeal relating to the TKAG matter is whether the Petroleum regulations fall foul of the principle of legality.

Hydraulic fracturing and the environment

[5] During the 1960s and 1970s gas reserves were discovered in the sedimentary shale rock structures in the Karoo Basin. These shale rock structures are found at depths of between 1 500 metres and 4 500 metres below the surface. Hydrocarbon gas that had been created from organic material, escaped from source rock formations, migrated upwards and became trapped in small porous spaces in the extremely impermeable shale rock structures. This is referred to as shale gas. There is no real distinction between the nature of shale gas and that of conventional oil and gas deposits. The critical difference lies in the method of their extraction. Hydrocarbon accumulations in reservoir rocks form conventional oil and gas fields from which the oil or gas is extracted by drilling wells that give access to the reservoirs. Because the small pore spaces containing the shale gas are dispersed over very large areas, the shale gas cannot economically be accessed and extracted by conventional methods. The method of extracting shale gas relevant to this appeal is hydraulic fracturing or 'fracking'.

[6] In the Karoo Basin, hydraulic fracturing for shale gas would firstly involve deep vertical drilling into the shale rock layer. The drilling would intersect various geological layers. This may cause the linking of multiple isolated hydrogeological systems. Once the shale rock layer is reached, horizontal drilling takes place for up to 2 500 metres. The purpose of the horizontal drilling is to maximise contact with the shale gas pores in the layer. The contact between the drilled wells and the pores must, however, be enhanced artificially. This is done by pumping a mixture of water (99 to 99,5 per cent) and chemicals (0,5 to 1 per cent) into the well at high pressure. This process fractures the shale rock layer. The overpressurised water opens the fractures to gain access to as many pores as possible. Once the pressure is reduced, the water, mixed with heavy or radioactive metals from the rock formation, reflows to the surface, together with the shale gas.[2]

[2] In terms of the Petroleum regulations '"hydraulic fracturing" means injecting fracturing fluids into the target formation at a pressure exceeding the parting pressure of the rock to induce fractures through which petroleum can flow to the wellbore'.

[7] Hydraulic fracturing may have a variety of adverse effects on the environment. Because the small shale gas pores are spread over a wide area, production of shale gas by hydraulic fracturing in economically viable quantities requires more wells than conventional gas fields. This would unavoidably result in area consumption for drilling pads, equipment, and facilities for processing, storing and transporting the gas. Access roads and manoeuvring space for trucks would be required. This would generate dust and noise. Hydraulic fracturing may also have seismic effects. Large quantities of water would be used. Waste water containing chemicals or heavy or radioactive metals would have to be disposed of.

[8] It is common cause, however, that the major potentially adverse impacts of hydraulic fracturing on the environment are the emission of pollutants and the contamination of surface water and groundwater. This may be caused by uncontrolled gas or fluid flows arising from blowouts or spills, linking of hydrogeological systems, well failures (corrosion of the casing or cementing failure), leaking of fracturing fluids and uncontrolled waste water discharge. The contamination of groundwater in a water-scarce area may, in particular, be disastrous.

Factual Background

[9] The definition of 'petroleum' in s 1 of the MPRDA includes hydrocarbon gas such as shale gas. Chapter 6 of the MPRDA (ss 69-90) deals with the exploration for and production of petroleum. An application for an exploration right is made in terms of s 79 of the MPRDA. It is made to the Petroleum Agency of South Africa (PASA), an agency designated under s 70 to perform functions referred to in Chapter 6, and is considered by the Minerals Minister in terms of s 80 of the MPRDA. An application for a production right is submitted to PASA in terms of s 83 and considered by the Minerals Minister under s 84.

[10] Between 2008 and 2010 three companies applied to PASA for rights to explore for shale gas in the Karoo by the use of hydraulic fracturing. They are Bundu Gas and Oil Exploration (Pty) Limited (Bundu), Falcon Oil and Gas Ltd (Falcon) and Shell Exploration Company B.V. (Shell). The public participation processes that followed elicited a large number of objections to these applications. The objections were aimed,

essentially, at the potentially adverse environmental impacts of hydraulic fracturing and the lack of proper regulation thereof.

[11] In response to these objections, and on the recommendation of PASA, the Minerals Minister imposed a moratorium on all applications for rights under Chapter 6 of the MPRDA. The moratorium was imposed in terms of s 49(1) of the MPRDA and published in the Government Gazette on 1 February 2011,[3] but did not affect the applications received before this date from Bundu, Falcon and Shell.

[12] During December 2011, the Minerals Minister established an inter-departmental task team. Its mandate included the evaluation of the potential environmental risks posed by the process of hydraulic fracturing as well as the social impacts of shale gas exploitation. The task team appointed a working group to perform a study in this regard, which it duly produced, and the task team submitted a report to the Minerals Minister.

[13] The report of the task team included the following recommendations: (a) to allow normal exploration (excluding hydraulic fracturing), such as geological field mapping and other data-gathering activities to proceed under the existing regulatory framework; (b) to constitute a monitoring committee to ensure comprehensive and coordinated augmentation of the regulatory framework and supervision of operations; (c) to augment the current regulatory framework; and (d) once all the preceding actions have been completed, to authorise hydraulic fracturing under strict supervision of the monitoring committee, which, in the event of any unacceptable outcomes, could halt the process.

[14] On 7 September 2012, Cabinet approved these recommendations. The envisaged monitoring committee was established. Amongst its members were representatives of the Departments of Mineral Resources, Environmental Affairs, Water and Sanitation, and Science and Technology. The monitoring committee produced draft regulations, which were published by the Minerals Minister for public comment on

[3] Mineral and Petroleum Resources Development Act (28/2002): South African Agency for Promotion of Petroleum Exploration and Exploitation (Pty) Ltd (Petroleum Agency SA): Moratorium under s 49(1), GN 54, *GG* 33988, 1 February 2011.

15 October 2013.[4] The monitoring committee assessed the responses and revised the regulations.

[15] In the meantime, the Minerals Minister published another moratorium under s 49(1) of the MPRDA.[5] The moratorium again excluded the applications of Bundu, Falcon and Shell. However, on 24 November 2014, these entities were informed that PASA would process their applications, but that they should: revise their environmental management programmes to exclude hydraulic fracturing; undertake a further public participation process in terms of s 79(4)*(a)* of the MPRDA in respect of their revised environmental management programmes; and submit their revised environmental management programmes by 27 February 2015. Bundu and Falcon availed themselves of this opportunity, but Shell did not. The public participation process in respect of the revised environmental management programmes again elicited a large number of objections.

[16] As I have said, the Minerals Minister promulgated the Petroleum regulations on 3 June 2015. The Government Notice stated that the regulations were made under s 107 of the MPRDA.[6] There is no evidence that the applications of Bundu, Falcon and Shell progressed beyond the stages that I have mentioned. It can safely be accepted that their progress was halted pending the outcome of the appeal.

Legislative history and framework

(a) MPRDA

[17] Section 3(1) of the MPRDA provides that mineral and petroleum resources are the common heritage of all the people of South Africa and that the State is the custodian thereof for the benefit of all South Africans. In terms of s 3(2), the Minerals Minister, acting on behalf of the State as custodian of the nation's mineral and petroleum resources, may grant, issue, refuse, control and manage, *inter alia*, any prospecting right, mining right, exploration right or production right. Chapter 4 of the MPRDA

[4] Mineral and Petroleum Resources Development Act (28/2002): Proposed Technical Regulations for Petroleum Exploration and Exploitation, GN 1032, *GG* 36938, 15 October 2013.
[5] Mineral and Petroleum Resources Development Act (28/2002): Restriction in terms of s 49(1) of the Mineral and Petroleum Resources Development Act, 2002 (Act No. 28 of 2002) on granting of new applications for reconnaissance permits, technical co-operation permits, exploration rights and production rights in terms of ss 74, 76, 79 and 83 of the Act, GN 71, *GG* 37294, 3 February 2014.
[6] The Government Notice also referred to the provisions of s 14 of the Interpretation Act 33 of 1957, but the parties are in agreement that these provisions play no role in the appeal.

(ss 9-56) deals with applications for and granting of prospecting rights and mining rights in respect of minerals. As I have said, Chapter 6 of the MPRDA deals with applications for and granting of exploration rights and production rights in respect of petroleum.[7] Section 69(2) makes certain provisions of the MPRDA relating to minerals applicable to petroleum exploration and production.[8]

[18] Prior to the amendments that I shall revert to shortly, the environmental impacts of petroleum exploration and production were regulated under the MPRDA. Prior to its repeal, s 38 of the MPRDA, *inter alia*, provided that the holder of the relevant right under the MPRDA was obliged to give effect to the general objectives of integrated environmental management laid down in Chapter 5 of the National Environmental Management Act 107 of 1998 (NEMA) and to consider, investigate, assess and communicate the impact of the conduct in terms of the right on the environment. It also provided that the holder of the right: was obliged to manage all environmental impacts in accordance with his or her environmental management plan or environmental management programme and as an integral part of his or her operations; had, as far as it was reasonably practicable, to rehabilitate the environment affected by the operations to its natural or predetermined state; and was responsible for any environmental damage, pollution or ecological degradation as a result of his or her operations.

[19] Section 39, in turn, provided for environmental management programmes and environmental management plans, in the following terms:

'(1) Every person who has applied for a mining right in terms of section 22 must conduct an environmental impact assessment and submit an environmental management programme within 180 days of the date on which he or she is notified by the Regional Manager to do so.

---

[7] See para 9 above.

[8] MPRDA 2002, section 69(2):
'*(a)* For the purposes of this Chapter, section 9, 10, 11, 12, 21, 26, 29, 30, 37, 38A, 38B, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 64 and Chapter 7 and Schedule II apply with the necessary changes.
(b) Any reference in the provisions referred to in paragraph *(a)* to—
(i) minerals, must be construed as a reference to petroleum;
(ii) mining, must be construed as a reference to production;
(iii) mining area, must be construed as a reference to production area;
(iv) mining rights, must be construed as a reference to production rights;
(v) prospecting, must be construed as a reference to exploration;
(vi) prospecting area, must be construed as a reference to exploration area;
(vii) prospecting rights, must be construed as a reference to exploration rights; and
(viii) reconnaissance permission, must be construed as a reference to reconnaissance permit.'

(2) Any person who applies for a reconnaissance permission, prospecting right or mining permit must submit an environmental management plan as prescribed.

(3) An applicant who prepares an environmental management programme or an environmental management plan must—

(a) establish baseline information concerning the affected environment to determine protection, remedial measures and environmental management objectives;

(b) investigate, assess and evaluate the impact of his or her proposed prospecting or mining operations on—

(i) the environment,

(ii) the socio-economic conditions of any person who might be directly affected by the prospecting or mining operation; and

(iii) any national estate referred to in section 3 (2) of the National Heritage Resources Act, 1999 (Act No. 25 of 1999), with the exception of the national estate contemplated in section 3 (2) (*i*) (vi) and (vii) of that Act;

(*c*) develop an environmental awareness plan describing the manner in which the applicant intends to inform his or her employees of any environmental risks which may result from their work and the manner in which the risks must be dealt with in order to avoid pollution or the degradation of the environment; and

(*d*) describe the manner in which he or she intends to—

(i) modify, remedy, control or stop any action, activity or process which causes pollution or environmental degradation;

(ii) contain or remedy the cause of pollution or degradation and migration of pollutants; and

(iii) comply with any prescribed waste standard or management standards or practises.

(4) (*a*) Subject to paragraph (*b*), the Minister must, within 120 days from the lodgement of the environmental management programme or the environmental management plan, approve the same, if—

(i) it complies with the requirements of subsection (3);

(ii) the applicant has complied with section 41 (1); and

(iii) the applicant has the capacity, or has provided for the capacity, to rehabilitate and manage negative impacts on the environment.

(*b*) The Minister may not approve the environmental management programme or the environmental management plan unless he or she has considered—

(i) any recommendation by the Regional Mining Development and Environmental Committee; and

(ii) the comments of any State department charged with the administration of any law which relates to matters affecting the environment.

(5) The Minister may call for additional information from the person contemplated in subsection (1) or (2) and may direct that the environmental management programme or environmental management plan in question be adjusted in such way as the Minister may require.

(6) (*a*) The Minister may at any time after he or she has approved an environmental management programme or environmental management plan and after consultation with the holder of the reconnaissance permission, prospecting right, mining right or mining permit concerned, approve an amended environmental management plan or environmental management programme;

(*b*) For the purposes of paragraph (*a*), subsection (4) applies with the necessary changes.

(7) The provisions of subsection (3) (*b*) (ii) and the subsection (3) (*c*) do not apply to the applications for reconnaissance permissions, prospecting rights or mining permits.'

[20] Prior to its amendment, s 107(1) of the MPRDA read as follows:

'(1) The Minister may, by notice in the *Gazette*, make regulations regarding—

(*a*) (i) the conservation of the environment at or in the vicinity of any mine or works;

(ii) the management of the impact of any mining operations on the environment at or in the vicinity of any mine or works;

(iii) the rehabilitation of disturbances of the surface of land where such disturbances are connected to prospecting or mining operations;

(iv) the prevention, control and combating of pollution of the air, land, sea or other water, including ground water, where such pollution is connected to prospecting or mining operations;

(v) pecuniary provision by the holder of any right, permit or permission for the carrying out of an environmental management programme;

(vi) the establishment of accounts in connection with the carrying out of an environmental management programme and the control of such accounts by the Department;

(vii) the assumption by the State of responsibility or co-responsibility for obligations originating from regulations made under subparagraphs (i), (ii), (iii) and (iv) of this paragraph; and

(viii) the monitoring and auditing of environmental management programmes;

(*b*) the exploitation processing, utilization or use of or the disposal of any mineral;

(*c*) procedures in respect of appeals lodged under this Act;

(*d*) fees payable in relation to any right, permit or permission issued or granted in terms of this Act;

(*e*) fees payable in relation to any appeal contemplated in this Act;

(*f*) the form of any application which may or have to be done in terms of this Act and of any consent or document required to be submitted with such application, and the information or details which must accompany any such application;

(*g*) the form, conditions, issuing, renewal, abandonment, suspension or cancellation of any environmental management programme, permit, licence, certificate, permission, receipt or other document which may or have to be issued, granted, approved, required or renewed in terms of this Act;

(*h*) the form of any register, record, notice, sketch plan or information which may or shall be kept, given, published or submitted in terms of or for the purposes of this Act;

(*i*) the prohibition on the disposal of any mineral or the use thereof for any specified purpose or in any specified manner or for any other purpose or in any other manner than a specified purpose or manner;

(*j*) the restriction or regulation in respect of the disposal or use of any mineral in general;

(*k*) any matter which may or must be prescribed for in terms of this Act; and

(*l*) any other matter the regulation of which may be necessary or expedient in order to achieve the objects of this Act.'

[21] An agreement entered into between the Environment Minister, the Minerals Minister and the Minister responsible for water affairs, constituted a paradigm shift in respect of the management of environmental impacts of activities under the MPRDA. The agreement was entitled the *One Environmental System.* Its main import is set out in s 50A(2) of NEMA:

'Agreement for the purpose of subsection (1) means the Agreement reached between the Minister, the Minister responsible for water affairs and the Minister responsible for mineral resources titled ***One Environmental System*** for the country with respect to mining, which entails—

(*a*) that all environment related aspects would be regulated through one environmental system which is the principal Act and that all environmental provisions would be repealed from the Mineral and Petroleum Resources Development Act, 2002;

(*b*) that the Minister sets the regulatory framework and norms and standards, and that the Minister responsible for Mineral Resources will implement the provisions of the principal Act and the subordinate legislation as far as it relates to prospecting, exploration, mining or operations;

(*c*) that the Minister responsible for Mineral Resources will issue environmental authorisations in terms of the principal Act for prospecting, exploration, mining or operations, and that the Minister will be the appeal authority for these authorisations; and

(*d*) that the Minister, the Minister responsible for Mineral Resources and the Minister responsible for Water Affairs agree on fixed time-frames for the consideration and issuing of the authorisations in their respective legislation and agree to synchronise the time frames.'[9]

Thus, the implementation of the *One Environmental System* would establish NEMA as the only environmental statute and the Environment Minister as the 'lead' minister.

[22] Pursuant to the *One Environmental System*, ss 38, 39 and 107(1)*(a)* of the MPRDA, amongst others, were deleted with effect from 7 June 2013 and s 38A was inserted in the MPRDA. It provides:

'(1) The Minister is the responsible authority for implementing environmental provisions in terms of the National Environmental Management Act, 1998 (**Act No. 107 of 1998**) as it relates to prospecting, mining, exploration, production or activities incidental thereto on a prospecting, mining, exploration or production area.

(2) An environmental authorisation issued by the Minister shall be a condition prior to the issuing of a permit or the granting of a right in terms of this Act.'

In terms of s 1 of the MPRDA, 'environmental authorisation' has the meaning assigned to it in s 1 of NEMA.

(b) NEMA and the EIA regulations

[23] Section 1 of NEMA defines the 'environment' as 'the surroundings within which humans exist and that are made up of – (i) the land, water and atmosphere of the earth; (ii) micro-organisms, plant and animal life; (iii) any part or combination of (i) and (ii) and the interrelationship among and between them; and (iv) the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being'. It also defines 'environmental authorisation'. For present purposes this means the authorisation by a competent authority of a listed activity. A listed activity is an activity identified by the Environment Minister under s 24(2)*(a)*, which may not commence without an environmental authorisation from the competent authority. The exploration for and production of petroleum are such listed activities.

[9] Section 50A of NEMA was substantially replicated in s 163A of the National Water Act 36 of 1998.

The competent authority is the organ of state charged by NEMA with granting or refusing an environmental authorisation in respect of a specific listed activity, *in casu* the Minerals Minister.

[24] Chapter 5 of NEMA (ss 23-24K) deals with integrated environmental management. Section 23 sets out the purpose and general objective of general integrated environmental management. Section 24 was substituted in consequence of the *One Environmental System*. It deals extensively with environmental authorisations. In terms of s 24(1A), an applicant for an environmental authorisation must comply with the requirements prescribed[10] in terms of NEMA, including the regulations issued thereunder,[11] in relation to:

'(*a*) steps to be taken before submitting an application, where applicable;

(*b*) any prescribed report;

(*c*) any procedure relating to public consultation and information gathering;

(*d*) any environmental management programme;

(*e*) the submission of an application for an environmental authorisation and any other relevant information; and

(*f*) the undertaking of any specialist report, where applicable.'

[25] Section 24(4) of NEMA details what procedures for the investigation, assessment and communication of the potential consequences or impacts of activities on the environment must include and ensure. Section 24(5) provides that the Environment Minister, or a MEC to whom the relevant Premier has assigned responsibility for environmental affairs with the concurrence of the Environment Minister, may make regulations consistent with s 24(4):

'(*a*) laying down the procedure to be followed in applying for, the issuing of, and monitoring compliance with, environmental authorisations;

(*b*) laying down the procedure to be followed in respect of—

(i) the efficient administration and processing of environmental authorisations;

(ii) fair decision-making and conflict management in the consideration and processing of applications for environmental authorisations;

(iv) applications to the competent authority by any person to be exempted from the provisions of any regulation in respect of a specific activity;

---

[10] In terms of s 1 of NEMA 'prescribe' means prescribe by regulation in the Gazette.

[11] In terms of s 1 of NEMA 'this Act' includes the schedules, regulations and any notice issued under the Act.

(Editorial note: Numbering as per *Government Gazette*.)

(v) appeals against decisions of competent authorities;

(vi) the management and control of residue stockpiles and deposits;

(vii) consultation with land owners, lawful occupiers and other interested or affected parties;

(viii) mine closure requirements and procedures, the apportionment of liability for mine closure and the sustainable closure of mines with an interconnected or integrated impact resulting in a cumulative impact;

(ix) financial provision; and

(x) monitoring and environmental management programme performance assessments;

(*b*A) laying down the procedure to be followed for the preparation, evaluation, adoption and review of prescribed environmental management instruments, including—

(i) environmental management frameworks;

(ii) strategic environmental assessments;

(iii) environmental impact assessments;

(iv) environmental management programmes;

(v) environmental risk assessments;

(vi) environmental feasibility assessments;

(vii) norms or standards;

(viii) spatial development tools;

(viiiA) minimum information requirements; or

(ix) any other relevant environmental management instrument that may be developed in time;

. . . .

(*h*) prescribing minimum criteria for the report content for each type of report and for each process that is contemplated in terms of the regulations in order to ensure a consistent quality and to facilitate efficient evaluation of reports;

(*i*) prescribing review mechanisms and procedures including criteria for, and responsibilities of all parties in, the review process; and

(*j*) prescribing any other matter necessary for dealing with and evaluating applications for environmental authorisations.'

[26] It is also necessary to refer to s 24(10) of NEMA. It provides:

'(*a*) The Minister, or an MEC with the concurrence of the Minister, may—

(i) develop or adopt norms or standards for—

(*aa*) a listed activity or specified activity contemplated in subsection (2) (*a*) and (*b*);

(*bb*) any part of the listed or specified activity referred to in item (*aa*);

(*cc*) any sector relating to item (*aa*);

(*dd*) any geographical area relating to item (*aa*); or

(*ee*) any combination of the activities, sectors, geographical areas, listed activities or specified activities referred to in items (*aa*), (*bb*), (*cc*) and (*dd*);

(ii) prescribe the use of the developed or adopted norms or standards in order to meet the requirements of this Act;

(iii) prescribe reporting and monitoring requirements; and

(iv) prescribe procedures and criteria to be used by the competent authority for the monitoring of such activities in order to determine compliance with the prescribed norms or standards.

(*b*) Norms or standards contemplated in paragraph (*a*) must provide for rules, guidelines or characteristics—

(i) that may commonly and repeatedly be used; and

(ii) against which the performance of activities or the results of those activities may be measured for the purposes of achieving the objects of this Act.

(*c*) The process of developing norms or standards contemplated in paragraph (*a*) must, as a minimum, include—

(i) publication of the draft norms or standards for comment in the relevant *Gazette*;

(ii) consideration of comments received; and

(iii) publication of the norms or standards to be prescribed.

(*d*) The process of adopting norms or standards contemplated in paragraph (*a*) must, as a minimum, include—

(i) publication of the intention to adopt existing norms or standards in order to meet the requirements of this Act for comment in the relevant *Gazette*;

(ii) consideration of comments received; and

(iii) publication of the norms or standards to be prescribed.'

[27] Section 44(1) provides, *inter alia*, that the Environment Minister may make regulations prohibiting, restricting or controlling activities which are likely to have a detrimental effect on the environment and generally, to carry out the purposes and the provisions of NEMA. Section 44(1C) reads:

'Regulations made in terms of this Act or any other Act of Parliament that may have the effect of amending the provisions of the Agreement referred to in section 50A must be made by the Minister in concurrence with the Minister responsible for mineral resources and the Minister responsible for water affairs.'

[28] The Environment Minister has not, as yet, made regulations specifically in terms of s 44(1), nor has she developed or adopted norms and standards in terms of s 24(10) of NEMA. The Environment Minister did, however, make regulations as envisaged by s 24(5) of NEMA. They are the Environmental Impact Assessment Regulations, 2014, as amended (the EIA regulations).[12] The EIA regulations prescribe procedures and requirements for applications for: an environmental authorisation; amendment of an environmental authorisation; amendment of an environmental management programme (EMPr); and amendment of a closure plan. In terms of reg 15 an environmental assessment practitioner must identify whether basic assessment or a scoping and environmental impact reporting process (S & EIR) must be applied to a particular application.

[29] Chapter 4 of the EIA regulations deals with applications for environmental authorisation. Regulation 16 prescribes general requirements for such an application. Where basic assessment must be applied to an application, reg 19 prescribes what must be submitted to the competent authority. Essentially these are a basic assessment report, inclusive of specialist reports, an EMPr and, where applicable, a closure plan. When an S & EIR must be applied to the application, the applicant for an environmental authorisation must submit a scoping report to the competent authority. If the scoping report is accepted by the competent authority in terms of reg 22, the applicant must submit an environmental impact report inclusive of specialists' reports and an EMPr. Each of these reports, programmes and plans must contain the detailed information relating to environmental risks and impacts that are set out in a dedicated appendix to the EIA regulations and must have been subjected to a public participation process.

Regulation-making powers in respect of environmental matters

[30] As I have shown, the *One Environmental System* envisaged that all environmental aspects relating to prospecting, exploration, mining or production in terms of the MPRDA would be regulated through NEMA and its subordinate legislation. It is plain that this includes making regulations regarding the management of the environmental impacts of these activities. Section 50A(2)*(b)* of NEMA expressly provides that the Environment Minister would set the regulatory framework and norms

[12] The EIA regulations were published in GN R982, *GG* 38282, 4 December 2014 and were amended by GN 326 published in *GG* 40772, 7 April 2017 and by GN 706, *GG* 41766, 13 July 2018.

and standards in this regard. A meaning must be ascribed to the deliberate repeal of s 107(1)*(a)* of the MPRDA in consequence of the *One Environmental System*. The only meaning that presents itself is that its purpose was to divest the Minerals Minister of the power to make any regulations regarding the matters specified in s 107(1)*(a)*(i)-(viii). It bears repeating that what was thus taken away from the Minerals Minister, *inter alia*, was the power to make regulations regarding:

'(i) the conservation of the environment at or in the vicinity of any mine or works;

(ii) the management of the impact of any mining operations on the environment at or in the vicinity of any mine or works;

(iii) the rehabilitation of disturbances of the surface of land where such disturbances are connected to prospecting or mining operations;

(iv) the prevention, control and combating of pollution of the air, land, sea or other water, including ground water, where such pollution is connected to prospecting or mining operations;

. . . .

(viii) the monitoring and auditing of environmental management programmes.'

[31] As a result, the only regulation-making powers regarding the environmental impacts of these activities, are those vested in the Environment Minister in terms of NEMA. As I have said, these powers include: to identify a listed activity under s 24(2); to make regulations in terms of s 44(1) to carry out the purposes and provisions of NEMA; to make regulations under s 24(1A) and s 24(5) laying down procedures and requirements for an application for an environmental authorisation; and to develop or adopt norms and standards in terms of s 24(10) in respect of, *inter alia*, a listed activity. Therefore it is clear that the Minerals Minister has no power to make regulations relating to the management of the environmental impacts of exploration or production of petroleum or the process and requirements of an application for an environmental authorisation. All of this is entirely consonant with what the *One Environmental System* aimed to achieve, as stipulated in s 50A(2)*(b)* of NEMA.

[32] The regulation-making powers of the Minerals Minister are, therefore, limited to those set out in s 107(1)*(b)*-*(l)* of the MPRDA. The next question is whether all or some of the Petroleum regulations were authorised by one or more of these provisions. To answer this question we must analyse the Petroleum regulations.

Environmental Provisions of the Petroleum regulations

[33] In terms of GN R466, the Minerals Minister 'made the regulations as arranged in the Schedule'. The Schedule stated, however, that regulations previously made by the Minerals Minister[13] are amended by the addition of Part IV, headed 'Petroleum Exploration and Production'. Part IV contains Chapters 6-10 and regs 84-133. Regulation 133 provides: 'These regulations are called the Regulations for Petroleum Exploration and Production, 2015.' The Minerals Minister correctly conceded that this peculiarity does not prevent the review of the Petroleum regulations on their own.

[34] The heading of Chapter 6 (regs 84-85) is 'General Provisions'. Chapter 7 (regs 86-93) is entitled 'Environmental Impact Assessment'. Chapter 8 (regs 94-107) is entitled 'Well Design and Construction'. The regulations define 'well' as a drilled hole used for the purpose of exploration and production of petroleum resources. The title of Chapter 9 (regs 108-129) is 'Operations and Management' and that of Chapter 10 (regs 130-133) is 'Well Suspension and Decommissioning'.

[35] A large number of provisions of the Petroleum regulations plainly seek to manage the potential impacts of petroleum exploration and production on the environment. By way of example I refer to the following:[14]

(a) Regulation 88(1), which requires an applicant for an exploration right or a production right or a holder of an exploration right or a production right to appoint an independent specialist to conduct a hydrocensus to indicate potentially affected water resources within at least a three kilometre radius from the furthest point of potential horizontal drilling and identify priority water source areas and domestic groundwater supplies on relevant geohydraulical maps;

(b) Regulations 89(1)-(2), which require such an applicant or holder, prior to conducting hydraulic fracturing, to:

  (i) assess the risk of potential hydraulic fracturing related seismicity;

  (ii) submit a risk assessment report and proposed mitigation measures for approval and recommendation by the Council of Geoscience; and

[13] Regulations published under GN R1288, 29 October 2004, as amended by GN R1203, 30 November 2006 and GN R349, 18 April 2011.

[14] Reference could also be made to regs 87(1), 88(4), 88(5), 88(7), 89(5), 89(8), 94(3), 95(4), 98, 99(2)-(5), 114(4), 116(2), 119(3)*(b)*, 123(2), 123(3), 124(3), 124(8), 126(2), 127(2)-(7), 128(3) and 129(2).

(iii) to carry out site-specific surveys to characterise local stress regimes and identify proximal faults and site characterisations;

(c) Regulation 91, which requires such a holder to prevent the contamination of the environment by providing a suitably impermeable site underlay system and by making site drainage arrangements;

(d) Regulation 94(2), which requires such an applicant or holder to ensure that the list of specified design and operational risks are considered as part of a well-related risk assessment process, including aquifer isolation, the protection of potable groundwater, the containment of fracturing and the deformation of aquifers and geological strata due to injection or extraction of fluids or gas;

(e) Regulation 95(1), which requires that the well design be informed by a well-related risk assessment and that the well is constructed, commissioned, operated, modified, maintained, suspended and decommissioned in a manner that provides for the control of the well at all times, and prevents:

(i) the migration of petroleum and other fluids into any other formation except the target formation;

(ii) the pollution of water resources; and

(iii) risks to health and safety of persons from the well or anything in the well or in strata to which the well is connected;

(f) Regulation 97, which requires conductor casing to be set and cemented to a surface in order to:

(i) stabilise unconsolidated sediments;

(ii) isolate shallow aquifers that provide or are capable of providing fresh groundwater for water wells and springs in the vicinity of the well; and

(iii) provide a base for equipment to divert shallow natural gas;

(g) Regulation 99(1), which requires intermediate casing for exploration and productions wells to be set to protect unexpected fresh water found below the surface casing shoe;

(h) Regulation 102(11), which requires a holder of an exploration right or a production right to ensure that there is isolation of hydraulic fracturing operations from fresh water and other permeable horizons by ensuring complete cement isolation in each casing annulus;

(i) Regulation 113(1), which provides that the substances listed in Schedule I to the Petroleum regulations are prohibited from use in the fracturing process;

(j) Regulation 114(2), which requires the researching, assessment and documenting of faults and igneous intrusions that may impact on the hydraulic fracturing seal mechanism, in order to demonstrate that the risk of fracturing fluids migrating via faults and intrusions beyond the designated fracture zones, has been mitigated;

(k) Regulation 115(3)*(a)*, which requires that where technically feasible, the holder of an exploration right or a production right maximise the use of environmentally friendly hydraulic fracturing fluid additives and minimise the amount and number of additives;

(l) Regulation 116(1), which requires the holder of an exploration right or a production right to manage hydraulic fracturing flowback and produced fluids in accordance with an approved waste management plan;

(m) Regulation 117(1), which requires an applicant for an exploration right or a production right or the holder of an exploration right or a production right to develop a fluid transportation management plan and specifies the requirements for such a plan;

(n) Regulation 118(8)*(a)*, which requires that the background level of radioactivity in the ground adjacent to the fluid storage tanks be measured prior to drilling and prior to site restoration, to establish whether there has been any change that may require particular remediation measures;

(o) Regulation 119(4)*(a)*, which requires an applicant for an exploration right or a production right or a holder of an exploration right or a production right to ensure that risk assessments to eliminate or reduce the risks of dangerous substances being released and the impact of the release on the environment, is carried out;

(p) Regulation 121(1), which requires a holder of an exploration right or a production right in control of operations to compile a water balance that, *inter alia*:

  (i) accounts for and reflects the possible interconnections between the operations, the surface and groundwater resource and how these may be avoided and mitigated; and

  (ii) is used by the holder to generate water management reports to assist in the management of the impact of the operations on the water resource;

(q) Regulation 122(1), which requires a holder of an exploration right or a production right to ensure, prior to and during all the phases of drilling and hydraulic fracturing operations, that the operation does not pollute a water resource or

reduce such a resource and that where such an incident occurs, the necessary remedial measures are implemented;

(r) Regulations 122(2) and (3), which specify the minimum separation distances between, on the one hand, a well site where hydraulic fracturing operations are proposed or planned and any directional drilling from such site and, on the other hand, any existing or identified future municipal water well field, any existing water borehole, the edge of a riparian area, the 100-year flood line of a water course and a wetland;

(s) Regulation 124(4), which prohibits the disposal of waste to underground, including the use of re-injection disposal wells;

(t) Regulation 124(5), which prohibits the discharge of hydraulic fracturing fluids, hydraulic fracturing flowback and produced water into a surface watercourse;

(u) Regulation 127(1), which requires the holder of en exploration right or a production right to minimise the emissions associated with the venting of hydrocarbon fluids and natural gas during the hydraulic fracturing operations and specifies the technical manner in which it must do so;

(v) Regulation 128(2), which requires the holder of an exploration right or a production right to employ practises for the control of fugitive dust during the hydraulic fracturing operations and specifies the minimum such practises; and

(w) Regulation 129(1), which requires that site selection and the identification of traffic routes, be made with consideration of the potential effect of noise pollution on the surrounding environment.

[36] The Petroleum regulations also deal with the process and requirements of an application for environmental authorisation. For instance, reg 86(4) provides:

‘The designated agency, the Council of Geosciences and the Council for Scientific Research must be identified as interested and affected parties for the purposes of the public participation to be undertaken as part of the Environmental Impact Assessment process.’

The Petroleum regulations, *inter alia*, prescribe the submission of the following as part of an application for an environmental authorisation:

(a) The geological overview report contemplated in reg 87(1) (reg 87(2));

(b) The water resource monitoring plan contemplated in reg 88(2) (reg 88(3));

(c) The seismicity risk assessment report contemplated in reg 89(1) and the site-specific surveys contemplated in reg 89(2) (reg 89(3));

(d) The well design risk assessment contemplated in reg 94(2) and the proposed control measures contemplated in reg 94(3) (reg 94(4));
(e) The final well decommissioning design (reg 95(2));
(f) A well engineering design and hydraulic fracturing programme and procedure (reg 110(2)*(a)* and *(b)*);
(g) A risk assessment report in respect of fracturing fluid containment (reg 114(2));
(h) The risk management plan for each well contemplated in reg 115(1) (reg 115(2)*(a)*);
(i) The fluid transportation management plan contemplated in reg 117(1) (reg 117 (2)*(a)*);
(j) The proposals for the control and management of the risks of hydraulic fracturing operations contemplated in reg 119(4)*(a)* (reg 119(4)*(b)*); and
(k) A waste management plan (reg 125(1)).

[37] A few provisions of the Petroleum regulations could, on the face thereof, be regarded as dealing purely with the technical aspects of hydraulic fracturing. But in context most of them are aimed at protecting the environment by, *inter alia*, ensuring well integrity and by minimising the risks of contamination and pollution through leakages and blowouts. In this regard, reference can be made to reg 96 (well construction standards), reg 100 (production casings), reg 103 (casing string tests), reg 104 (formation pressure integrity tests), reg 105 (blowout prevention) and reg 106 (pressure testing of blowout prevention equipment). Accordingly, only a small number of provisions do not deal with the environmental aspects of petroleum exploration and production.

[38] Regulation 85 states that the purpose of the Petroleum regulations is to prescribe standards and practices that must ensure the safe exploration and production of petroleum. When the content of the Petroleum regulations is considered in the light of its genesis and the material known to its maker (particularly the report of the inter-departmental task team and the objections to the draft regulations), the ineluctable conclusion is that the word ‘safe’ in reg 85 refers to the safety of the environment. In my view, the dominant purpose and effect of the Petroleum regulations is to regulate the process and requirements of applications for environmental authorisations and to

establish a regulatory framework and norms and standards for the management of the environmental risks of petroleum exploration and production.

Environmental Provisions of Petroleum regulations *ultra vires*

[39] It follows that most of the provisions of the Petroleum regulations fell within the exclusive competence of the Environment Minister and were prohibited by s 44(1C) of NEMA. Nevertheless, both the Minerals Minister and the Environment Minister sought to avoid this conclusion on different and, at times, contradictory grounds.

[40] In this court, the Minerals Minister squarely accepted that the Petroleum regulations deal with the process and requirements of an application for an environmental authorisation. The relevant regulations[15] were referred to as the process provisions. It is clear from s 50A(2)*(c)* of NEMA and s 38A of the MPRDA that the Minerals Minister issues environmental authorisations in terms of NEMA. They are not issued, granted or approved in terms of the MPRDA. The process provisions were, therefore, not authorised by s 107(1)*(g)* of the MPRDA.

[41] The Minerals Minister contended, however, that the process provisions were authorised by EIA reg 16. The argument suffers from various difficulties. First, the Petroleum regulations were expressly promulgated under s 107 of the MPRDA and it is not open to the Minerals Minister to now rely on EIA reg 16.[16] Second, the Environment Minister has no power to make regulations which confer authority on the Minerals Minister to make regulations, let alone regulations regarding the very matters that Parliament enjoined the Environment Minister to regulate. Third, reg 16 simply does not authorise the Minerals Minister to regulate the process and requirements of an application for environmental authorisation. As I have said, reg 16 only prescribes the formal requirements of an application for an environmental authorisation.[17]

---

[15] See para 36 above.
[16] See *Minister of Education v Harris* [2001] ZACC 25; 2001 (4) SA 1297 (CC) para 18.
[17] EIA reg 16(1)*(a)*, for instance, provides that an application for an environmental authorisation must be made on an official application form obtainable from the relevant competent authority. Regulation 16(3) reads:
'Any report, plan or document submitted as part of an application must –
(a) comply with any protocol or minimum information requirements relevant to the application as identified and gazetted by the Minister in a government notice;
(b) be prepared in a format that may be determined by the competent authority; and
(c) take into account any applicable government policies and plans, guidelines, environmental management instruments and other decision making instruments that have been adopted by the

[42] The Minerals Minister further contended that the provisions of the Petroleum regulations aimed at the management of the environmental impacts of petroleum exploration or production were authorised by s 107(1)*(l)* of the MPRDA. It will be recalled that this subsection empowers the Minerals Minister to make regulations which may be necessary or expedient in order to achieve the objects of the MPRDA. In terms of s 2*(h)*, one of the objects of the MPRDA is to 'give effect to s 24 of the Constitution by ensuring that the nation's mineral and petroleum resources are developed in an orderly and ecologically sustainable manner while promoting justifiable social and economic development'.[18] The sustainable development of South Africa's mineral and petroleum resources cannot be separated from the need to protect the environment, so it was argued, and therefore the management of environmental impacts is necessary or expedient to achieve the object of sustainable development of resources.

[43] The fundamental flaw in the argument, however, is that it ignores the *One Environmental System* and the statutory amendments made to give effect thereto. The argument boils down to saying that the Minerals Minister had exactly the same powers to make regulations in respect of the environment before and after the introduction of the *One Environmental System* and its consequential amendments. That this is quite untenable, can be illustrated as follows. At the time when s 107 of the MPRDA contained both s 107(1)*(a)* and s 107(1)*(l)*, the latter clearly did not authorise the making of regulations regarding the matters specifically mentioned in s 107(1)*(a).* The purpose of the repeal of s 107(1)*(a)* in consequence of the *One Environmental System* could not have been to expand the range of matters falling under s 107(1)*(l)* to include the very matters that had been deleted from s 107. As I have said, the repeal of s 107(1)*(a)* could, in the context thereof, have had no purpose other than to migrate the power to make regulations regarding environmental impacts to the Environment

---

competent authority in respect of the application process or the kind of activity which is the subject of the application and indicate how the relevant information has been considered, incorporated and utilised.'

[18] Constitution of the Republic of South Africa, 1996 section 24:

'**24 Environment.—**

Everyone has the right—

(a) to an environment that is not harmful to their health or well-being; and

(*b*) to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that—

(i) prevent pollution and ecological degradation;

(ii) promote conservation; and

(iii) secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.'

Minister. I therefore agree with the submission that after the introduction of the *One Environment System*, the environment-related object of s 2*(h)* of the MPRDA is to be achieved through the application of NEMA to petroleum exploration and production. The provisions of the Petroleum regulations aimed at the management of environmental impacts were neither necessary nor expedient in order to achieve the objects of the MPRDA.

[44] The oral argument of the Environment Minister proceeded along the following lines:

(a) An environmental authorisation in terms of NEMA is essentially the same as an environmental management programme and/or an environmental management plan under the repealed s 39 of the MPRDA;

(b) The repeal of the relevant provisions of the MPRDA divested the Minerals Minister only of the power to regulate the function of granting or refusing an environmental authorisation;

(c) The Petroleum regulations do not deal with the process or requirements of an application for an environmental authorisation; and

(d) In the light of the remaining environmental provisions of the MPRDA, the incidental regulation of environmental impacts of operations under the MPRDA is authorised under s 107(1)*(f)*-*(l).*[19]

[45] I am prepared to accept, without deciding, that proposition (a) is correct. In line with, *inter alia*, the repealed s 38 of the MPRDA, the power to make regulations in terms of s 107(1)*(a)* extended to matters far beyond the mere function of granting or refusing an environmental authorisation. It is fair to say that the power to make regulations under s 107(1)*(a)* covered virtually every conceivable aspect of the management of the environmental impacts of petroleum exploration and production. That is what was taken away from the Minerals Minister. Proposition (b) therefore fails. As to proposition (c), I have shown, and the Minerals Minister conceded (and attempted to justify), that the Petroleum regulations purport to regulate the process and requirements of an application for an environmental authorisation. The Minerals Minister correctly

[19] Apart from the third preamble, s 2*(h)* and other provisions of the MPRDA that deal with sustainable development of resources (ss 3(3) and 37(2)), the Environment Minister identified ss 17(1)*(c),* 23(1)*(d),* 37(1), 43, 45, 46, 75(1)*(c),* 80(1)*(c)* and 84(1)*(c)* as the remaining environmental provisions of the MPRDA.

conceded that proposition (d) is entirely dependent on the acceptance of proposition (b). As it is untenable, the argument implodes and proposition (d) is not reached. But it is in any event wrong. None of the remaining environmental provisions of the MPRDA could sustain regulations under s 107(1)*(f)-(l)*. These provisions in fact entail the implementation of NEMA.[20]

---

[20] By way of example, ss 17(1)*(c)*, 23(1)*(d)* and 75(1)*(c)* provide that the Minerals Minister must grant a prospecting right, a mining right or a reconnaissance permit, as the case may be, if, *inter alia,* the respective prospecting, mining or reconnaissance 'will not result in unacceptable pollution, ecological degradation or damage to the environment and an environmental authorisation is issued.' Section 84(1)*(c)* in turn provides that the Minerals Minister must grant a production right if, *inter alia*, that will not result in unacceptable pollution, ecological degradation or damage to the environment. That there would be no such prejudicial effects on the environment, would in each case be determined by the process and requirements of an application for an environmental authorisation in terms of the EIA regulations. Section 37(1) provides:

'The principles set out in section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998)—

(a) apply to all prospecting and mining operations, as the case may be, and any matter or activity relating to such operation.

(b) serve as guidelines for the interpretation, administration and implementation of the environmental requirements of this Act.'

Section 43(1) provides:

'The holder of a prospecting right, mining right, retention permit, mining permit, or previous holder of an old order right or previous owner of works that has ceased to exist, remains responsible for any environmental liability, pollution, ecological degradation, the pumping and treatment of extraneous water, compliance to the conditions of the environmental authorisation and the management and sustainable closure thereof, until the Minister has issued a closure certificate in terms of this Act to the holder or owner concerned.'

Section 45(1) provides:

'If any prospecting, mining, reconnaissance, exploration or production operations or activities incidental thereto cause or results in ecological degradation, pollution or environmental damage, or is in contravention of the conditions of the environmental authorisation, or which may be harmful to health, safety or well-being of anyone and requires urgent remedial measures, the Minister, in consultation with the Minister of Environmental Affairs and Tourism, may direct the holder of the relevant right or permit in terms of this Act or the holder of an environmental authorisation in terms of National Environmental Management Act, 1998, to—

(a) investigate, evaluate, assess and report on the impact of any pollution or ecological degradation or any contravention of the conditions of the environmental authorisation;

(b) take such measures as may be specified in such directive in terms of this Act or the National Environmental Management Act, 1998; and

(c) complete such measures before a date specified in the directive.'

Section 46(1) provides:

'If the Minister directs that measures contemplated in section 45 must be taken to prevent pollution or ecological degradation of the environment, to address any contravention in the environmental authorisation or to rehabilitate dangerous health or safety occurrences but establishes that the holder of a reconnaissance permission, prospecting right, mining right, retention permit or mining permit, the holder of an old order right or the previous owner of works, as the case may be or his or her successor in title is deceased or cannot be traced or in the case of a juristic person, has ceased to exist, has been liquidated or cannot be traced, the Minister in consultation with the Minister of Environmental Affairs and Tourism, may instruct the Regional Manager concerned to take the necessary measures to prevent pollution or ecological degradation of the environment or to rehabilitate dangerous health and social occurrences or to make an area safe.'

As I have said, in terms of s 69(2) a reference in these sections to prospecting must be construed as a reference to exploration and the reference to mining must be construed as a reference to production.

[46] In a written reply submitted after the hearing of the appeal, the Environment Minister changed tack in respect of proposition (c). It was submitted that the various instances where additional reports and information are to be submitted as part of an application for an environmental authorisation, are justified by the constitutional imperative of co-operative government under s 41 of the Constitution and are therefore not an impermissible regulation of environmental aspects. I am unable to agree with this submission. The *One Environmental System,* the implementation of which, *inter alia*, vests the power to make regulations of this kind in the Environment Minister, is itself a commendable example of co-operative government. And it is inherent in the principle of co-operative government that an organ of state may only exercise a power conferred on it and may not encroach on the powers of another.[21] The Minerals Minister could not under the guise of co-operative government exercise powers that he did not have, nor could the principle of co-operative government be invoked to, in effect, render the repeal of s 107(1)*(a)* of the MPRDA meaningless.

[47] In dismissing the challenge to the power of the Minerals Minister to make the Petroleum regulations, the court in the TKAG matter essentially reasoned that the Petroleum regulations entailed no more than cross-referencing to and implementing of the provisions of NEMA and the EIA regulations, and that they 'squarely fall within the ambit of s 107(1)*(l)* of the MPRDA'. For the reasons mentioned, the Petroleum regulations are not limited to these categories and, in any event, to implement a legislative provision means to apply it, not to make it. It is difficult to fathom how regulations that merely cross-refer to and implement other legislation, could be authorised by s 107(1)*(l)*, but in the circumstances this requires no further consideration. It follows that I agree with the decision of Bloem J in the Stern matter on this point.

[48] To sum up, the greater part of the Petroleum regulations regulates the process and requirements of an application for an environmental authorisation and provides a regulatory framework and norms and standards for managing the environmental

---

[21] In terms of s 41 of the Constitution:
'(1) All spheres of government and all organs of state within each sphere must –
. . .
(e) respect the constitutional status, institutions, powers and functions of government in the other spheres;
(f) not assume any power or function except those referred on them in terms of the Constitution;
(g) exercise their powers and perform their functions in a manner that does not encroach on the geographical, functional or institutional integrity of government in another sphere.'

impacts of exploration and production of petroleum. Only the Environment Minister, and not the Minerals Minister, had the power to regulate these matters.

Conclusion

[49] In *Coetzee v Government of the Republic of South Africa, Matiso & others v Commanding Officer Port Elizabeth Prison & others*[22] para 16, the following passage in *Johannesburg City Council v Chesterfield House (Pty) Ltd*[23] was approved:

'where it is possible to separate the good from the bad in a Statute and the good is not dependent on the bad, then that part of the Statute which is good must be given effect to, provided that what remains carries out the main object of the Statute . . . . Where, however, the task of separating the bad from the good is of such complication that it is impracticable to do so, the whole Statute must be declared *ultra vires*.'

Despite the fact that the majority of the provisions of the Petroleum regulations were *ultra vires*, the separation of these provisions from those that were authorised, is complicated and impractical. It would also lead to an incoherent remainder. Therefore, the Petroleum regulations must be set aside in their entirety, irrespective of whether PAJA or the principle of legality applies.

[50] The procedural unfairness complained of in the Stern matter was that the draft regulations published for public comment[24] did not list substances that would be prohibited from use in the fracturing process. In response hereto, the Minerals Minister explained that reg 113(1) of the Petroleum regulations and the list of prohibited substances in Schedule I thereto, had been the result of the public participation process. This response appears to have some substance, but, in the light of the conclusion that I have reached, it is not necessary to determine this issue. Nor is it necessary to pronounce on the antecedent question, namely whether PAJA applied to the making of the Petroleum regulations. In *Mostert NO v Registrar of Pension Funds and* others[25], this court explained that the decision in *Minister of Health & another NO v New Clicks South Africa (Pty) Ltd & others (Treatment Action Campaign and another as amici curiae)*[26] is no authority for the proposition that the making of regulations by a minister

[22] [1995] ZACC 7; 1995 (10) BCLR 1382; 1995 (4) SA 631. See also *Premier, Limpopo Province v Speaker of the Limpopo Provincial Legislature & others* [2012] ZACC3; 2012 (4) SA 58 (CC); 2012 (6) BCLR 583 (CC) paras 22-28.
[23] [1952] 3 All SA 436 (A); 1952 (3) SA 809 (A) at 822D-E.
[24] See para 14 above.
[25] [2017] ZASCA 108; 2018 (2) SA 53 (SCA) paras 8-10.
[26] [2005] ZACC 14; 2006 (1) BCLR 1 (CC); 2006 (2) SA 311 (CC).

generally is administrative action in terms of PAJA and added that the final word on this subject may not have been spoken. For the reasons mentioned, the determination of this appeal does not require us to resolve this question.

[51] It remains to deal briefly with the plea of non-joinder raised in the Stern matter. The Minerals Minister contended that Bundu, Falcon and Shell should have been joined in those proceedings. In order for them to have been necessary parties to the Stern matter, they had to have a direct and substantial interest in the outcome of the litigation. This meant a legal interest in the subject-matter of the application which could be prejudicially affected by the order in that application.[27] The relevant subject-matter in the Stern matter concerned the power of the Minerals Minister to make regulations in respect of environmental matters. Bundu, Falcon and Shell had no legal interest in the determination of this issue. Their interests in the application were, at most, of an indirect financial nature.

[52] Finally, the Minerals Minister argued that a declaration of invalidity should be suspended to allow the relevant Minister to lawfully promulgate regulations. In my view, however, there is no factual basis for this request and the opposing argument that exploration for petroleum by hydraulic fracturing should not take place at all before it is lawfully regulated, is compelling. It follows that the appeal in the Stern matter must be dismissed and the appeal in the TKAG matter must succeed.

[53] The following order is issued:

In the Stern matter:

1 The appeal is dismissed with costs, including the costs of two counsel.

In the TKAG matter:

1 The appeal is upheld with costs, including the costs of two counsel.

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

‘(a) The Regulations for Petroleum Exploration and Production, 2015 that came into effect on 3 June 2015, in accordance with Government Notice R466 in Government Gazette 38855, are reviewed and set aside.

---

[27] See *De Villiers & others v GJN Trust & others* [2018] ZASCA 80; 2019 (1) SA 120 (SCA) paras 22-24.

(b) The respondents, jointly and severally, are ordered to pay the costs of this application, including the cost of two counsel.'

_____

C H G van der Merwe

Judge of Appeal

APPEARANCES

For the Minister of Mineral Resources:	H Maenetje SC, with him N Muvangua Instructed by: Whitesides Attorneys, Grahamstown State Attorney, Bloemfontein
For Stern NO and others:	A Breitenbach SC, with him H C Schreuder Instructed by: Dold & Stone, Grahamstown McIntyre Van der Post, Bloemfontein
For Treasure the Karoo Action Group and AfriForum:	P Lazarus SC, with him A Pantazis Instructed by: Hurter Spies Inc. Attorneys, Centurion McIntyre Van der Post, Bloemfontein
For the Minister of Environmental Affairs:	M Oosthuizen SC, with him F Patel Instructed by: State Attorney, Pretoria State Attorney, Bloemfontein