GUNN ATTORNEYS | COMMERCIAL MINING ENVIRONMENTAL

MARCH NEWSLETTER 2020

Dear Readers,

We hope you have had a fantastic start to 2020!

The March edition of our newsletter looks at updates in the conservation and biocontrol sectors while also focusing on recent legal notices and amendments.

NATIONAL LEGISLATION

- **NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT 59 OF 2008**
  GN 85 in *GG* 42990 of 3 February 2020 - Exclusion of certain waste streams or portions of waste streams from the definition of 'waste' for beneficial use

  GN 172 in *GG* 43022 of 14 February 2020 - Extension of comment period on the Draft National Waste Management Strategy

- **NATIONAL WATER ACT 36 OF 1998**
  GN 165 in *GG* 43015 of 14 February 2020 - Determination of water resource classes and resource quality objectives for the Mzimvubu Catchment

- **FOODSTUFFS, COSMETICS AND DISINFECTANTS ACT 54 OF 1972**
  GN 119 in *GG* 43008 of 10 February 2020 - Regulations governing the maximum limits for pesticide residues that may be present in foodstuffs amended

- **PETROLEUM PRODUCTS ACT 120 OF 1977**
  GN R88 in *GG* 42993 of 4 February 2020 - Regulations in respect of petroleum products published in GN R1708 in *GG* 42934 of 31 December 2019 substituted with effect from 5 February 2020

POLICIES

- **DEPARTMENT OF MINERAL RESOURCES AND ENERGY**
  GN 116 in *GG* 43003 of 7 February 2020 - South African Biofuels Regulatory Framework

NOTICES

- **NATIONAL WATER ACT 36 OF 1998**
  GN 218 in GG 43050 of 28 February 2020 – Determination of water resource classes and resource quality objectives for Mzimbuvu catchment

- **NATIONAL ENVIRONMENTAL MANAGEMENT ACT 107 OF 1998**
  GN 199 in GG 43936 of 25 February 2020 – Procedures to be followed for assessment and minimum criteria for reporting of identified environmental themes when applying for Environmental Authorisation – Extension of deadline for comments

- **STANDARDS ACT 8 OF 2008**
  Draft Standards for comment: SANS 14067 Ed 1 Greenhouse gases – Carbon footprint of products – Requirements and guidelines for quantification. This document specifies principles, requirements and guidelines for the quantification and reporting of the carbon footprint of a product (CFP), in a manner consistent with international standards on life cycle assessment (LCA (ISO 14040 and ISO 14044)

BILLS BEFORE PARLIAMENT

- Independent Electricity Management Operator Bill (B14-2019)

- National Environmental Management Laws Amendment Bill (B12-2017)

- National Forests Amendment Bill (B11-2016)

PROVINCIAL LEGISLATION

- **WESTERN CAPE**

  NATIONAL ENVIRONMENTAL MANAGEMENT: PROTECTED AREAS ACT 57 OF 2003
  PN 12 in *PG* 8207 of 14 February 2020 - Haarwegskloof Nature Reserve - for comment

BUGGING OUT

5 March 2020 by Sonam Mansingh

Whether you love them or you are bothered by them, insects are everywhere. It is estimated that there are between six and ten million insect species on the planet. Insects are the most diverse group of animals on Earth and they make up over half of all organisms on the planet. Although many people think of insects as pests, they are responsible for maintaining ecosystem functions and services that benefit the environment and humans. Insects like wasps, bees, butterflies, and ants pollinate flowers when they collect nectar from them, thereby ensuring that we have healthy crops and plants, as well as beautiful flowers and trees.

This short article considers the advantages and disadvantages of the intentional or accidental introduction of non-native insect species into an environment, as well as whether South Africa has the capability to deal with the associated long-term consequences of such introductions. This article will focus on the case studies of the the polyphagous shot hole borer (Euwallacea fornicatus) and the planthopper (Megamelus scutellaris) in South Africa.

The Polyphagous Shot Hole Borer

The tiny polyphagous shot hole borer beetle is 2mm in length and native to Southeast Asia. This beetle creates tunnels in the trunks and branches of host trees and lays its eggs inside. The female beetles carry a fungus between host trees, which grows in the tunnels, serving as a food source for larvae and adults. The fungus disrupts the flow of water and nutrients in the trees, causing branch dieback and ultimately the death of the tree.

Since arriving in South Africa in 2017, this beetle is now present in nearly all parts of the country and in more than 100 tree species. The greatest impact has been in urban environments such as Johannesburg.

In California and Israel, the polyphagous shot hole borer has been responsible for causing irreversible damage to the avocado industry, as well as to trees in natural ecosystems.

There are strong concerns that this beetle could pose a threat to economically important crops in South Africa, as the Department of Agriculture, Land Reform and Rural Development has been slow to act and no formal response to this invasion has been triggered. Heavily infested trees are simply being removed and disposed of appropriately at designated dumping sites to reduce the risk of the beetle spreading.

The South African National Environmental Management: Biodiversity Act places a duty on all land owners to control invasive species present on their

land. It also requires all levels of government to develop monitoring, control and eradication plans for land under their control.

Despite these legislative requirements and the beetle wreaking havoc on trees in our cities and towns, a practical national strategy to guide municipalities has still not been developed.

The plan of action has been purely academic. A multi-disciplinary and multi-institutional Polyphagous Shot Hole Borer Research Network has been established with the objective to align and coordinate research efforts by researchers from ten different academic institutions across the country.

While surveillance and monitoring of the behaviour of the beetle is the first step in finding a solution, the beetle has been residing in South Africa for nearly three years and has destroyed far too many trees to be underestimated.

The Planthopper

Water hyacinth is an invasive non-native weed from South America that has been on the Hartbeespoort Dam since the mid-1960s. There has been a long history of control of this weed including herbicide application, mechanical and manual removal, and biological control. While all of these control interventions have been moderately effective, biological control is considered the most sustainable and environmentally friendly. Water hyacinth destroys native habitats, leads to increased water loss through evapotranspiration, impedes water flow, causes flooding and soil erosion, obstruction of navigation, causes drastic changes in the physical and chemical properties of water and in the environment and has severely detrimental effects on plants and animals.

Currently, six different kinds of insects are being used as a biological control method on the water hyacinth in the Hartbeespoort Dam. However, the most successful has been the planthopper, which was intensively introduced last year.

The planthopper is a small sap sucking insect, approximately 3 mm in length and native to South America. The colouration varies from pale cream to dark brown and adults may or may not possess wings. Water hyacinth planthopper nymphs may develop wings where the nutrient levels in the plant drop below a certain level. The frequency of winged adults increases as plant quality deteriorates.

Planthoppers pierce the plant tissue, damaging cells and causing water logging, which reduces plant buoyancy and leads to rotting. The damage is evident as the leaves start to turn brown and a sooty mould develops on the leaves.

Biological control agents previously introduced on the Hartbeespoort Dam have not survived due to periodic herbicide application. Scientists have since confirmed that herbicide application has ceased.

“Biocontrol aims to reunite invasive species with the natural enemies. The results on the dam are already significant. And now that the plants are dying, we have seen a drop of 3% coverage

from 13% to 10% in only the past week" - Professor Julie Coetzee from the Centre for Biological Control (CBC) at Rhodes University.

Scientists are of the opinion that the water hyacinth will never completely disappear from the dam and that some should remain on the shores. The planthopper can only feed on and reproduce on water hyacinth. Therefore, planthopper populations will decrease as the plants die.

There is a possibility that the hyacinth may recover in the spring as a result of a cold winter and high nutrients. However, the CBC intends to continually release and monitor the activity of the planthopper to ensure that the insect populations grow faster than they would have on their own.

The planthopper has demonstrated promising results in the short time since it was introduced onto the hyacinth in the Hartbeespoort Dam. However, ongoing control and monitoring is essential to ensure that this insect does not create problems of its own within this already stressed ecosystem.

Conclusion

Bugs should be considered a resourceful tool, able to solve a plethora of problems in the modern world. On the flipside, due to the high reproductive rate and destructive tendencies associated with most insects, without meticulous study and monitoring the introduction of non-native species to an environment could create further and more widespread issues.

As illustrated above, bugs can present themselves as an immense liability or a great asset. In order to ensure environmentally sustainable solutions to a wide variety of issues, it is crucial for state departments to proactively determine how pest control and use outside of the agricultural sector should be managed in South Africa. In the absence of a national strategy there will always be a fragmented and imperfect approach to pest control, the consequences of which could result in missed opportunities for South Africa and prove dire to the already fragile economy.

ENVIRONMENTAL CONSIDERATIONS FOR SELF-GENERATION REGIME

18 Feb 2020 by Gillian Niven & Paula-Ann Novotny (Bizcommunity)

Besides the obvious dialogue about legislative amendments needed for mining companies to generate their own power, there is also the question of whether the minister consulted with other relevant departments in ensuring this policy decision is given due effect. And what does this mean from an environmental regulatory perspective?

The Integrated Resource Plan (IRP) 2019 is one the latest addition to the array of legal instruments South Africa has adopted to transition to a low carbon economy and as part of its commitment to adapt to and mitigate against climate change under the international climate change framework. The plan makes it clear that South Africa will pursue a diversified energy mix to reduce reliance on a single energy source (coal) in line with the country's Paris Agreement commitments to reduce greenhouse gas emissions. This has largely promoted the recent revisions to environmental legislative frameworks in an attempt to alleviate the regulatory strain on renewable energy companies.

Environmental Assessment

However, it is debatable whether mining companies seeking to self-generate power under Mantashe's proposed Electricity Regulation Act exemption - in order to "help close the energy gap caused by deteriorating Eskom plant performance" - will constitute the large-scale wind and solar photovoltaic (PV) energy developments contemplated in the most recent environmental law revisions.

For example, applications for environmental authorisations for certain large scale wind or solar PV facilities must now follow the basic assessment procedure of the Environmental Impact Assessment Regulations, 2014, and the timeframe for decision-making purposes is a truncated 57 days. This process is, however, only available for projects where the entire proposed facility will be situated in a declared Renewable Energy Development Zone (REDZ), eight of which were gazetted in 2018 and a further three proposed in November 2019. The REDZ were promulgated primarily to aid in future bidding rounds of the Renewable Energy

Independent Power Producer Procurement Programme (REIPPPP) and speaks primarily to the areas in which those REIPPPP projects are located.

Not Part of REIPP

It seems likely that the typical self-build of a mining company would be considered private power generation and not part of the Renewable Energy Independent Power Producer Programme.

Private power generation will likely consider various technologies, and not all of them would necessarily be renewable or clean. Renewable energy projects are less likely to require the host of environmental approvals typically required for a power generation facility, however, when coupled with continuous technology requirements, may trigger these. These projects will therefore continue to bear the existing environmental and atmospheric emission consequences and permitting requirements which are the subject of environmental regulation - with the standard environmental authorisation application process having a lead time of 300 days for generation facilities with an output of greater than 20MW.

The piecemeal fashion in which overarching policy determinations relating to the urgent deployment of energy and energy solutions in South Africa are being translated into law is problematic, posing significant challenges to industry, increasing the risk of misalignment between the different instruments, and fostering a continuation of legal uncertainty.

It is unclear, in this case, whether the Department of Environment, Forestry and Fisheries or the Department of Human Settlements, Water and Sanitation have been consulted on Mantashe's proposal and whether regulations will be published to apply a truncated environmental licensing process to self-generation projects, as one would hope to see.

https://www.bizcommunity.com/Article/196/693/200781.html

INTERESTING ENVIRONMENTAL TOPICS

- ***Climate crisis: Massive hole opens up under Antarctic glacier which could lead to catastrophic sea level rises***
  https://www.independent.co.uk/environment/climate-crisis-glaciers-melting-collapse-thwaites-hole-western-antarctic-a9320766.html

- ***Philippi Horticultural Area Food & Farming Campaign & Others v MEC for Local Government, Environmental Affairs and Development Planning: Western Cape 17 February 2020***

  The PHA Food and Farming Campaign successfully challenged various decisions relating to a proposed development of a portion of the Philippi Horticultural Area. The court remitted the MEC's decision to dismiss an appeal of the environmental authorisation granted to the developer (thereby upholding the validity of the environmental authorisation) and sent the matter back for redetermination. The MEC was instructed to reconsideration the appeal in light of new evidence and reports relating to the impact of the proposed development on the underlying aquifer. City planning decisions made by the City of Cape Town's General Appeals Committee were also set aside on the basis that relevant considerations relating to the aquifer were not considered. The matter was sent back for reconsideration by the Committee, restricted to reconsideration of the natural environment and the effect of the proposed development application on existing rights in relation to the aquifer in the context of climate change and water scarcity in the City.

- ***The URL for the South African National Red List for animal species is changed from http://bgis.speciesstatus.sanbi.org/ to http://speciesstatus.sanbi.org;***

- ***The URL for the South African National Red List for plant species is changed from http://bgis.speciesstatus.sanbi.org/ to http://redlist.sanbi.org/***

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