Centre *for* Environmental Rights
Advancing Environmental Rights in South Africa

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For the attention of:
The Director-General: Environmental Affairs
Care of: Mr Anben Pillay
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Our ref: NL/RH
12 February 2018

Dear Minister

COMMENTS ON THE PROPOSED REGULATIONS TO EXCLUDE A WASTE STREAM OR A PORTION OF A WASTE STREAM FROM THE DEFINITION OF WASTE

1. We address you on behalf of the following organisations: groundWork (gW); Earthlife Africa, Johannesburg (ELA); the Vaal Environmental Justice Alliance (VEJA); the Highveld Environmental Justice Network (HEJN); and the South Durban Community Environmental Alliance (SDCEA).

2. We hereby submit our clients' comments on the Draft Regulations to Exclude a Waste Stream or a Portion of a Waste Stream from the Definition of Waste, published for comment on 12 January 2018 in Government Gazette 41380, government notice 14 ("the draft regulations"). As the 30 day deadline expires on Sunday 11 February 2018, these comments are being submitted on the following working day – Monday 12 February.

3. We record upfront that there are numerous issues with the interpretation and intended implementation of these draft regulations, as will be explained in more detail below. The draft regulations would allow for unacceptable (and, we submit, unconstitutional) automatic blanket exclusions of certain waste streams - which are harmful and potentially hazardous - from the definition of "waste" in terms of the National Environmental Management: Waste Act, 2008 (NEMWA). Put simply, these **draft regulations would allow for the storage, transport and use of potentially hazardous waste to go unregulated and unmonitored. This cannot be permitted**.

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4. We also submit that the draft regulations are unconstitutional in that they would effectively allow the executive to amend original legislation – through seeking to amend the definition of "waste" in NEMWA, by means of regulations. Only Parliament, as the primary law-maker, can amend original legislation.

5. While we, and our clients agree with the responsible use of waste to minimise pollution and harmful impacts on the environment,[1] this **must** be strictly regulated and done in accordance with the principles of the National Environmental Management Act, 1998 (NEMA), which require, *inter alia*, that environmental management must place people and their needs at the forefront of its concern;[2] that pollution and degradation of the environment are avoided, or, where they cannot be altogether avoided, are minimised and remedied;[3] that a risk-averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions;[4] that negative impacts on the environment and on people's environmental rights be anticipated and prevented, and where they cannot be altogether prevented, are minimised and remedied;[5] and environmental justice must be pursued so that adverse environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, particularly vulnerable and disadvantaged persons.[6]

6. The draft regulations state their intended purpose (in terms of regulation 2) as being:

> *"(a) to prescribe the manner in which a person or category of persons may apply to the Minister for the exclusion of a waste stream or a portion of a waste stream from the definition of waste;*
> *(b) exclude a waste stream or a portion of a waste steam from the definition of waste; and*
> *(c) promote diversion of waste from disposal through its beneficial use.*"

7. We note that no mention is made – in the purpose of the draft regulations - of health and the environment at all, in particular the need to ensure against the harmful impacts of waste on human health and the environment. The protection of the constitutional environmental right must remain paramount.

8. NEMWA defines "waste" as:

> "*(a) any substance, material or object, that is unwanted, rejected, abandoned, discarded or disposed of, or that is intended or required to be discarded or disposed of, by the holder of that substance, material or object, whether or not such substance, material or object can be re-used, recycled or recovered and includes all wastes as defined in Schedule 3 to this Act; or*
>
> *(b) any other substance, material or object that is not included in Schedule 3 that may be defined as a waste by the Minister by notice in the Gazette,*
>
> *but any waste or portion of waste, referred to in paragraphs (a) and (b), ceases to be a waste-*
> *(i) once an application for its re-use, recycling or recovery has been approved or, after such approval, once it is, or has been re-used, recycled or recovered;*
> *(ii) where approval is not required, once a waste is, or has been re-used, recycled or recovered;*
> *(iii) where the Minister has, in terms of section 74, exempted any waste or a portion of waste generated by a particular process from the definition of waste; or*
> *(iv) where the Minister has, in the prescribed manner, excluded any waste stream or a portion of a waste stream from the definition of waste*."

[1] In accordance with s2(4)(a)(iv) of NEMA.
[2] S2(2) NEMA.
[3] S2(4)(a)(ii) NEMA.
[4] S2(4)(a)(vii) NEMA.
[5] S2(4)(a)(viii) NEMA.
[6] S2(4)(c) NEMA.

9. The effect of the draft regulations, should they come into effect, would be that waste streams covered under the regulations would not be defined as waste and would therefore not be regulated by NEMWA – meaning that a waste management licence (WML) would not be required, nor would the other controls provided for in NEMWA to protect against the environmental and health impacts of harmful waste, be applicable.

10. We submit that it would be unlawful and a violation of the section 24 constitutional right to an environment not harmful to health or wellbeing to permit waste to be excluded completely from the application and regulation of NEMWA, particularly without: any provision for a prior application and approval process – which is transparent and conducted in consultation with the public; any means of alternative regulation of the transportation, usage and storage of such waste; conditions or requirements to be met before waste can be excluded and against which the exclusion should be monitored; and provision for monitoring of uses of the waste and accompanying environmental and human health risks. Any decisions to exclude waste streams must be based on sound science and guided by the precautionary principle and an open and democratic process.

11. The draft regulations might very well create a perverse incentive for companies to produce more waste for it to be "re-used" and to create a revenue stream from it, and they would allow waste generators to avoid the strict and proper management and regulation of their waste streams, because:

    11.1. the draft regulations would allow for the use, storage and transportation of potentially hazardous and toxic waste to go unregulated because they allow for blanket exclusions of waste without any provision for regulation and monitoring of those waste streams, and the process for an application and approval for the exclusion of waste streams is not sufficiently robust or adequate to address environmental and health risks;

    11.2. the draft regulations are unclear and ambiguous on the question of which waste streams are excluded and the processes to be followed for the exclusion; and

    11.3. there are numerous additional gaps in the draft regulations, which would render these regulations weak and would further jeopardise South Africa's waste management system.

12. We write to recommend, first and foremost, that **these regulations <u>not</u> be promulgated as they would have severe and adverse impacts for the control and management of waste in South Africa, and are likely to give rise to harmful risks to human health and the environment.** As such, these regulations would significantly undermine the constitutional right to an environment not harmful to health or wellbeing.[7]

13. We emphasise that our clients have extensive concerns over the current management and implementation of the existing waste management laws in South Africa. In our experience, we have seen numerous instances of non-compliance with WMLs or other provisions of NEMWA with little monitoring and enforcement of compliance by government, while mines are leaving a legacy of devastating water, soil, and air pollution from their residue deposits and stockpiles.[8] One of the reasons for the devastating impacts of mining waste is the uncertainty around the regulation of this waste in terms or NEMWA and/or the Mineral and Petroleum Resources Development Act, 2002, (MPRDA). This serves as an example of the harmful effects of failing to adequately and expressly regulate waste streams under NEMWA.

14. Any provision for the exclusion of waste streams from NEMWA will simply allow further harm to human health and the environment to be caused by industrial polluters. **It is therefore our clients' recommendation that the promulgation of any regulations to provide for the exclusion of waste streams be put on hold until the existing**

[7] S24 of the Constitution of the Republic of South Africa, 108 of 1996.

[8] See for example http://e360.yale.edu/features/the_haunting_legacy_of_south_africas_gold_mines.

waste management system is properly implemented – with full and adequate monitoring and enforcement by government.

15. In the alternative, should these draft regulations proceed to be promulgated, we recommend - **while not accepting the constitutionality of the regulations and fully reserving our clients' rights in this regard** - that they be substantially amended in accordance with the recommendations set out herein. These regulations should be substantially redrafted to provide for a stricter application process wherein only specific non-toxic, non-hazardous wastes can be exempt from the requirement to obtain a WML (but not excluded from NEMWA entirely) and only by prior application and approval - strictly regulated by a risk management plan and subject to comprehensive norms and standards for each specific waste stream. Automatic blanket exclusions of waste streams cannot be permitted.

16. We emphasise that chapter 3 of the draft regulations, read with schedule 1, should be deleted from the regulations entirely; alternatively that chapter 2 be amended so as to clarify that the application process and requirements for risk assessments and risk management plans, apply **only** to those wastes and intended uses listed in schedule 1, meaning that one can only apply for an exclusion in terms of the regulations in respect of wastes in schedule 1.

17. We also call upon the Departments of Health (DoH), and Water and Sanitation (DWS) to make submissions on these draft regulations and the potential consequences for human health and water and sanitation, should they be enacted, as well as the Departments of Agriculture, Forestry and Fisheries, Public Works and Human Settlements, given the proposed uses of excluded wastes for agricultural and construction purposes as listed in schedule 1 to the draft regulations. Copies of these submissions are also forwarded to the director generals of these departments.

18. We make our submissions below, and provide some examples from the United States (US).

The draft regulations would allow for the use, storage, and transportation of potentially hazardous and toxic waste to go unregulated

19. The draft regulations appear to contemplate 2 distinct sets of wastes that can be excluded from the definition of waste under NEMWA, and 2 separate processes for exclusion, these being:

    19.1. *any waste at all* in respect of which an applicant may submit an application (per chapter 2 of the draft regulations) – such exclusion can only take place through approval by the Minister; and

    19.2. specific waste types used in specific ways listed in schedule 1 to the draft regulations (per chapter 3 of the draft regulations) – under one interpretation, such exclusion applies automatically to all waste streams listed in schedule 1, without any application process to be followed or approval required, and without any risk management plan or other controls to regulate the scheduled uses of the waste.

20. Both types of exclusion are highly problematic for the reasons set out below, predominantly because of:

    20.1. the provision for blanket or automatic exclusions; and

    20.2. the inadequate process for the exclusion of waste streams, which is not sufficiently comprehensive, transparent, and robust nor adequately monitored and regulated.

i. Automatic blanket exclusions cannot be permitted

21. Chapter 3 read with schedule 1 to the draft regulations appears to allow for blanket or automatic exclusions of four kinds of wastes, namely: metallurgical slag, coal ash, gypsum, and biomass, if used for specific purposes.

22. In other words, wastes to be used for any of the purposes listed in schedule 1 are exempt entirely from NEMWA and furthermore:

    22.1. there is no provision for any kind of case-by-case assessment of the waste to be used, nor prior approval (based on a case-by-case assessment) by the Minister;

    22.2. there is no provision for any form of risk assessment (for impacts of the uses on human health or the environment) nor has the Minister published a risk management plan in relation to those streams for comment; and

    22.3. it is not clear what the position will be for waste being generated, stored, and transported in anticipation of the listed uses – presumably these will be exempt from NEMWA as well.

23. Many of the proposed uses are problematic from a human health and environmental perspective, and the wastes listed and used in accordance with schedule 1 will not be monitored or regulated in any way. This is highly problematic and unacceptable.

24. There must be a mechanism for testing and determining the toxicity of particular waste; assessing the risks of its uses; and enabling a decision-maker to consider and exercise discretion as to whether the waste can be excluded. Blanket exclusions such as are provided for in schedule 1 and chapter 3 cannot be permitted.

25. Simply allowing these exclusions without requiring or providing for any form or risk assessment, risk management plan or permit for the scheduled uses is – in our clients' view **- a blatant violation of the right to an environment not harmful to health or wellbeing**. It is clearly not a reasonable measure to prevent pollution and ecological degradation as envisaged by s24(b)(i) to (iii) of the Constitution. It is also arbitrary to require risk assessments and risk management plans for exclusions in terms of chapter 2, but not for the exclusions in terms of the chapter 3 schedule 1 wastes and their uses.

26. In relation to coal ash, we point out that:

    26.1. Coal ash is known to contain toxic metals such as: lead, thallium, barium, cadmium, chromium, mercury, and nickel. For trace metals, arsenic, cadmium, chromium, lead, antimony and selenium, 97%, 97.2%, 99%, 97.5%, 97.7% and 91.5% of the total mobilisation of each of these metals, respectively, is retained and concentrated in the coal ash.[9] These and other toxicants in coal ash can cause cancer and neurological damage in humans. They can also harm and kill wildlife, especially fish and other water-dwelling species.

    26.2. The major environmental harms from coal ash include: leaching of potentially toxic substances into soils, groundwater and surface waters; hindering effects on plant communities; and the accumulation of toxic elements in the food chain.[10] Many researchers have documented the negative effects of coal ash on the physiology, morphology, and behaviour of aquatic organisms and the health of aquatic ecosystems.[11] For

[9] Sabbioni, E., Goetz, L., and Bignoli, G.(1984). "Health and Environmental Implications of Trace Metals Released from Coal-Fired Power Plants: An Assessment Study of the Situation in the European Community." The Science of the Total Environment (40) 141-154.

[10] Rowe, L.C., Hopkins, W.A., Congdon, J.D. (2002). "Ecotoxicological Implications of Aquatic Disposal of Coal Combustion Residues in the United States: A Review." Environmental Monitoring and Assessment 80: 207.

[11] Ibid.

example, researchers have documented extensive damage to fish populations from selenium leaching from coal ash landfills and surface impoundments throughout the United States.[12]

26.3. Toxic pollution, some of it cancer-causing, can and often does escape from sites where coal ash is stored, as demonstrated by, *inter alia*, the USA Environmental Protection Agency (EPA).[13] This occurs in a variety of ways, most frequently when coal ash comes into contact with water, allowing toxics to "leach" or dissolve out of the ash and percolate through water. Coal ash toxics have leached from disposal sites in well over 100 communities in the USA, carrying toxic substances into above-ground and underground waterways including streams, rivers, aquifers, and drinking water wells, forcing some families to find new drinking water supplies.[14]

26.4. When large quantities of coal ash are "recycled," they present another potential route of exposure to coal ash toxics. Some states in the US allow coal ash to be used as structural fill, agricultural soil additive, top layer on unpaved roads, fill for abandoned mines, spread on snowy roads, and even as cinders on school running tracks. These uses may expose coal ash to water, increasing the risk of leaching.

26.5. Coal ash is also dangerous if inhaled. Some of the proposed forms of recycling may endanger human health from airborne particles, even where no water is involved. The EPA has documented that coal ash contains toxic materials, and that these toxicants can and do escape from disposal sites. It has confirmed and measured toxic leaching into water supplies. And it has identified specific sites at which humans have been exposed to coal ash toxics, whether from drinking contaminated water, eating contaminated fish, or breathing "fugitive dust."[15]

26.6. The EPA has found that living next to a coal ash disposal site can increase the risk of cancer or other diseases, especially if one lives near an unlined wet ash pond that contains coal ash comingled with other coal wastes and drinking water is obtained from a well. According to the EPA's peer-reviewed "Human and Ecological Risk Assessment for Coal Combustion Wastes," people in those circumstances have as much as a 1 in 50 chance of getting cancer from drinking water contaminated by arsenic, one of the most common and dangerous pollutants in coal ash.[16] This risk is 2,000 times greater than the EPA's goal for reducing cancer risk to 1 in 100,000. The same EPA risk assessment states that living near ash ponds increases the risk of health problems from exposure to toxic metals such as cadmium, lead, and other pollutants. Typically, coal ash contains arsenic, lead, mercury, cadmium, chromium, and selenium, as well as aluminum, antimony, barium, beryllium, boron, chlorine, cobalt, manganese, molybdenum, nickel, thallium, vanadium, and zinc.[17] All can be toxic.[18] Especially where there is prolonged exposure, these

[12] Ibid.

[13] U.S. Environmental Protection Agency. "Summary of Proven Cases with Damages to Groundwater and to Surface Water," Appendix, "Hazardous and Solid Waste Management System; Identification and Listing of Special Wastes; Disposal of Coal Combustion Residuals From Electric Utilities." Proposed rule. http://www.epa.gov/osw/nonhaz/industrial/special/fossil/ccr-rule/fr-corrections.pdf.

[14] U.S. Environmental Protection Agency, Office of Solid Waste. Coal Combustion Waste Damage Case Assessments. July 9, 2007. Downloaded from http://www.publicintegrity.org/assets/pdf/CoalAsh-Doc1.pdf.

[15] U.S. Environmental Protection Agency. "Hazardous and Solid Waste Management System; Identification and Listing of Special Wastes; Disposal of Coal Combustion Residuals from Electric Utilities." [EPA-HQ-RCRA-2009-0640; FRL-9149-4] Proposed rule. http://www.epa.gov/osw/nonhaz/industrial/special/fossil/ccr-rule/fr-corrections.pdf.

[16] U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, Office of Resource Conservation and Recovery. "Human and Ecological Risk Assessment of Coal Combustion Wastes." Draft EPA document. P. ES-7. April 2010.

[17] U.S. Environmental Protection Agency. "Hazardous and Solid Waste Management System; Identification and Listing of Special Wastes; Disposal of Coal Combustion Residuals from Electric Utilities." [EPA-HQ-RCRA-2009-0640; FRL-9149-4] Proposed rule.

[18] All except molybdenum are listed as toxics by the Agency for Toxic Substances and Disease Registry (ATSDR), a federal public health agency of the U.S. Department of Health and Human Services. Some molybdenum compounds have been shown to be toxic to rats. Although human toxicity data are unavailable, animal studies have shown that chronic ingestion of more than 10 mg/day of molybdenum can cause diarrhoea, slowed growth, low birth weight, and infertility and can affect the lungs, kidneys and liver.

toxic metals can cause several types of cancer, heart damage, lung disease, respiratory distress, kidney disease, reproductive problems, gastrointestinal illness, birth defects, impaired bone growth in children, nervous system impacts, cognitive deficits, developmental delays, and behavioural problems. In short, coal ash toxics have the potential to injure all of the major organ systems, damage physical health and development, and even contribute to mortality.

27. If waste such as coal ash is allowed to simply go unregulated, this could have disastrous implications in South Africa. Eskom alone produces 25 million tons of coal ash per annum, 1.2 million tons of which is sold for use in industrial products such as cement.[19]

28. For these reasons, it is vital that a careful and risk-averse approach be taken in relation to any proposed measures in dealing with coal ash and its potentially devastating impacts. Allowing coal ash to be exempt from the application of NEMWA – without any adequate means to manage and monitor its use and management - would have irreversibly harmful consequences for human health and the environment.

29. Our clients are also particularly concerned about the proposed exclusion for coal ash as an inorganic fertilizer or soil ameliorant or conditioner (as per schedule 1, items (2)(f) and (g)); and for gypsum as a soil conditioner (as per schedule 1, item (3)(a)), given the significant risks of harm to human health and the environment that would arise by virtue of potential soil contamination.

30. A scientific publication that discusses the problems of using coal ash as fertilizer or soil amendment, by Shaheen, S. M., Hooda, P. S., & Tsadilas, C. D. (2014) titled "Opportunities and challenges in the use of coal fly ash for soil improvements – a review", *Journal of environmental management*, 145, 249-267, concludes the following:[20]

> "*It is important to stress that soil and CFA (coal fly ash) properties need to be carefully considered as incorrect use of CFA may not prove beneficial and possibly may cause adverse effects including toxicity (e.g. when acidic CFA is used in acidic soil or too large amounts are applied)* (e.g. Jala and Goyal, 2006; Patra et al., 2012a; Ukwattage et al., 2013; Skousen et al., 2013; Ram and Masto, 2014)." (emphasis added)

31. The conclusions of the above publication further highlight and support the significant concerns and risks in allowing **blanket, automatic** exclusion for specific uses of wastes.

ii. The process for any exclusion must be comprehensive, robust and strictly monitored and regulated

32. Chapter 2 of the draft regulations provides for an application process for the exclusion of waste streams by approval of the Minister. **We submit that any exclusion of a waste stream must first be subject to a comprehensive application and public participation process and must also be subject to approval by the Minister**.

33. In this instance, the quality of the risk assessments submitted to the Minister will be a critical determinant for whether the Minister makes good or bad decisions regarding the exclusion of wastes. The risk assessment process is severely deficient for this purpose – as addressed in further detail below - and would allow the submission (and possible approval) of risk assessments of very poor quality.

34. We also submit that the regulations must expressly state that **hazardous and toxic wastes can never be excluded**, not even by application to the Minister.

35. A distinction should be made between hazardous/toxic wastes and other wastes and, at a minimum, the burden to the waste generator of showing that the waste can be managed in such a way as to avoid harm to health and

[19] See http://www.eskom.co.za/news/Pages/Feb20.aspx.
[20] Available at https://www.sciencedirect.com/science/article/pii/S0301479714003375.

the environment should be higher in the case of hazardous and toxic waste. The criteria in regulation 7 require a risk assessment "*demonstrating that the use of the waste can be managed in such a way as to ensure it will not result in significant adverse impacts on the environment*." Yet no mention is made of risks to human health and the environment. As submitted below – the requirement for both "significant" and "adverse" impacts is too high a threshold.

36. The draft regulations would also need to address the following issues and considerations in the application and risk management process:

36.1. Encapsulated and un-encapsulated wastes: A distinction should be made between un-encapsulated uses and encapsulated uses of waste. Encapsulated uses are less problematic than un-encapsulated uses.[21] The USA EPA concluded that environmental releases of constituents of potential concern from fly ash concrete and flue gas desulphurisation (FGD) gypsum wallboard during use by the consumer are comparable to or lower than those from analogous non-coal combustion residual products, or are at or below relevant regulatory and health-based benchmarks for human and ecological receptors. There are proven damage cases in the USA where dangerous levels of contaminants were released from un-encapsulated coal combustion residual structural fills.[22]

36.2. Waste storage and transportation before use: In the draft regulations, this is not provided for and industries may simply keep waste on site for an unlimited duration - awaiting usage – while the storage of the waste has potential to cause great harm and risks to human health and the environment.

36.3. The dilution and/or mixing of hazardous wastes: In South Africa, hazardous waste is often diluted or mixed with other waste to allow for disposal to less stringent hazard facilities. Mixing commonly occurs with putrescible waste. These regulations would need to provide for mixtures and ensure that this is strictly assessed and regulated, particularly for mixtures that enhance leachability.

36.4. Exporting and importing of waste: The draft regulations could open the door for potentially hazardous and toxic wastes to be exported and imported without any regulation, if these waste streams are excluded as per the regulations (either automatically or by application).

37. The draft regulations also fail to make clear that only portions of schedule 1 wastes that are diverted for the "permitted uses" listed can be exempt. At a minimum, there must be a process:

37.1. for determining the proportion of a waste stream at a given facility, which can be diverted (which will not be static over the life of a plant, as markets for these materials shift), and for verifying that the determined proportions are being diverted; and

37.2. for verifying that the waste is actually being used as represented.

38. For example, where the use of coal ash for brick-making is only commercially viable or possible for a portion of the ash, in theory this would mean that only this portion would be excluded. However, there would be nothing preventing a waste generator from simply keeping waste unregulated in perpetuity with the claimed intention of using it as per the scheduled uses. This is another reason why the automatic blanket exclusions in chapter 3 and schedule 1 cannot be permitted.

[21] See https://www.epa.gov/sites/production/files/2014-12/documents/ccr_bu_eval.pdf

[22] See http://www.cityofchesapeake.net/Asset13901.aspx; http://articles.baltimoresun.com/2008-11-01/news/0810310142_1_coal-ash-constellation-gravel-mine; and http://www.newsobserver.com/news/local/coal-ash-issue/article10329920.html.

39. Applications must be required for scheduled uses in schedule 1 (although this appears not to be the case in the draft regulations). In the absence of adequate scientific information on the potential impacts and given the potential for significant harm - with limited resources in the Department of Environmental Affairs (DEA) – the precautionary principle must be relied upon in decision-making. Site-specific factors must always be considered and no exclusions can be permitted for toxic and hazardous waste streams.

40. We must also point out that assessing each proposed exclusion on a case-by-case basis places a large burden of responsibility on DEA to ensure a proper and comprehensive risk management plan and to ensure that the management plans are being complied with and properly implemented. In our experience, we are already seeing numerous instances of non-compliances with WMLs – with inadequate monitoring by the authorities – and poor implementation of NEMWA. These regulations – with their uncertainties and weak risk assessment and management process - are simply exposing the waste and environmental management system to further vulnerabilities and abuses.

41. Our clients reiterate that, only once the existing waste management regime under NEMWA is under control and properly implemented, should government be able to consider implementing any processes for the exclusion of waste streams. It is therefore our recommendation that the **promulgation of any regulations for the exclusion of waste streams, be placed on hold**.

The exclusions are unclear and ambiguous

42. The lack of clarity of the draft regulations regarding the manner in which waste streams are excluded is highly problematic.

43. Chapter 2 provides for a process in terms of which any person (or group of persons) who generates waste may apply to the Minister – by lodging the prescribed application form – for the exclusion of a waste stream or portion of a waste stream from the definition of waste. The impression created is that such an application can be made in respect of <u>any</u> waste.

44. However, regulation 13(1) of the draft regulations states:

> "*Scope of <u>application</u>: The exclusion of a waste stream or a portion of a waste stream listed in Schedule 1 of these Regulations are restricted to the identified permitted uses in Schedule 1*."

45. Regulation 4(a) and Regulation 13(1) read together allow for 2 possible interpretations:

    45.1. Under one interpretation, an applicant who is a generator of any kind of waste whatsoever (even the most toxic waste from the most toxic industrial process) may apply to exclude that waste from the definition of waste under NEMWA, as long as the intended use of the waste is approved per the process set out in regulations 5 to 10. But to the extent that an application relates to an exclusion of a waste listed in schedule 1, then only the uses listed in schedule 1 are permitted. In other words, any uses for coal ash which are not listed in schedule 1, cannot be allowed, not even on application to the Minister. This interpretation would also mean that wastes listed in schedule 1 (in accordance with chapter 3 of the draft regulations) follow a different process for exclusion. If chapter 3 does envisage a separate exclusion process to that set out in chapter 2, the implication is that a prior approval from the Minister and a risk management plan would not be required and there would be no means of monitoring and regulating these excluded activities listed in schedule 1, particularly because NEMWA will not apply.

    45.2. Another possible interpretation, is that only an applicant who is a generator of a waste stream listed in schedule 1 (i.e. metallurgical slag, coal ash, gypsum and biomass) may apply to exclude its waste from the definition of waste under NEMWA, as long as the intended use of the waste is also listed in schedule 1 for that waste. Therefore the schedule 1 exclusions are **not** automatic, and the generator of the waste

would still need to apply for a specific exclusion by following the process set out in regulations 5 to 10 of the draft regulations.

46. The second interpretation should be the preferred interpretation as it is more aligned with the objects of NEMWA and NEMA. However, the ambiguities in the draft could be interpreted to allow the former i.e. 2 separate instances of exclusion – one by application in respect of any waste and one by automatic exclusion of listed waste streams. In any event, given this uncertainty, a waste generator would certainly choose to apply the former, more relaxed, interpretation.

47. It is also not clear whether – if an exclusion in terms of chapter 3 read with schedule 1, applies – a risk management plan is required. Regulation 13(2) states that "*Where a waste stream or portion of waste stream has been excluded from the definition of waste in terms of these Regulations, such a waste stream or a portion of a waste stream must be managed in terms of the risk management plan developed in terms of regulation 9 and 10 of these Regulations*". As this is a subsection of regulation 13, titled "*scope of application*" (emphasis added), and as it falls under chapter 2 dealing with applications for the exclusion of waste, the implication is, again, that the type of exclusion envisaged by chapter 3 falls outside the scope of the requirements of regulation 13(2). This is likely to be the interpretation followed by persons generating waste listed in schedule 1. In order for the draft regulations to be properly aligned with the objects of NEMWA and the NEMA s2 principles, all exclusions under these regulations must be managed in terms of a risk management plan – this is the preferred interpretation and this should be explicitly provided for in the regulations.

48. Apart from making the implementation of the regulations difficult, the uncertainty and ambiguity could have severely detrimental implications as outlined above, namely that:

    48.1. an applicant who is a generator of any kind of waste may apply to exclude its waste from the definition of waste under NEMWA, irrespective of how toxic or hazardous such waste might be; and

    48.2. wastes such as coal ash and metallurgical slag wastes for example, which are toxic and which have significant impacts on the environment, would automatically go unregulated if used for specific purposes, with the impacts of those specific uses also being unregulated and not properly assessed and/or managed to mitigate harm.

49. While we do not accept the constitutionality of these regulations, we point out that in order to avoid any uncertainty around the application of these regulations – in the event that they are promulgated – they must **at the very least** make clear that:

    49.1. an application for exclusion of a waste stream in terms of chapter 2 applies **only** to waste streams listed in schedule 1 (as opposed to any kind of waste); and

    49.2. **all** waste streams excluded from the definition of waste (including those listed in schedule 1), must be subject to a risk assessment and prior approval of the exclusion, and governed by a risk management plan.

Problems with specific provisions of the draft regulations and their practical implementation

50. The following are issues with the specific provisions of the draft regulations. In the event that the draft regulations are to be promulgated – while we do not accept the constitutionality of the regulations - they must, at the very least, address the below issues.

i. Competent authority

51. It is not specified who the competent authority in relation to the administration, monitoring and implementation of these regulations is intended to be.

52. The draft regulations require applications in terms of chapter 2 to be submitted to, and decided by, the Minister; however, from a practical perspective it is unlikely that the Minister will have the capacity to assess the applications. It is highly unlikely that the Minister will take on the task of monitoring compliance with risk management plans.

53. Regulation 11 states that a report must be submitted to DEA on an annual basis and must be made available to DEA on request.

54. Because these regulations will fall under NEMWA, the presumption is that the Chemicals and Waste Branch at DEA will be responsible for the administration of the regulations, yet this may not fall under their mandate once waste streams are excluded from the definition of waste. In the absence of express delegation of authority by the Minister or by specification in the regulations, the proper monitoring and implementation of the regulations – in particular the monitoring of excluded waste and its usage and compliance with risk management plans - could be significantly undermined.

55. It will also be difficult for stakeholders to engage with the relevant authorities if it is not clear who the competent authority is. This should be clarified.

ii. Persons who may apply for exclusion of a waste stream

56. Allowing a "group of persons" to apply for an exclusion will effectively lead to blanket exemptions for entire industries. This runs counter to our clients' position that applications for exclusions of waste streams must be determined on a case-by-case basis.

57. The provision for a group of persons would also allow much broader exemptions that would bypass review of individual cases – for this reason we recommend that regulation 4(b) be deleted.

iii. Applications for exclusion of a waste stream, risk assessments, and risk management plans (regulations 5 to 10)

58. In addition to the interpretational and legality issues (regarding blanket exclusions and permissible exclusions of any waste) highlighted above, there are further issues with the implementation of the application procedure envisaged in chapter 2 of the draft regulations.

59. As submitted above, the regulations must expressly state that an application is required for **all** exclusions – including those governed by chapter 3 read with schedule 1 of the draft regulations.

60. Before making a decision on such an application – the Minister must give notice and invite written comments within 30 days, in terms of s73 of NEMWA. However, NEMWA simply requires "sufficient information" to be made available. This does not necessarily include the application itself or adequate detail that would enable stakeholders to properly engage with the potential impacts and implications of the application. This must be explicitly provided for in the regulations, which must require the **application documents to be made publicly available**, along with all necessary and relevant information, including health and environmental risk impact assessments. Furthermore the time period of 30 days is woefully inadequate to allow for meaningful consideration and participation by members of the public. A period of at least 90 days should be provided for.

61. It is also vital that other responsible government departments namely the DoH and DWS be required to consider and approve (or object to) an application for exclusion of a waste stream, as well as the Departments of Agriculture, Forestry and Fisheries, Human Settlements and of Public Works, where relevant.

62. The application form (included in annexure A to the draft regulations) does not provide for a sufficiently detailed application process. A fatal flaw is that no assessment of impacts to human health is required to be included in the assessment nor any chemical analysis of the waste to be excluded. This, at the very least, must be remedied, as it is doubtful that the Minister would have sufficient information before her to adequately assess the potential impacts and implications, of the intended exclusion(s). This would not enable proper and informed decision-making and is unacceptable.

63. Furthermore, the application form considers the use of waste - and its effects – to be uniform across different environments with different sensitivities, yet in reality this could not be the case as one risk assessment and management plan may very likely not adequately cover a range of possible different situations. That is, applications should be specific to particular uses of waste at particular sites. On the other hand, the risk assessment would not be sufficiently consistent, as there are no set standards or thresholds for the exclusion of various waste streams. In this regard, we submit that norms and standards must be developed.

64. As criteria for granting an exclusion, the draft regulations provide that an applicant has to demonstrate that the use of the waste can be managed in such a way that it will not result in "significant adverse impacts" to the environment. We submit that the threshold - of requiring both "significant" and "adverse" impacts - is too high. We recommend that this be replaced with "negative impacts". It is also not clear when impacts can be regarded as both significant and adverse – this should be clarified and defined in the regulations if "significant and adverse" are to remain as requirements. Furthermore, express reference to human health is missing from the criteria and should be included. This draft regulation must be amended to state that "*7(b) … the use will not result in ~~significant adverse~~ negative impacts on the environment and human health*".

65. It is also not clear who will be required to conduct the risk assessments under these regulations. In our experience, environmental assessment practitioners (tasked with conducting environmental impact assessments under NEMA) are seldom sufficiently objective and impartial to make realistic and just conclusions on the significance of impacts or to make recommendations that the project not go ahead.

66. We point out that without a robust and comprehensive framework in place for the conduct of risk assessments, the chances are high that the Minister would make incorrect or inappropriate decisions that are harmful to human health and the environment. To remedy this, the draft regulations should refer to procedures for the conduct of risk assessments (both human health risk assessments and environmental risk assessments).[23]

67. The final criterion for the Minister to exclude a waste stream, is that a risk management plan should be developed. It is not clear when or at what stage this plan must be developed. Such a plan should accompany the assessment when the application is submitted to the Minister for approval - so that the Minister can assess the adequacy of the proposed measures in the plan before making a decision on the application. This, however, must be explicitly provided for in the draft regulations. Furthermore, the regulations must expressly provide for the risk management plan to be considered and approved by the Minister.

68. Regulation 6(2) then lists numerous steps that can be taken by the Minister – after considering an application for exclusion. These steps include: the granting of the application; requiring the applicant to amend the

[23] Examples of this can be found at: WHO (2010) human health risk assessment toolkit: chemical hazards - http://www.inchem.org/documents/harmproj/harmproj/harmproj8.pdf; Government of Australia - Environmental Health Risk Assessment Guidelines for assessing human health risks from environmental hazards - http://webarchive.nla.gov.au/gov/20110605104414/http://www.health.gov.au/internet/publications/publishing.nsf/Content/ohp-ehra-2004.htm; 'U.S. EPA - Conducting a Human Health Risk Assessment' - https://www.epa.gov/risk/conducting-human-health-risk-assessment; and 'U.S. EPA - Ecological Risk Assessment' - https://www.epa.gov/risk/ecological-risk-assessment.

application; requiring the applicant to submit additional information; or refusing the application with reasons. Regulation 6(2) however, should also make express provision for the Minister to approve the application, but with the inclusion of conditions for the approval.

69. In relation to the elements of the risk assessment and the risk management plan (in accordance with regulations 8 to 10), we point out that the risk management plan requirements are too vague; the only specific requirements involve documenting how much waste is being used for what purpose. The minimum requirements of the risk management plan do not even mention the protection of human health or the environment, let alone set requirements for monitoring and risk management. **There must – at the very least - be a monitoring programme to track any environmental or health impacts, and periodic audits**.

70. The draft regulations also fail to provide for a period of validity of the risk management plan – the implication then is that this will exist in perpetuity despite any inevitable changes in circumstances. We submit that the regulations must provide for a process of renewal of a risk management plan at least every 5 years and this renewal process must be subject to adequate public participation.

71. Finally, it is vital that express provision be made in the regulations for risk assessments and risk management plans, as well as all records of waste generation and management, to be publicly available online, on the website of the applicant and DEA, and easily accessible in hard copy by members of the public.

iv. Reporting (regulation 11)

72. Regulation 11 requires a report arising from regulation 10(c) to be submitted to DEA on an annual basis. Regulation 10(c) is the requirement that a risk management plan "*include a mechanism to record the amount of waste distributed to specific users for a permitted use; including the number of enterprises established or supported and the extent to which previously disadvantaged individuals have been supported*."

73. Nowhere in the draft regulations is there a requirement for reporting on any environmental and human health impacts; non-compliances with the risk management plan; or any additional risks or issues which may have arisen.

74. We point out, with respect, that it is not within the mandate of DEA to assess the number of enterprises established nor any of the other objectives for the report envisaged by draft regulation 11 read with 10(c). The failure to require or provide for any regular environmental reporting of compliance with the risk management plan is a **fatal flaw**, which must be addressed.

75. The draft regulations also fail to make provision for this annual report to be made publicly available on request and online. This must be provided for in order to uphold the rights of access to information[24] and to an environment not harmful to health or wellbeing.[25]

iv. Withdrawal of an exclusion (regulation 12)

76. We note that provision is made for the Minister to review and/or withdraw the exclusion, if she, on reasonable grounds, believes that a waste stream or a portion of a waste stream excluded from the definition of waste poses a threat to health, wellbeing and environment.

77. It is, however, unclear how the Minister would be able to form the belief that an excluded waste poses a threat to health, wellbeing, and the environment if there is no requirement for monitoring and reporting on such impacts in the regulations.

[24] S32 of the Constitution.
[25] S24 of the Constitution.

78. We note further, that the process for withdrawal is fairly lengthy and complex in that the Minister must first give the person contemplated an opportunity to comment; then follow a consultative process; and then publish the decision in the government gazette. While we have no objection to the party concerned having an opportunity to make comment, we do note that, in reality, this is likely to deter the already under-capacitated officials from withdrawing exclusions of waste streams timeously. In instances where significant and ongoing harm is being caused by the exclusion, a more speedy withdrawal process should be provided. The Minister must have the power to halt approved uses immediately while simultaneously reviewing the decision and providing an opportunity for comment after such withdrawal.

79. It is also not clear whether the Minister's power to withdraw applies to schedule 1 classified wastes. Our submission is that it must apply to **all waste streams** included in these regulations, including those in terms of chapter 3 and schedule 1.

v. Scope of application (regulation 13)

80. In accordance with the submissions made above at paragraphs 47 and 49, the regulations must be amended to make clear that the requirement for a risk assessment and risk management plan applies to **all** waste streams to be excluded from the definition of waste, including those listed in schedule 1, and that the requirement for an application and approval of the Minister is also required for waste streams listed in schedule 1.

81. It is also not clear how the implementation of risk management plans (regulation 13(2)) could be enforced, where no environmental and health requirements are to be included in the plan or the annual reports.

82. In addition, if the waste is transferred by a generator to a third party that then reuses it, does the third party have to abide by the generator's risk management plan and which party will be liable for any failure to adequately implement the risk management plan? This must be clarified.

vi. Amendment of the list of waste stream or portion of waste streams excluded (regulation 15)

83. Similarly to the point made above in relation to withdrawals and amendments of exclusions, it is not clear how the Minister would be able to decide "on reasonable grounds" that a permitted use poses a threat to health, well-being and the environment when there is no requirement for reporting on these aspects. This must be remedied.

vii. Offences and penalties (regulation 17)

84. We note that the only offences listed in the draft regulations are:

84.1. intentionally providing false and misleading information to the Minister; or

84.2. contravening or failing to comply with any permitted use of waste contemplated in schedule 1.

85. If chapter 2 does envisage the exclusion of **any** waste on approval by the Minister (including waste not listed in schedule 1) then we submit that failing to comply with such an approval and the conditions of an approval must also constitute an offence.

86. Similarly, the failure to comply with the provisions of a risk management plan must constitute an offence under regulation 17.

Conclusion

87. In conclusion, given the irregularities and fatal shortcomings in these draft regulations, we recommend that:

87.1. the promulgation of any regulations for the exclusion of waste streams be placed on hold pending the proper implementation of the existing waste management system - with full and adequate monitoring and enforcement by government; or

87.2. **alternatively** that the draft regulations be **replaced** with regulations that:

87.2.1. provide for uses of non-hazardous and low-toxicity wastes only by application with no provision for automatic blanket exclusions;

87.2.2. do not allow for an exclusion from the definition of waste (and thereby an exclusion from NEMWA), but rather for applications to be brought for the approval of specific waste uses to be regulated extensively by risk management plans and conditions to approvals for the uses. Storage and transportation prior to use must still be governed by a WML; and

87.2.3. are substantially amended in all other respects to address the concerns highlighted above and in accordance with the recommendations made above.

88. Kindly contact us should you have any queries. We would also be happy to meet with DEA to discuss these draft regulations, as well as other provisions of NEMWA (in particular our concerns around the implementation of part 8 (contaminated land provisions), which we have previously brought to DEA's attention.[26]

Yours faithfully
CENTRE FOR ENVIRONMENTAL RIGHTS

per:

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[26] Should you require us to resend copies of this correspondence, please let us know.