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Environmental Justice and Human Rights on the Mining Wastelands of the Witwatersrand Gold Fields

Tracy-Lynn Humby

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Justice environnementale et droits humains : comprendre les tensions et explorer les possibilités

Environmental Justice and Human Rights: Investigating the Tensions, Exploring the Possibilities

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Résumé de l'article

En Afrique du Sud, le cadre constitutionnel et statutaire établit apparemment une synergie entre les droits environnementaux et la justice environnementale. De plus, une notion prédominante du constitutionnalisme transformatif positionne le droit comme une pierre angulaire pour un changement social de grande ampleur par l'entremise d'un processus politique non violent. Une étude de cas du Tudor Shaft Informal Settlement, situé dans les champs aurifères du Witwatersrand, met en évidence les ambigüités présentes dans la notion de justice environnementale, ainsi que les tensions entre les réclamations basées sur les droits environnementaux et socioéconomiques. La mise en évidence de l'existence d'ordres moraux locaux — des alliances politiques fondées sur l'accès aux ressources, qui emploient fréquemment des moyens violents afin d'atteindre des objectifs politiques suggère que l'ordre constitutionnel et le constitutionnalisme transformatif ont tous deux une portée limitée.

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Environmental Justice and Human Rights on the Mining Wastelands of the Witwatersrand Gold Fields

TRACY-LYNN HUMBY*

ABSTRACT

In South Africa, the constitutional and statutory framework seemingly establishes a strong synergy between environmental rights and environmental *justice*. A prevailing notion of transformative constitutionalismadditionally positions law as the foundation for large-scale social change through nonviolent political processes. A case study of the Tudor Shaft Informal settlement on the Witwatersrand goldfields elucidates the ambiguities in the notion of environmental *justice and the tensions* between claims based on the environmental right and

RÉSUMÉ

En Afrique du Sud, le cadre constitutionnel et statutaire établit apparemment une synergie entre les droits environnementaux et la justice environnementale. De plus, une notion prédominante du constitution nalismetransformatif positionne *le droit comme une pierre* angulaire pour un changement social de grande ampleur par l'entremise d'un processus politique non violent. Une étude de cas du Tudor Shaft Informal Settlement. situé dans les champs aurifères du Witwatersrand, met en évidence les ambigüités

^{*} Associate Professor, School of Law, University of the Witwatersrand, Johannesburg, South Africa. This article is based on a paper that was to be presented at a conference on environmental justice and human rights hosted by the University of Ottawa from 8-10 November 2012. I was unable to attend because of a medical emergency but a webinar of this paper will nevertheless be made available on the conference website. My thanks are due to Mariette Liefferink, Jackie Dugard and Michael Power for their assistance in gathering the information relating to the case study presented in this article.

socio-economic rights. By highlighting the existence of local moral orders—political alliances based on access to resources that frequently employ violence to achieve political ends—it also suggests the limited reach of the constitutional order and the project of transformative constitutionalism.

Key-words: Environmental justice, human rights, mining waste, acid mine drainage, local moral orders, Witwatersrand.

présentes dans la notion de *iustice environnementale.* ainsi que les tensions entre les réclamations basées sur les droits environnementaux et socioéconomiques. La mise en évidence de l'existence d'ordres moraux locaux des alliances politiques fondées sur l'accès aux ressources, qui emploient fréquemment des moyens violents afin d'atteindre des *objectifs politiques* — *suggère aue l'ordre constitutionnel* et le constitutionnalisme transformatif ont tous deux une portée limitée.

Mots-clés: Justice

environnementale, droits de la personne, gestion des résidus miniers, effluents miniers acides, ordres moraux locaux, Witwatersrand.

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INTRODUCTION

The post-1994 constitutional legal order of South Africa provides a fruitful context in which to interrogate the relationship between environmental justice and human rights. In South Africa the beginnings of environmental justice activism occurred more or less co-terminously with the adoption of a supreme Constitution containing a justiciable Bill of Rights that incorporates both a right to environment and socio-economic rights. This, along with incorporation of the discourse of environmental justice into legislation aimed at giving effect to the environmental right, causes environmental justice and human rights struggles to be easily conflated. This view, however, unproblematically assumes the unmediated, uninterrupted and universal reach of a positivistic legal order into the complex crevices of a postcolonial State. In the spirit of Foster's 1998 account of the environmental justice struggles of the community of Chester, Pennsylvania,¹ a substantial portion of this contribution is devoted to narrating the "grassroots" environmental justice resistance that has emerged out of the proximity of the Tudor

^{1.} Sheila Foster, "Justice from the Ground Up: Distributive Inequities, Grassroots Resistance, and the Transformative Politics of the Environmental Justice Movement" (1998) 86 Cal L Rev 775. Foster's article is one of the most widely cited articles in the early legal literature on environmental justice in the United States of America. Due to limitations of space it is not possible to canvas this article more fully and a familiarity with its content on the part of the reader is assumed.

Shaft Informal Settlement to a uraniferous tailings dam on South Africa's Witwatersrand goldfields. Foster's contribution to the legal literature on environmental justice at the time was to liberate the concept from its moorings to a distributive paradigm that sought to measure the phenomenon in terms of the distribution of material environmental hazards and alignment thereof with race and class.² Her approach was rather to elucidate the social agencies, relations and processes "behind the statistics."³ In so doing she demonstrated how the resistance in Chester quickly became a struggle over the legitimacy of decision-making processes, the exclusion and marginalization of citizens in those processes and the structural forces that prevented them from participating in decisions that fundamentally affected their lives.⁴ There are interesting parallels between Foster's Chester case study and the study of Tudor Shaft in this article, but also important differences that point to the need for additional conceptual resources for understanding environmental justice struggles in South Africa. The most important of these differences question the assumption that environmental justice activisms play out across a single public order undergirded by mutually acceptable, formal legal norms couched as human rights, and that activisms are both driven by and constitutive of a civil society concerned with the environment.

In order to frame the Tudor Shaft case study, the first part of this article provides a brief theoretical account of the shifting relationship between environmental justice and human rights in South Africa. It also references Von Holdt's work on "local moral orders"—a concept that describes alternative normative frameworks that emerge (or continue to exist) alongside, underneath, and in the stead of the constitutional legal order. The second part then contextualizes the problem of mining waste on the Witwatersrand goldfields before recounting how the environmental hazard at Tudor

^{2.} Vicki Been's impressive statistical analyses in "What's Fairness Got to Do With It? Environmental Justice and the Siting of Locally Undesirable Land Uses" (1993) 78 Cornell L Rev 1001, and (with Francis Gupta) "Coming to the Nuisance or Going to the Barrios? A Longitudinal Analysis of Environmental Justice Claims" (1997) 24 Ecology LQ 1, is probably the highwater mark for this approach.

^{3.} Foster, supra note 1 at 777.

^{4.} Ibid at 778.

Shaft has been constituted and how the community and its civil society partners have responded. The third part argues that while the Tudor Shaft case has also boiled down to the legitimacy of decision-making processes, the complexity of the environmental justice struggle in this case (and cases similarly situated) cannot be comprehended by way of reference to the concepts of environmental justice and human rights alone. It thus points the way to studying rights-based environmental justice struggles in South Africa as one form of environmental resistance, which exists alongside others.

I. ENVIRONMENTAL JUSTICE AND HUMAN RIGHTS IN SOUTH AFRICA

A. CONVERGING PATHS

South Africa has a long and shameful history of environmental injustices interwoven with the abuses of colonialism, apartheid, capitalism and patriarchy. Early accounts of both "green" and "brown" dimensions of environmental justice emerged in the early 1990s.⁵ The mining sector—which has played such a critical role in shaping the geospatial, political, economic and social contours of South Africa—carries its share of environmental injustice claims. In addition to the forced removal of black South Africans to make way for mining operations,⁶ the environmental injustices of mining

^{5.} See Jacklyn Cock & Eddie Koch, eds, Going Green: People, Politics and the Environment in South Africa (Cape Town: Oxford University Press, 1991); Alan B Durning, Apartheid's Environmental Toll (Washington, DC: Worldwatch Institute, Worldwatch Paper 95, 1990); Mamphela Ramphele, Jacklyn Cock & Christopher McDowell, eds, Restoring the Land: Environment and Change in Post-Apartheid South Africa (London: The Panos Institute, 1991). "Green" accounts, for instance, pointed to the brutal forced removal of thousands of black South Africans during the apartheid era in order to establish pristine wilderness areas, while brown accounts highlighted the squalid conditions in which black people lived in the urban townships and rural homelands, as well as the hazardous conditions under which black people laboured.

^{6.} Thabo Madihlaba, "The Fox in the Henhouse: The Environmental Impact of Mining on Communities in South Africa" in David A McDonald, ed, *Environmental Justice in South Africa* (Athens, Ohio: Ohio University Press, 2002) 156 discusses, in this regard, the forced removal of the Baphalane people from their ancestral lands on 31 August 1963 in order for a mining lease to be granted to Gencor for the mining of platinum and chrome (at 158).

manifested chiefly in occupational hazards, increased exposure to noise and traffic, and the degradation of air and water quality from the generation and siting of mining waste.⁷

One of the enduring perceptions in accounts of environmental injustice is that "environmental issues" are the concern of the white middle class, completely disconnected from the grim realities of life faced by the majority of the population.⁸ But this narrative fails to recognize the significant alliances that began to form across race and class as a nascent environmental justice "movement" gained impetus in South Africa the early 1990s.⁹ Following the unbanning of antiapartheid political parties and activists, a less restricted political climate enabled political organizations, non-governmental organizations, trade unions, and academics to broaden their horizons beyond anti-apartheid politics and to begin exploring the linkages between poverty, race and environmental degradation.¹⁰ Between 1990 and 1994, for example, South Africa's black majority soon-to-be-elected governing party, the African National Congress (ANC), displayed a new sensitivity toward environmental issues, to the extent of including the environment as one of ten basic needs in its pre-election version of

10. *Ibid*.

^{7.} *Ibid* at 164. For an overview of finalized and pending cases pertaining to mining, environment and publication participation, see Centre for Environmental Rights, *Mining and Environment Litigation Review* (June 2012, compiled by Tracy Humby).

^{8.} Jan Glazewski, "Environmental Justice and the New South African Democratic Legal Order" (1999) Acta Juridica 1 at 2. See also Loretta Feris, *The Conceptualization of Environmental Justice within the Context of the South African Constitution* (LLD Thesis, University of Stellenbosch, 2000).

^{9.} Rachel Wynberg & David Fig, "Realising Environmental Rights: Civic Action, Leverage Rights and Litigation" in Malcolm Langford, Ben Cousins, Jackie Dugard & Tshepo Madlingozi, eds, *Socio-Economic Rights in South Africa. Symbols or Substance?* (Cambridge: Cambridge University Press, 2013) [page references to this sources are based on the document on file with the author]. Wynberg and Fig cite as particular examples of such alliances the South Durban Community Environmental Association and the Vaal Environmental Justice Alliance at 2. Cock notes that the environmentalism that began to emerge in South Africa in the early 1990s cannot be described by some of the more conventional definitions of social movements. Rather it was an informal, partial, fragmented network of environmental initiatives of diverse social composition and with inchoate ideologies of various shades of "green" and "brown." Jacklyn Cock & David Fig, "The Impact of Globalization on Environmental Politics in South Africa, 1990–2002" (2001) 5:2 Afr sociol Rev 15 at 16.

the *Reconstruction and Development Programme*.¹¹ The key to this remarkable turnaround was the realization that environmental issues are also the product of unjust social relations and that the "environment" should accordingly be reconceptualized to include the working and living spaces of black South Africans. It then became apparent that environmental initiatives were not so far removed from other post-apartheid democratic ideals.¹² Building on the formation of new nongovernmental organizations that drew attention to the embeddedness of the environment in socio-political struggles,¹³ a "loose alliance" of over 550 non-profit organizations in the form of the Environmental Justice Networking Forum (EJNF) also came into being.¹⁴ The oft-repeated definition of environmental justice put forward by the EJNF held that:

Environmental justice is about social transformation directed toward meeting basic human needs and enhancing our quality of life—economic quality, health care, housing, human rights, environmental protection and democracy. In linking environmental and social justice issues the environmental justice approach seeks to challenge the abuse of power which results in poor people having to suffer the effects of environmental damage caused by the greed of others. . . . In recognizing that environmental damage has the greatest impact upon poor people, EJNF seeks to ensure the right of those most affected to participate at all levels of environmental decision-making.¹⁵

Environmental rights were seen by this emerging wave of post-apartheid civil society organizations as a means to secure

^{11.} Phia Steyn, "The Lingering Environmental Impact of Repressive Governance: The Environmental Legacy of the Apartheid Era for the New South Africa" (2005) 2:3 Globalizations 391 at 397. The inclusion of environment as a basic need was however dropped in the version of the *Reconstruction and Development Programme* that was formalized after the elections.

^{12.} David A McDonald, "Introduction" in McDonald, supra note 6, 1 at 2.

^{13.} Wynberg & Fig, supra note 9 at 5; Cock & Fig, supra note 9 at 18–20.

^{14.} Belinda Dodson, "Searching for a Common Agenda: Ecofeminism and Environmental Justice" in McDonald, *supra* note 6, 81 at 101–103; Cock & Fig, *supra* note 9 at 18.

^{15.} Quoted in McDonald, "Introduction" in McDonald *supra* note 6 at 4. The lack of a reference to race in this definition is interesting, but the context in South Africa is that most poor people are also people of colour. Additionally, because of the policy of apartheid, racial discriminatory intent in the allocation of environmental harms tends to be assumed.

environmental justice, particularly through the courts,¹⁶ a legitimation of demands and claims, and a rallying point for social mobilization.¹⁷ Cock writes that "[i]n a South African context, environmental justice means social transformation directed to meeting basic human needs and rights," but she also envisions environmental justice as a "powerful mobilizing force," the "core" of which lies in the notion of rights—rights of access to natural resources and to decision-making.¹⁸ Rights, in her understanding, seem to play a role not only in articulating a legal entitlement, but also in fuelling social mobilization, as social tension, arising from the contradiction between the discourse of rights and the experience of unmet needs, increases.¹⁹

The inclusion of an express constitutional right to the environment in first the 1993 and then the 1996 South African Constitutions provided an opportunity to cement this relationship between environmental rights and environmental justice. In the 1996 Constitution, section 24 guarantees everyone a right to an environment that is "not harmful to health or well-being" and the right to have the environment protected, "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." The concept foregrounded in the constitutional text is sustainable development, with environmental justice more implicit in the reference to "present and future generations." However, section 24 stands in the company of the socio-economic rights of access to housing²⁰ and sufficient water and food.²¹ as well

^{16.} Wynberg & Fig, supra note 9 at 6.

^{17.} Jacklyn Cock, "Sustainable Development or Environmental Justice: Questions for the South African Labour Movement from the Steel Valley Struggle" (2007) 40:1&2 LABOUR, Capital and Society 37 at 49.

^{18.} *Ibid*.

^{19.} *Ibid*.

^{20.} Constitution of the Republic of South Africa, 1996, No 108 of 1996, s 26 [1996 Constitution].

^{21.} Ibid, s 27(1)(b).

as the rights to equality,²² human dignity,²³ and life²⁴ all of which potentially address substantive environmental justice concerns in a South African context. The rights of access to information²⁵ and the courts²⁶ and the right to administrative justice,²⁷ further establish rights-based standards that may be invoked in support of the right to participate in environmental decision-making. Further, the environmental clause and its supporting provisions in the Bill of Rights definitively addressed the problem of securing environmental justice through the courts given the Constitution's extremely generous provision on *locus standi*. Section 38 extends *locus* standi to persons acting in their own interest, to anyone acting on behalf of another person who cannot act in his or her own name, to anyone acting as a member of, or in the interest of, a group or class of persons, and even to anyone "acting in the public interest."²⁸

In a significant paper published at the end of the 1990s, Karl Klare introduced the idea of "transformative constitutionalism" to designate the potential project of social change facilitated by the South African Constitution and the Bill of Rights in particular. He described this project as:

[A] long-term project of constitutional enactment, interpretation and enforcement committed . . . to transforming a country's political and social institutions and power relationships in a democratic, participatory and egalitarian direction. Transformative constitutionalism connotes an enterprise of inducing

26. 1996 Constitution, supra note 20, s 34.

27. Ibid, s 33. The administrative justice provision has been threshed out in the Promotion of Administrative Justice Act 3 of 2000 [PAJA].

28. 1996 Constitution, supra note 20, s 38. Section 32 of the National Environmental Management Act, 1998 further broadens standing by allowing any person to seek appropriate relief for a breach of the Act (including one of its framing principles) "in the public interest" and "in the interest of protecting the environment," amongst other grounds.

^{22.} Ibid, s 9.

^{23.} Ibid, s 10.

^{24.} *Ibid*, s 11.

^{25.} *Ibid*, s 32. The constitutional provisions relating to access to information have been subsequently elaborated in the *Promotion of Access to Information Act 2* of 2000 [*PAIA*].

large-scale social change through nonviolent political processes grounded in law. $^{29}\,$

As Liebenberg notes, "[t]he notion of transformative constitutionalism has found a deep resonance in academic literature, the jurisprudence of the courts, and civil society campaigns for social justice."³⁰ In the words of a former Chief Justice of the Constitutional Court, Puis Langa, transformation is a "permanent ideal, a way of looking at the world that creates a space in which dialogue and contestation are truly possible, in which new ways of being are constantly explored and created, accepted and rejected and in which change is unpredictable, but the idea of change is constant."³¹ The Constitution is thus not transformative in the sense of its peculiar historical position, but because "it envisions a society that will always be open to change and contestation . . . "32 This understanding of transformation positions democratic deliberation—in non-judicial structures but also through the courts, as they go about the process of interpreting human rights norms—as absolutely central to the process of transforming the status quo.³³ It consequently also highlights the need for parity of participation in both public and private institutions.³⁴ As I will highlight in the case study of the Tudor Shaft Informal Settlement below, it is a profound lack of such parity of participation that is possibly centrally responsible for the environmental injustices that are being perpetuated.

^{29.} Karl E Klare, "Legal Culture and Transformative Constitutionalism" (1998) 14 SAJHR 146 at 150.

^{30.} Sandra Liebenberg, *Socio-Economic Rights: Adjudication Under a Transformative Constitution* (Claremont, Cape Town: Juta, 2010) at 25. For a critical reading of the project of transformative constitutionalism, and the manner in which it has been received by South African legal scholars, see Karin van Marle, "Transformative Constitutionalism as/and Critique" (2009) Stell L R 286.

^{31.} Pius Langa, "Transformative Constitutionalism" (2006) Stell L
 R351 at 354.

^{32.} Ibid.

^{33.} Liebenberg, supra note 30 at 29.

^{34.} The notion of "pariticipatory parity" was developed by Nancy Fraser, "Social Justice in the Age of Identity Politics: Redistribution, Recognition and Participation" in Nancy Fraser & Axel Honneth, *Redistribution or Recognition? A Political-Philosophical Exchange* (London: Verso, 2003) 7.

Already before the adoption of the 1996 Constitution, a four-year consultative process to develop a new policy and regulatory framework for environmental management in South Africa, aimed at giving effect to the constitutional environmental right, had commenced.³⁵ During more or less the same time the South African NGO coalition (SANGOCO), in collaboration with the South African Human Rights Commission and the Commission on Gender Equality, held countrywide hearings on poverty with one component dedicated specifically to poverty and the environment. More than 10 000 people participated in these hearings.³⁶ Environmental justice and environmental human rights were thus clearly on the agenda, together. The White Paper on Environmental Management Policy for South Africa, published in 1998, explicitly listed environmental justice as one of the principles that had to underpin the new rights-oriented environmental legislation³⁷ and, in line with this, a number of environmental justice-oriented principles were included in the list of national environmental management principles set out in the National Environmental Management Act (NEMA).³⁸ The most explicit of these held that "[e]nvironmental 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 persons³⁹ and that "[e]quitable

access to environmental resources, benefits and services to

^{35.} This initiative was known as the Consultative National Policy Process (CONNEPP). For important background on the CONNEPP process, see Cock & Fig, *supra* note 9 at 20–21. While the CONNEPP served as a forum where diverse stakeholders could meet to discuss environmentally related concerns, it was also criticized for being removed from central planning processes. Despite the reconceptualization of "environment" to allow for the inclusion of other priorities of the democratic State (housing, access to safe water, sanitation, electricity and the like), it seems that already at this stage the "environment" was sliding into a separate realm of governance. See Steyn, *supra* note 11 at 398.

^{36.} Glazewski, supra note 8 at 5.

^{37.} GN 749/1998 in Government Gazette 18894 dated 15 May 1998, at 22.

^{38.} The list of environmental management principles is set out in *National Environmental Management Act* 107 of 1998 [*NEMA*], s 2(4). The status of these principles is articulated in s 2(1) of this Act. They have no over-riding importance and although they must be applied by all organs of State in South Africa, they merely apply "alongside all other appropriate and relevant considerations."

^{39.} *Ibid*, s 2(4)(c).

meet basic human needs and ensure human well-being must be pursued . . ."⁴⁰ A number of principles also emphasized the need for participation of all interested and affected parties in environmental governance.⁴¹ Whilst subsequently enacted pieces of environmental legislation operationalized these environmental justice provisions in different ways,⁴² the regulation of participation by interested and affected parties was primarily effected through the *NEMA* and its attendant *Environmental Impact Assessment Regulations*. These required a compulsory and highly structured public participation process prior to submitting an application to obtain an environmental authorization for listed activities deemed to have a detrimental effect on the environment.

By the late 1990s the relationship between environmental justice and environmental human rights therefore appeared to be synergetic. From a legal perspective the discourse of environmental rights had been infused with a discourse of environmental justice that not only referenced the need for fair allocation of environmental hazards, but also emphasized the need for meeting basic needs through equitable access to natural resources and promoting a culture of inclusivity and engagement in environmental decisionmaking. Regulatory mechanisms for ensuring "interested and affected parties" had a voice in environmental decisionmaking had also been entrenched in legislation. The legislative conditions to facilitate the outworking of the project of transformative constitutionalism in the relationship between South Africans and the environment had seemingly been established

B. BYWAYS AND SIDETRACKS

The predominant tone of the narrative that describes developments since the mid-1990s is, however, one of disappointment. The environmental movement became increasingly

^{40.} Ibid, s 2(4)(d).

^{41.} *Ibid*, see ss 2(4)(f), (g), (h) and (q).

^{42.} See Glazewski, supra note 8 at 23–28 where he discusses the environmental justice dimensions of the National Water Act 36 of 1998 and the Marine Living Resources Act 18 of 1998.

"dispersed, segmented and compartmentalized."⁴³ Cock and Fig describe a "demobilization" of environmentally concerned civil society as key environmental activists moved into government, academia or high-paid consultancies.⁴⁴ The explicit and implicit policies of the State tended to exacerbate these trends. During the Mbeki administration, a new macroeconomic policy⁴⁵ imposing the well-recognized orthodoxies of a neoliberal agenda (deficit reduction, trade liberalization, a rolling back of the State through deregulation and privatization) was adopted.⁴⁶ Budgets for national and newly created provincial environmental departments were cut.⁴⁷ further impeding their already-limited capacity to implement a suite of ambitious and sophisticated new environmental laws. The State's attitude and relationship toward non-governmental environmental organizations became colder and less accommodating on the basis that it was now the democratically elected State that acted on behalf of South African citizens and that should be left alone to govern without interference from civil society.⁴⁸ Far from offering a potential platform for equal participation in environmental decision-making, the mandatory public participation processes in environmental impact assessments became a bureaucratic maze "facilitated by expensive consultants in the pocket of 'developers,' and undertaken within the rules set by a pro-industry capitalist government."49

During this time, the strategies environmental justice advocates employed to articulate and defend environmental

^{43.} Wynberg & Fig, supra note 9 at 9.

^{44.} Ibid at 23.

^{45.} The Growth, Employment and Redistribution Strategy or "GEAR." This economic policy was launched by President Mbeki in 1997.

^{46.} Cock & Fig, supra note 9 at 25.

^{47.} Ibid.

^{48.} Wynberg & Fig, supra note 9 at 9.

^{49.} David Hallowes & Mark Butler, *The Balance of Rights: Constitutional Promises and Struggles for Environmental Justice* (Pietermaritzburg: groundWork, 2004) at 65; Zarina Patel, "Environmental Justice in South Africa: Tools and Trade-Offs" (2009) Social Dynamics 94. Public participation in the environmental impact assessment process is but one of numerous tracks for consultation in environmental matters. Legislation dealing with water, waste, air quality and biodiversity, amongst others, provide extensively for public participation processes. I am not claiming that these processes are also dysfunctional.

and related rights encompassed resistance and coalition building, campaigning, lobbying, media campaigns, and advocacy in addition to rights-based litigation.⁵⁰ Few of the environmental cases that were heard, however, were based squarely on the constitutional right to environment and even when section 24 was invoked the courts tended to avoid deciding the cases in terms of this provision.⁵¹ As a result there is little interpretive depth to section 24 and the protective ambit of the right, including its utility for environmental justice struggles, remains unclear. Worryingly, in at least a couple of the judgments of the Constitutional Court the old dichotomization that pits "environment" against social justice has come to the fore. In Minister of Public Works v Kyalami Ridge Environmental Association⁵² the government's attempts to establish a transit camp for 300 homeless flood victims on state land was unsuccessfully resisted by a wealthy group of neighbouring property owners who argued—invoking their rights in terms of section 24-that the transit camp could not be established until the relevant town planning scheme had been amended and an environmental impact assessment process concluded. And in Mazibuko v City of Johannesburg,⁵³ the only case dealing with the section 27(1)(b) right of access to sufficient water that has come before the Constitutional Court so far, the Court's rejection of the contention that policies of free basic water should be extended to 50 litres per person per day, and their support for the policy of installation of prepaid water meters, was in part supported by concerns that in an arid country such as South Africa, water is a scarce resource requiring "careful management."54

On the face of it rights-based litigation aimed at securing socio-economic rights, which include the rights of access to housing and sufficient food and water, have fared better, at least in the sense that social protagonists have achieved

^{50.} Wynberg & Fig, supra note 9 at 3.

^{51.} Loretta Feris, "Constitutional Environmental Rights: An Under-Utilized Resource" (2008) SAJHR 29 at 38.

^{52. [2001]} ZACC 19 (S Afr Const Ct), [2001] 7 B Const LR 652 [Kyalami Ridge].

^{53. [2009]} ZACC 28 (S Afr Const Ct), [2010] 3 B Const LR 239 [Mazibuko].

^{54.} Ibid at para 3.

"victories" based squarely on these rights.⁵⁵ However, the Constitutional Court's approach in these cases—which focuses on structural "good governance" considerations such as coherence, legality, coordination and inclusivity in government policy-making and implementation rather than concrete means and ends-has come under trenchant criticism for its "proceduralization" of the enquiry and rejection of minimum core obligations.⁵⁶ This has the effect, as Pieterse and others have argued, of rendering the material needs of the applicants who come to court extraneous to the inquiry and entrenching the status quo.⁵⁷ Additionally, for purposes of this research, socioeconomic rights have not been framed as issues of environmental concern. In terms of the Constitutional Court's jurisprudence on the section 24 right to environment and the socio-economic rights in sections 26 and 27, to date. the picture that emerges is therefore one of a lack of integration of these concerns.⁵⁸

The primary basis on which environmental justice advocates have grounded their rights-based strategies is on what legal commentators have characterized as "narrow administrative grounds"—the byways and sidetracks for rights-based interventions in environmental justice struggles.⁵⁹ These

^{55.} Socioeconomic rights cases that can be considered victories include Government of the Republic of South Africa v Grootboom [2000] ZACC 19 (S Afr Const Ct), [2000] 11 B Const LR 1169; Minister of Health v Treatment Action Campaign (No. 2) [2002] ZACC 15 (S Afr Const Ct), [2002] 10 B Const LR 1033; Khosa v Minister of Social Development, Mahlaule v Minister of Social Development [2004] ZACC 11 (S Afr Const Ct), [2004] 6 B Const LR 569; Jaftha v Schoeman, Van Rooyen v Stolz [2004] ZACC 25 (S Afr Const Ct), [2005] 1 B Const LR 78.

^{56.} Marius Pieterse, "Eating Socioeconomic Rights: The Usefulness of Rights Talk in Alleviating Social Hardship Revisited" (2007) 29:3 Hum Rts Q 796 at 800.

^{57.} Ibid at 812.

^{58.} See Jackie Dugard & Anna Alcaro, "Why Can't We Be Friends? Environmental and Socio-Economic Rights in the Courts" (2012) Draft submission to the SAJHR (copy on file with author).

^{59.} Ibid at 11. Cases of this nature include Earthlife Africa (Cape Town) v Director-General: Department of Environmental Affairs and Tourism [2005] ZAWCHC 7, [2005] 2 All SA 44 (CC) (judicial review relating to a decision by the Department to approve the environmental impact assessment for a controversial nuclear energy project known as the Pebble Bed Modular Reactor); Trustees for the time being of the Biowatch Trust v Registrar: Genetic Resources [2009] ZACC 14, [2009] 10 B Const LR 1014 (judicial review of a decision to refuse to grant access to information relating to genetically-modified organisms, but which ultimately came to centre on the law relating to costs in constitutional matters).

encompass legal issues raised by the interpretation of the section 32 right of access to information and its associated legislation, the Promotion of Access to Information Act;⁶⁰ the section 33 right to administrative justice and its associated legislation the Promotion of Administrative Justice Act; certain common law principles of administrative law such as audi alteram partem: and certain statutory provisions of the new suite of environmental laws.⁶¹ For environmental activists, much of the victory in these cases centres on changing the culture of political engagement around environmental decision-making. In an early case in a mining context, *Director*: Mineral Development, Gauteng Region v Save the Vaal Environment.⁶² for instance, the issue turned on whether an unincorporated association of concerned landowners had a right to raise their environmental concerns at the time a mining right was granted and not at the later stage of approval of the environmental management programme, as required by legislation in force at the time. Upholding the right to be heard, the Supreme Court of Appeal remarked that "by including environmental rights as fundamental, justiciable human rights, by necessary implication requires that environmental considerations be accorded appropriate recognition and respect in the administrative processes in our country. Together with the change in the ideological climate must also come a change in our legal and administrative approach to environmental concerns."63

There is certainly nothing wrong with using procedural aspects of rights to enforce substantive entitlements. Indeed, it supports the objectives of parity of participation in deliberative democracy that is so important for transformative constitutionalism. The problem with these interventions, however, is that they have *not* instigated a deep and thorough going change in the way in which developers, their consultants and the government interact with communities affected

^{60.} Act 2 of 2000 [PAIA].

^{61.} Act 3 of 2000 [PAJA].

^{62. [1999]} ZASCA 9, [1999] 2 All SA 381 (A) [Save the Vaal].

^{63.} Ibid at para 20.

by environmental degradation.⁶⁴ Further, while rights-based strategies need not involve litigation, when this is in fact pursued it exacts a significant toll on social solidarity, impacts negatively on social mobilization around environmental issues, fosters a dependence on white lawyers, and stretches the limited resources of environmental advocacy organizations to breaking point.⁶⁵

C. CHASMS?

In the light of these experiences, there is a sense of a growing chasm between rights discourse and the lived experience of the majority of South Africans. Hallowes and Butler, writing from a non-governmental organization perspective, make reference to the "yawning gap" between people's struggles over land, energy, water and clean air and their expectations of enjoying rights to a better life after apartheid.⁶⁶ In general, they maintain, the Constitution and its Bill of Rights seem unable to prevent the process whereby people become vulnerable.⁶⁷ This does not mean that environmental activists should eschew the use of the Constitution. It is "vital," Hallowes and Butler maintain, to keep the avenues of action offered by the Constitution open so that "effective interpretation of rights is made a matter of progressive contestation" and not left to conservative agencies in the State and corporate world.⁶⁸ It is not "wrong" for environmental activists to use talk of rights in environmental justice struggles, but the

^{64.} Wynberg and Fig illustrate this point in their discussion of an administrative justice victory in the *Earthlife Africa case*. Although this case affirmed the importance of public participation in decisions to secure nuclear power facilities, a similar lack of public consultation and engagement has marked the Zuma government's commissioning of six new conventional nuclear power stations. See Wynberg & Fig, *supra* note 9 at 30.

^{65.} These effects are extensively canvassed with reference to the *Biowatch* and Steel Valley cases in Wynberg & Fig, supra note 9 at 21 and Jacklyn Cock & Victor Munnik, *Throwing Stones at a Giant: An Account of the Steel Valley Struggle* Against Pollution from the Vanderbijlpark Steel Works (2006) Report for the Centre for Civil Society, University of KwaZulu Natal, respectively.

^{66.} Hallowes & Butler, supra note 49 at 51.

^{67.} Ibid.

^{68.} Ibid at 74.

limits placed by the prevailing economic, social and legal order on the realization of such rights must be acknowledged. 69

Pieterse, who links his critique of socioeconomic rights to the mid-1980s critical legal studies debate on rights discourse in the United States of America, goes beyond arguing that the Bill of Rights is merely failing to prevent vulnerabilities. He argues that society in fact uses rights discourse to suppress and contain social movements.⁷⁰ Focusing on the socioeconomic rights in the South African Constitution (and not the environmental right), he maintains that the original constitutional text and the courts' subsequent interpretations thereof have shaped rights that are essentially "empty" in nature. This facilitates the proceduralization of the inquiry into whether the State has met the obligations they generate and marginalizes the real, material needs they are supposed to meet.⁷¹ Still, he does not argue for abandoning rights-based strategies. In order to remedy the imperfect articulation of socioeconomic rights, however, "progressive lawyers" must assist in "translating" these rights "from their current conceptually empty articulation into more concrete needs-linked notions of entitlement."72

While pointing to the defects of the Bill of Rights, both of these positions still assume that rights-based discourse is the predominant mode of ordering social relations. Von Holdt's research on the patterning and texturing of social order in post-apartheid South African localities, however, seriously challenges the assumption that rights, and by extension the constitutional socio-legal order, have an "untrammeled reach and authority across the material and social geography of South Africa."⁷³ He shows that Western notions of civil society, a construct that references social groupings that can organize on the basis of non-politically aligned concerns and

^{69.} Ibid at 81.

^{70.} Pieterse, supra note 56 at 798.

^{71.} Ibid at 800.

^{72.} Ibid at 820.

^{73.} Karl von Holdt, "Precarious Society: The Making and Unmaking of Social Orders," paper presented to the SWOP colloquium on *The Politics of Precarious Society: Comparative Perspective on the Global South*, 4–6 September 2012 [Von Holdt, "Precarious Society"]; Karl von Holdt, "Institutionalisation, Strike Violence and Local Moral Orders" (2010) 72/73 Transformation 127.

within the parameters of a legal order constituted by rights and equality before the law, do not really apply in the localities (informal townships) and contexts (strikes) in which he has conducted his research. Instead he draws on Chatterjee's notion of "political society"⁷⁴—a social order patterned on subaltern groupings that negotiate deals with the authorities in order to obtain access to resources (land, or permission to conduct trade in public spaces, for instance). These deals, which are contingent upon the negotiating strength of the subaltern group, do not constitute generally applicable principles of law. but rather bend and stretch the law in order to accommodate the favoured group.⁷⁵ In the townships in which Von Holdt conducted his research, the authorities are essentially the local town councils, which provide the primary basis for black elite formation.⁷⁶ Out of this a "local moral order" emerges, an alternative, localised conception of right and order that may emerge to fill the vacuum created by the State's inaction or incapacity to enforce the formal legal order. Local moral orders may assume different relationships toward the formal legal order. There are localities in which the local moral order is aligned with the formal legal order (using the phenomenon of xenophobic violence, as when violence against foreigners is regarded as breaking the law); localities where local agents step in to enforce the formal legal order themselves because the state agencies are too ineffectual to do so—but these actions may then be illegal (as when xenophobic attacks are justified on the basis that the State has failed to curb "illegal" immigration, this amounts to the community "taking the law into their own hands"); and localities where there is a thorough "remaking" of the law that better reflects the concerns and priorities of the group

^{74.} Partha Chatterjee, *The Politics of the Governed: Reflections on Popular Politics in Most of the World* (New York: Columbia University Press, 2004).

^{75.} Von Holdt, "Precarious Society," supra note 73 at 3.

^{76.} As Von Holdt explains, this is so because "the combination of political power with control over considerable resources makes a transaction between political status and commercial profit relatively easy. Salaries from high-level jobs in the local town council, the power to distribute both high- and low-level council jobs, as well as the opportunities for business with council, and the patronage networks that link the two, are key mechanisms in the formation of the elite, especially in small towns with limited employment opportunities" (*ibid* at 10-11).

(as when xenophobic attacks on all foreigners are justified, irrespective of whether the immigrants are illegal or not in terms of the formal legal order).⁷⁷ Four points about local moral orders are worthy of emphasis for purposes of this article: firstly, rights talk does not function to mobilize or *contain* the collective anger of communities, and the notion of rights and justice underlying the constitutional order may be rejected in favour of immediate and collective violence (as in vigilanteeism directed at alleged criminals).⁷⁸ Secondly, the struggles that constitute the negotiations between authorities and subaltern groups are not symptomatic of an embryonic civil society. The local ANC seems to saturate both political and civil society within the townships because subaltern contestations are frequently driven by ANC factions trying to get their own toehold in the ANC-dominated town council.⁷⁹ As Von Holdt concludes, "the struggle between subalterns and elites is located within political society, rather than within civil society—and is therefore absorbed into political society rather than constituting a challenge from without.⁸⁰ Thirdly, because the intense struggles over black elite formation take place within ANC networks rather than being decided at the ballot box, repertoires of violence are frequently employed to shift power relations.⁸¹ Finally, the overall patterning of order in South Africa is thus constituted by "multiple overlapping and contradictory social orders, each with their own 'law' or moral codes"82 and the sense of a socially predictable order patterned on mutually intelligible normative structures is lost.⁸³

- 79. Ibid at 9.
- 80. Ibid.
- 81. Ibid at 12.
- 82. Ibid.
- 83. Ibid at 14.

^{77.} Tamlyn Monson, "Making the Law; Breaking the Law; Taking the Law into our Own Hands: Sovereignty and Territorial Control in Three South African Settlements" in Loren B Landau, ed, *Exorcising the Demons Within: Xenophobia*, *Violence and Statecraft in Contemporary South Africa* (Johannesburg: Wits University Press, 2011).

^{78.} Von Holdt, "Precarious Society," supra note 73 at 8.

HUMBY

For the pockets of South African society versed in the project of transformative constitutionalism. Von Holdt's findings can only be profoundly disquieting. They seem to show that the organic forms of order emerging in the localities of the poor and the marginalised are not at all reflective of Klare's vision of large-scale social change based on nonviolent political processes grounded in law. And yet, as the case study of the Tudor Shaft Informal Settlement below will show, there are also agencies actively promoting a rights agenda in the environmental justice terrain,⁸⁴ such as the Federation for a Sustainable Environment (FSE)⁸⁵ and the Socio-Economic Rights Institute of South Africa (SERI).⁸⁶ Constituting the vestiges of civil society in this arena, these institutions tend to be led by whites despite attempts to ensure a more representative demographic spread. Significant efforts are nevertheless being made to form "rainbow alliances"⁸⁷ between such organizations and communities impacted by mining. The possibilities that such alliances engender for a rightsbased approach to environmental justice is best demonstrated by the recent case of Federation for Sustainable Environment v Minister of Water Affairs,⁸⁸ which dealt with the pollution of the town of Carolina's drinking water supply by acid mine drainage, one of the forms of mining waste that also blights the Witwatersrand goldfields in the case study considered

^{84.} Von Holdt himself acknowledges these when he remarks that the new constitutional legal order "has been extensively and successfully used by public interest lawyers to empower poor and marginalised communities, to establish what their rights mean in relation to concrete injustices, and to protect them from the arbitrary abuse of power by government" (*ibid* at 4).

^{85.} The FSE is a registered non-profit organization founded in 2007 that focuses, amongst others, on legacy issues relating to mining. It has an explicit social justice approach to environmental sustainability and emphasizes the need for proper public participation and consultation. The chief executive officer of this organization is Mariette Liefferink. See online: FSE http://www.fse.org.za>. (Note that all online references were accessed 4 June 2013).

^{86.} The SERI is a newly established non-profit organization (since 2009) that aims to provide professional dedicated and expert socio-economic rights assistance to individuals, communities and social movements in South Africa. See online: SERI http://www.seri-sa.org/>.

^{87.} Eddie Koch, "Rainbow Alliances: Community Struggles Around Ecological Problems" in Cock & Koch, *supra* note 5 at 20.

^{88.} Unreported decision, Case No. 35672/12, decided on 10 July 2012. Online: SAFLII http://www.saflii.org.za.

below. The case was fought by an alliance constituted by the FSE, the Legal Resources Centre, Lawyers for Human Rights and the Sibolela community on the basis of the section 27(1)(b) right of access to sufficient water. The applicants were victorious on the points of both the urgency of the matter and on the need for the responsible municipal authorities to change their culture of engagement with the affected Sibolela community by ensuring that they provided regular feedback on the steps they were taking to address the problem. For the first time a court also recognized the linkages between pollution and the rights to environmental health and access to sufficient water.

The relationship between environmental justice and human rights in South Africa is thus deeply complex. There is no clear affirmative or negative response to the question whether a rights-based constitutional legal order has substantially advanced environmental justice strivings. There is no established jurisprudence that integrates environmental and social justice concerns, and the manner in which the Constitutional Court has approached the justiciability of socio-economic rights suggests that even if environmental and social justice issues were integrated, this would not necessarily meet the material needs of affected groups and individuals. There is a disjuncture between the rights-based constitutional order supposedly driving a project of transformative constitutionalism, and the politically embedded local moral orders that are emerging in particular localities. Civil society institutions are nevertheless still attempting to use rights-based advocacy and litigation to advance the interests of marginalized communities, although their reach and influence is likely to be quite modest.

II. ENVIRONMENTAL JUSTICE, ENVIRONMENTAL RIGHTS AND THE STRUGGLES OF THE TUDOR SHAFT INFORMAL SETTLEMENT

In the light of this theoretical framework, the second part of this article considers the struggles of the Tudor Shaft Informal Settlement, a locality of some 1,800 people living adjacent to a uraniferous tailings dam on the Witwatersrand's formerly productive goldfields.⁸⁹ Although, like the Chester research this is but one case study, it is likewise not unique amongst the localities impacted by mining waste on the Witwatersrand goldfields. The first section of this part describes the extent of the mining waste problem on the Witwatersrand goldfields while the second section then turns to events that have played out at Tudor Shaft.

A. THE WITWATERSRAND AS A MINING WASTELAND

The gold of the Witwatersrand was formed between 2.8 and 2.7 billion years ago when layers of pebbly rock called conglomerate were deposited as river gravels. Certain minerals that decompose in the current oxygen-rich atmosphere were deposited alongside the gold. These included iron sulphide (or pyrite), other minor heavy metal sulphides and, in certain areas, uranium oxide.⁹⁰ Over millions of years the conglomerate layers of gold along with layers of quartzite and shale, formed "reefs" in this region. The first economically recoverable reefs were discovered in an area near to what would become Johannesburg in 1886 and over the course of the twentieth century the layers of gold-bearing reef rock were exhaustively extracted, leaving a warren of shafts, drives and tunnels (the mine void) and a range of mine residue areas—including tailings disposal facilities or "dams," waste rock dumps, opencast excavations and quarries, tailings spillage sites, and footprints left after the re-mining of tailings facilities⁹¹—that

^{89.} The Witwatersrand is an inland region situated predominantly in the Gauteng and North-West provinces of South Africa. As a physical phenomenon the Witwatersrand is a range of east-west running hills extending for about 280 kilometres, and held the richest deposits of gold ever discovered on earth.

^{90.} Terence McCarthy, *The Decanting of Acid Mine Water in the Gauteng City-Region: Analysis, Prognosis and Solutions* (Johannesburg: Gauteng City-Region Observatory, 2010) at 5.

^{91.} For ease of reference I will henceforth refer to these structures as the "tailings dams" because this is the term used to name the structure in the case involving the Tudor Shaft Informal Settlement. The term "mine residue area" is the overarching concept employed in the Gauteng Department of Agriculture and Rural Development's (GDARD) Conceptual Study on Reclamation of Mine Residue Areas for Development Purposes (2009), [GDARD, Conceptual Study] and its Study on Reclamation and Rehabilitation of Mine Residue Areas for Development Purposes: Phase II Strategy and Implementation Plan (2012), [GDARD, Strategy and Implementation Plan].

house the massive amounts of waste generated by gold mining activities. Mining on the Witwatersrand was commonly distinguished in terms of four basins: the western basin, which underlies Randfontein and Krugersdorp; the central basin underlying the south of Johannesburg; the eastern basin underlying the Nigel/Springs area; and the far west basin underlying the town of Carltonville and surrounds.⁹² Of these basins only the far west basin still has active underground mining operations. The total amount of surface mine waste generated by gold mining activities across these four basins is estimated to be in the region of six billion cubic meters.⁹³ More than 374 mine residue areas occur in Gauteng alone and most arise from gold mining.⁹⁴

Both the mine void and the tailings dams are implicated in the environmental waste-landing of the region, although the filling of the mine void with acid mine drainage (AMD)⁹⁵ has been the issue dominating headlines over the past decade. While mining activities were in full swing, the pumping of water out of the mine void minimized the formation of AMD. But the late 1950s already saw the first big mine closures due to declining profits. The last remaining mines in each basin stopped pumping water between 1998 and 2011 and the mine voids in each basin began to fill with AMD. In the western basin the "worst-case scenario" was realized: the mine water was allowed to fill the mine void, polluting groundwater sources and decanting at surface (since August 2002), allowing

^{92.} Expert Team of the Inter-Ministerial Committee on Acid Mine Drainage, Mine Water Management in the Witwatersrand Goldfields with Special Emphasis on Acid Mine Drainage (Pretoria: Council for Geoscience, 2010) at 1.

^{93.} GDARD, Conceptual Study, supra note 91 at 2.

^{94.} GDARD, Strategy and Implementation Plan, supra note 91 at 6.

^{95.} Acid mine drainage forms when pyrite in the underground rocks interacts with water and oxygen. This induces a chain of chemical reactions that produces an aqueous solution containing a high concentration of acids, sulphates and iron hydroxide. In nature these reactions occur quite slowly, but the process is accelerated in the presence of mining because the fragmentation of the rock allows for a greater surface area of pyrite to be exposed. The characteristically acidic nature of AMD in turn causes heavy metals in the surrounding rock to leach out into the solution. Depending on the composition of the surrounding rock a number of heavy metals toxic to both ecosystems and humans may be present, including aluminium, arsenic, chromium, copper, mercury, nickel, manganese, and uranium and its daughter products. See Rebecca Garland, "Acid Mine Drainage: The Chemistry" (2011) 7:2 Quest 50 at 51.

the contamination to spread to surface water systems and thus also percolating into the social systems that interface with the water resources in this area. In the central and eastern basins, the AMD has not vet reached an environmental critical level but will do so in a matter of months. After vears of dithering on the issue an inter-ministerial committee (comprising the ministers responsible for water, mineral resources, science and technology and finance) was finally convened in mid-2010 to oversee a technical intervention to pump and treat the AMD in the mine voids. The immediate and short-term activities of this intervention will cost the South African taxpayer more than ZAR two billion,⁹⁶ and there is presently no consensus on a model that would see mining companies contributing to the costs. There are also deeply divisive, unresolved environmental justice tensions about the public consultation process that has been followed to select and implement the so-called short- and long-term interventions, with civil society organizations maintaining that the consultation process is a sham because the technical decisions have essentially already been made.⁹⁷ These issues, however, merit an extended analysis of their own, a task that falls beyond the scope of the present article.

For residents of the Tudor Shaft Informal Settlement, the tailings dams are a more omnipresent form of danger. All gold mining tailings dams are assumed to be radioactive as the ores on the Witwatersrand contained ten times more uranium than gold. Over the 125-years of mining on the Witwatersrand, the extraction of more than 52 kilotonnes of gold was matched by the extraction of 430 kilotonnes of low-grade uranium, which is by and large still present in the mine residues.⁹⁸ Tailings serve as point sources for the generation of AMD, which in turn mobilizes the radioactive uranium as well as hazardous non-radioactive elements and sulphates. Ironically, the tailings are also the sites for the deposition of waste from AMD treatment, thus perpetuating a vicious cycle of AMD generation. The

^{96.} Sue Blaine, "Rand's Acid Water Costs Double, but State Has No Extra Funds," *Business Day* (31 August 2012). This amount to about USD 214 million at current exchange rates.

^{97.} Interview with Mariette Liefferink (1 November 2012).

^{98.} GDARD, Strategy and Implementation Plan, supra note 91 at 8.

implications of these high pollutant levels for animal and human health are, however, largely unexplored. While there have been some scientific studies that have attempted to identify the sources, loads, concentrations, pathways and risks of mine residue contaminants, there is much that is not vet known.⁹⁹ The Centre for Scientific and Industrial Research (CSIR) has allegedly conducted some epidemiological studies on the risks of AMD in these basins, but as the mines had commissioned these studies they have not been made publicly available. In a recent study, however, a researcher at North West University found that uranium levels in the kidneys of cattle kept in the vicinity of the Wonderfonteinspruit in the far-western basin were 4.350 higher than those in a control group.¹⁰⁰ This finding reinforces the specter of pollutants silently accumulating in the bodies of their animal and human hosts in this region.

B. ENVIRONMENTAL JUSTICE, HUMAN RIGHTS AND THE TUDOR SHAFT INFORMAL SETTLEMENT¹⁰¹

The actors in the drama that has played out over the relationship between an informal settlement and an environment saturated with the presence of tailings dams include the residents of the informal settlement; the FSE acting through its chief executive officer Mariette Liefferink; the public National Nuclear Regulator (NNR), a statutory body established in terms of the National Nuclear Regulator Act 47

^{99.} Garland, supra note 95 at 52.

^{100.} South African Press Association, "Uranium, Cobalt Found in Wonderfontein Spruit Cattle Organs," *Times Live* (18 December 2012).

^{101.} My account of the story of the Tudor Shaft Informal Settlement has been constructed from media reports, public domain video clips, interviews with Ms Liefferink and Michael Power (attorney at the LRC) and the affidavits submitted in the litigation. I have not interviewed members of the community or their attorney, or officials from the various government departments as ethics approval for this leg of the research is still outstanding. The account is thus necessarily limited by the nature of the sources I have used and this impact on my capacity to draw causal conclusions and make findings as to the motives of the various protagonists. However, it nevertheless stands as a "first-pass" attempt to detail the developments at Tudor Shaft, which to the best of my knowledge has not yet been attempted.

of 1999; Mogale City, the local municipality having jurisdiction over the area and ostensibly owning the land on which the tailings dam closest to the informal settlement is situated; the national Department of Environmental Affairs (DEA); Mintails, a company listed on the Australian stock exchange that primarily processes gold from tailings; the Legal Resources Centre and SERI respectively representing the FSE and members of the informal settlement in the current court application; and leaders within both the ruling ANC and the opposition Democratic Alliance (DA).

1. The Setting

The Tudor Shaft Informal Settlement is situated within the Upper Wonderfontein catchment area of the West Rand goldfields, and thus at the upper cusp of the far western basin. The name "Wonderfontein" means "spring of wonder," an emotion captured in descriptions of this area before anthropogenic interference. As Stoch and Winde write:¹⁰²

The FWR [Far West Rand] lies on the road between Taung, where the "man-apes" frolicked, and Kromdraai, claimed to be one of mankind's evolutionary nests. Common to this stretch of dolomitic karst is a temperate climate, often stated to be among the best in the world, overlying South Africa's premier aquifers.... The 1836 pre-settlement "pen-picture" of the area as left by Captain Harris was of an "abundance of water ... boundless meads ... covered with luxuriant herbage and entrammelled with rich parterres of brilliant flowers ... animated by droves of portly elands, moving in long procession across the silent and treeless landscape (citing H T Ramsden, *The Status, Powers and Duties of the Rand Water Board— Legal History and Analysis* (Doctoral Thesis, University of the Witwatersrand, Johannesburg, 1985) (unpublished)).

Today the area is waste-landed beyond recognition, scourged first by the large-scale dewatering of the underground

^{102.} E J (Leslie) Stoch & Frank Winde, "Threats and Opportunities for Post-Closure Development in Dolomitic Gold Mining Areas of the West Rand and Far West Rand (South Africa)—A Hydraulic View: Part 3—Planning and Uncertainty— Lessons from History" (2010) 36:1 Water SA 83 at 84.

aquifers which caused extensive formation of sinkholes and dolines and subsequently by the widespread dissemination of mine tailings and AMD through the media of water, air and the soil.

The informal settlement of Tudor Shaft is the product of a relocation of people carried out in 1995 or 1996 at which time promises were already made to provide "RDP" housing.¹⁰³ Although estimates vary, the affidavit submitted by Phumla Patience Miadu in the current court application states that the settlement currently comprises around 454 informal structures ("shacks" made of corrugated iron, wood and other materials) housing approximately 1,800 people.¹⁰⁴ Tudor Shaft has very little water and sanitation provision and no electricity. There are three communal standpipes and seven chemical toilets for the entire community. In a short open access video clip documenting a visit to the area by DA leader of the Gauteng Provincial Legislature Jack Bloom, the poverty of the settlement is laid bare for anyone to see.¹⁰⁵ People wait for hours in a line to fill 25-litre drums of water, rubbish flaps in the walkways and the toilets are either broken and filthy or locked (more on this below). As Miadu explains:

The residents are all desperately poor people who live at Tudor Shaft because we have nothing better or safer available to us. Those of us who are able to earn some money get by on extremely low incomes—on average well below [ZAR] 1,000 per month. Most of us are employed informally or as very low paid formal sector workers, such as security guards, cleaners and petrol pump attendants.¹⁰⁶

The informal settlement is situated immediately adjacent to an uraniferous tailings dam, with some shacks even

^{103.} Max Rambau, "Red Ants Relocate 35 Families" 1 March 2011, online: South African SDI Alliance http://sasdialliance.org.za/red-ants-relocate-35-families-to-mogale. RDP housing refers to the government subsidized housing programme.

^{104.} Phumla Patience Mjadu, "Founding Affidavit" in the Application of *Ex Parte Mjadu: Federation for a Sustainable Environment v National Nuclear Regulator* (South Gauteng High Court, Case No. 24611/2012), 27 July 2012 at para 13.

^{105.} C-TV, "Forgotten People: Episode 1 Mogale City," online: YouTube <http://www.youtube.com/watch?v=paLB2teh6j0>.

^{106.} Mjadu, supra note 104 at para 13.

situated atop the structure. The process by which the tailings dam has come to be classified as a "radiological hotspot," however, necessitating first the removal of the people, and shifting over time to the removal of the dump, has been a gradual one involving a number of social actors.

2. Construction of the "Environmental Hazard" and its "Appropriate Solution"

Although the issue of uranium pollution of the Wonderfonteinspruit catchment was raised as early as 1967,¹⁰⁷ the first comprehensive scientific reports on the problem were only commissioned from the late 1990s onwards. These included reports initiated by government¹⁰⁸ and by mines active in the area.¹⁰⁹ In the early 2000s the Water Research Commission commissioned a report that attracted widespread media attention to the issue for the first time.¹¹⁰ In their controversial report, Coetzee, Winde and Wade employed a tier-1 risk assessment to determine contaminants of concern. Chromium, cobalt, nickel, cadmium, arsenic, copper and uranium were determined as present in the sediments of the Wonderfonteinspruit.¹¹¹ Selecting uranium as the contaminant of greatest concern they then found that a significant amount of uranium (several tens of tons per annum) was entering the Wonderfonteinspruit via controlled and uncontrolled point

^{107.} Frank Winde, "Uranium Pollution of the Wonderfonteinspruit, 1997–2008 Part 1: Uranium Toxicity, Regional Background and Mining-Related Sources of Uranium Pollution" (2010) 36:3 Water SA 239 at 239.

^{108.} One of the first studies looking at the relationship between mine water discharges and effects on human health was undertaken by the then Department of Water Affairs and Forestry's Institute for Water Quality Studies (IWQS)—see IWQS Report on the Radioactivity Monitoring Programme in the Mooi River (Wonderfonteinspruit) Catchment. Report No. N/C200/00/RPQ/2399, April 1999.

^{109.} In 2005, mines operative in the area formed the Wonderfontein Action Group (WAG) that undertook comprehensive sampling of the water resources in the catchment, with a report *Concentrations of Uranium and other Heavy Metals in Sediments of the Lower Wonderfonteinspruit Catchment*—Results from a Grid-Based Sampling Exercise (funded by Goldfields Ltd.) (2007).

^{110.} H Coetzee, F Winde & P W Wade, An Assessment of Sources, Pathways, Mechanisms and Risks of Current and Potential Future Pollution of Water and Sediments in Gold-Mining Areas of the Wonderfonteinspruit Catchment, WRC Report No. 1214/01/06 (Pretoria: Water Research Commission, 2004).

^{111.} Ibid at xii.

sources, and via large-scale diffuse sources.¹¹² Potentially exposed populations included people living in the densely populated Wonderfonteinspruit valley and the 400.000 inhabitants of the town of Potchefstroom. Sub-populations of particular concern were those inhabitants living in informal settlements that use contaminated ground- and stream water for personal hygiene and drinking.¹¹³ The authors pointed out that above-average infection rates for HIV/AIDS and chronic and acute malnutrition made this sub-population particularly vulnerable to the additional stresses imposed by the ingestion of uranium in water and food products and the inhalation of uranium-contaminated dust and aerosols.¹¹⁴ The report concluded that uranium in the catchment posed a hazard to water users as a result of its chemotoxicity and recommended that a full radiological risk assessment was required to determine current and future risks due to radioactivity.¹¹⁵ Finding that the measured uranium content of many of the fluvial sediments in the Wonderfonteinspruit exceeded the regulatory limits established by the NNR for exclusion from such areas. they called upon it for a regulatory response.¹¹⁶

Although the NNR had been part of the project steering committee, in a disclaimer published with the report it stated that it was not in a position to concur with the methodology and conclusion of the report and that it would conduct its own studies.¹¹⁷ The NNR's "Brenk" Report into the issue was finalized in 2007. It has never been made available to the public in full text, however it largely confirmed the findings of Coetzee, Winde and Wade's report even suggesting that the extent of the problem might have been underreported.¹¹⁸

It was at this time that the FSE, with a small amount of financial support from the mines, began its sustained advocacy campaign on the radiological risks and hazards affecting

117. Ibid at xix.

118. A Turton, "The Role of Science in Deepening Democracy: The Case for Water in Post-Apartheid South Africa" (2009) 5:1 Journal for Transdisciplinary Research in Southern Africa 9 at 13.

^{112.} Ibid at xvi.

^{113.} Ibid at xiv.

^{114.} Ibid.

^{115.} *Ibid* at xvi.

^{116.} Ibid at xvii.

persons living in the upper Wonderfonteinspruit Catchment Area through conducting tours, participating in academic conferences and seminars, holding community workshops, and making submissions to various organs of State in the executive, Parliamentary Portfolio Committees, the Human Rights Commission, the Public Protector, unions and the news media. The national and international news media and Internet bloggers picked up on the story, and between 2007 and 2008 alone more than 50 articles on this topic appeared in the newspapers.¹¹⁹

In response to the mounting pressure from the media and civil society, the Department of Water Affairs and Forestry (DWAF—currently the Department of Water Affairs) and the NNR launched a joint initiative to remediate contaminated sites in the Wonderfonteinspruit, appointing a specialist task team to prepare a remediation action plan. This was finally released on 1 April 2009.¹²⁰ The plan identified the radiological risk of various sites in the Wonderfonteinspruit Catchment Area and called for a number of actions to be taken by the NNR, DWAF, the then Department of Mineral Resources and Energy, and the mines (including Mintails), amongst others.

Little action on the "action" plan was however forthcoming and the FSE continued with its vigorous advocacy.¹²¹ In the meantime Liefferink had also been nominated to the board of the NNR as one of the members representing the "voices of communities." In 2010, upon her instigation, the NNR prepared and published a "surveillance report" of the Wonderfonteinspruit Catchment Area.¹²² The apparent

^{119.} Winde, *supra* note 107 at 239.

^{120.} Ibid at 240.

^{121.} In its 2010 *Annual Report*, for instance, the FSE reported that it had presented at 24 international and national conferences on AMD, conducted 36 tours of the West Rand goldfields, conducted 60 workshops with 1,800 persons and distributed 6,000 pamphlets, 10,000 questionnaires and handouts focusing on the historical, current and future impacts of gold, uranium and coal mining. See Federation for a Sustainable Environment, *Non-profit Organization Annual Report* (2010) at 8, online: <http://www.moneyweb.co.za/mw/action/media/downloadFile?media_fileid=11167>.

^{122.} Prof Dr Chris Busby, National Nuclear Regulator Surveillance Report, Radioactivity in the Upper Wonderfonteinspruit Catchment Area, TR-NNR-10-001 (2010).

synergy between the NNR and the FSE as representative of "civil society organizations" at this point can be witnessed in another open access video clip in which Advocate Boyce Mkhize, the chief executive officer of the NNR, is recorded saying:

With the cooperation and information coming through also much more rigorously from civil society organizations, we then felt perhaps it might be appropriate for us to undertake a study on an urgent basis.¹²³

This harmonious relationship did not last long however, and in late 2010 the FSE invited the controversial uranium expert, Chris Busby,¹²⁴ to visit the Wonderfontein Catchment Area and to comment on the NNR's recently published surveillance report. Busby penned a scathing account of the NNR's work, concluding that the report was "unacceptable as a scientific document" on the basis of failing to adequately lay out the assumptions on which its calculations were based and deriving risk levels based on incorrect coefficients and mathematical errors, amongst other reasons.¹²⁵ Based on his own observations, Busby found that the radiation exposure of the residents of Tudor Shaft was at more than 15 times the regulatory limit and recommended that the people living on tailings dams be relocated "as a matter of urgency."¹²⁶

Although the NNR disputed Busby's findings on the basis that he did not use an internationally recognized methodology, they nevertheless indicated by mid-December 2010, that they would be alerting West Rand residents about the

^{123. 5050} Channel, "Toxic Mines Insert." online: YouTube <h0ttp://www.youtube.com/watch?v=2wvQbTkGAbw>, uploaded on 5 May 2011 [5050, "Toxic Mines"]. The interview with Advocate Mkhize occurs at around 2'35" in the video.

^{124.} A succinct overview of the controversial nature of Chris Busby's work is available on Wikipedia, online: ">http://en.wikipedia.org/wiki/Christopher_Busby>">http://en.wikipedia.org/wiki/Christopher_Busby> (although the neutrality of this article is itself disputed). Busby is known for his "Second Event Theory" which distinguishes between hazards from external radiation and internal radiation from ingested radioisotopes.

^{125.} Federation for a Sustainable Environment, "Responding Affidavit to Advocate Mkhize" in the Application of *Ex Parte Mjadu: Federation for a Sustainable Environment v National Nuclear Regulator* (South Gauteng High Court, Case No. 24611/2012), n.d. at 30 [FSE, "Responding Affidavit"].

^{126. 5050, &}quot;Toxic Mines," supra note 123 between 1'49" and 2'13".

health risks associated with their environment.¹²⁷ They produced a pamphlet in three South African official languages that introduces the NNR as the "public entity which serves to protect workers and members of the public from the harmful effects of ionising radiation."¹²⁸ Acknowledging that their recent environmental survey of the catchment area had shown elevated levels of radiation in the Tudor Shaft Informal Settlement, but underlining that there was no "eminent danger" to members of the public, they presented the information in the pamphlet as a "safety precaution" for residents of Tudor Shaft and their families.

Curiously, given their stance that the Tudor Shaft Informal Settlement was in no eminent danger, a mere two months later it was announced that the NNR and the Mogale City Municipality would be relocating residents to safe land.¹²⁹ The relocation of 17 families by Mogale City occurred at the beginning of March, but the media characterized the action as a "forced removal" in which the community had not been consulted.¹³⁰ Residents of the settlement, it was reported, were refusing to be relocated.¹³¹ And although the area to which the residents were relocated was serviced with chemical toilets and fresh water delivered on a daily basis, it was still located next to a mine dump and was presented as yet another transitional solution before the community members could be housed in a "government housing project."¹³²

Mogale City, it seemed, was eager to be seen to be doing the right thing. No further relocations took place however, and in September 2011 they were shocked to be at the receiving end of a directive issued by the DEA requiring them, as owner of the land on which the Tudor Shaft Informal

^{127.} Anonymous, "Communities to be educated about dangers of living on mine dumps" (15 December 2010) online: http://www.gatvol.co.za/latest-news-south-africa-crime/communities-to-be-educated-about-dangers-of-living-on-mine-dumps.html>.

^{128.} National Nuclear Regulator, online: http://www.nnr.co.za/wp-content/uploads/2011/07/NNR-Public-Awareness-Tudor-Shaft.pdf.

^{129.} Livhuwani Mammburu, "Residents Ignore Radiation Warning," Business Day (21 February 2011).

^{130.} Rambau, *supra* note 103. Although the media reported that 35 families were relocated, according to the eyewitness account of Mariette Liefferink only 17 families were moved.

^{131.} Mammburu, supra note 129.

^{132. 5050, &}quot;Toxic Mines," supra note 123 at 2'58" to 3'38".

Settlement was based, to take reasonable measures to rectify the environmental degradation.¹³³ The municipality disputed that it was responsible pointing out that it had not caused the radioactive risk and that, having regard to the legislative framework, responsibility lay either with the mining company that had mined the site and deposited the materials or with the "relevant government organization."¹³⁴ The DEA, however, disagreed.

Subsequent to this, a further set of co-ordinatory overtures between the municipality and NNR apparently produced a consensus that "the most appropriate and effective manner" of minimizing radiation exposure to the residents of Tudor Shaft would be to remove the tailings dam.¹³⁵ "Due to the size of the settlement and the realization of the fact that the resources of local government are not unlimited, it became clear that the wholesale relocation of the residents of the settlement was not a viable option."¹³⁶ At this point Mintails entered the scene. The affidavits record that the NNR had approached Mintails to embark on a "joint venture" to resolve the challenges in relation to the Tudor Shaft community and that at a tripartite meeting on 8 June 2012, it was agreed that Mintails would cooperate¹³⁷ by removing the tailings dam, reprocessing the tailings and depositing them at its authorized tailings facility. This it would do, ostensibly,

^{133.} Mogale City Local Municipality, "Second Respondent's Affidavit" in the Application of *Ex Parte Mjadu: Federation for a Sustainable Environment v National Nuclear Regulator* (South Gauteng High Court, Case No. 24611/2012), 4 July 2012 at para 24 [Mogale, "Affidavit"]. The national Department of Environmental Affairs' mandate is based on section 28 of the *National Environmental Management Act 107 of 1998* which establishes a "duty of care" on persons who cause significant pollution or degradation of the environment which duty extends to owners of the land or even persons who only had control of such land. The environmental authorities are mandate do require responsible persons to take remedial measures, or to undertake the remedial measures themselves and recover the costs from the persons responsible. By virtue of a later amendment of NEMA, notably, this duty explicitly extends to historic pollution such as in the present case.

^{134.} Ibid at para 25.

^{135.} Boyce Mkhize, "First Respondent's Affidavit" in the Application of *Ex Parte Mjadu: Federation for a Sustainable Environment v National Nuclear Regulator* (South Gauteng High Court, Case No. 24611/2012), 31 October 2012 at paras 3.13 and 3.14.

^{136.} *Ibid* at para 3.14.

^{137.} Mogale, "Affidavit," supra note 133 at paras 33-35.

on the basis of what it considered to be "its corporate social responsibility as a good corporate citizen."¹³⁸

3. A Community Immobilized?

In the account of the genesis of the environmental hazard and the identification of the most appropriate solution thereto, the Tudor Shaft Informal Settlement is of course conspicuous by their absence. They are positioned as the passive receptors of scientific, media, civil society and government scrutiny and action. They are the people who need to *be* studied, consulted, alerted or relocated.

Dugard, MacLeod and Alcaro's research on rights awareness and mobilization in four locations on the Witwatersrand goldfields supports this perception of passivity and offers insights into its causes.¹³⁹ The researchers employed a qualitative research design and limited sample size that does not support generalization, but they were nevertheless able to interview 21 people in the Tudor Shaft Informal Settlement in regard to their levels of environmental sensitization and mobilization on the basis of environmental rights.¹⁴⁰ Although none of the residents of Tudor Shaft identified the "environment" as their top priority (with that spot being reserved for housing and employment), as a group they were distinguished from the other sites by having a high number of respondents identifying the environment as a "key concern" a finding which the researchers attribute to the sustained advocacy efforts of Liefferink.¹⁴¹ Like the others sites, however,

^{138.} Mkhize, *supra* note 135 at paras 3.18–3.23. This affidavit erroneously refers to the mining company as "Mogale Gold." Mintails had already acquired Mogale Gold from its liquidators in 2005.

^{139.} Jackie Dugard, Jennifer MacLeod & Anna Alcaro, "A Rights-Based Examination of Residents' Engagement with Acute Environmental Harm Across Four Sites on South Africa's Witwatersrand Basin" (2012) 79:4 Social Research 931.

^{140.} *Ibid* at 933.

^{141.} *Ibid* at 945-46. While levels of environmental may have been high in this study, there are still reports of practices such as the use of mine tailings as a cure for acne or as an ingested supplement for pregnant women. Sheree Bega, "Residents Use Radioactive Mud as an Acne Cure," *Saturday Star* (15 November 2011). Ironically, the resident in this report who advocates the use of mine tailings as an acne cure is Patience Mjadu, i.e. the main applicant in the community's case against the NNR and others.

the level of *rights* awareness was very low¹⁴² and there was *no* proactive rights-based mobilization on environmental issues.¹⁴³ The reasons for this lack of mobilization were found to be fairly universal across all four sites: the problem was seen as being too big for individuals to be involved, and exacerbated by a disparity of resources. In Tudor Shaft, many respondents "found the idea that they could participate in change regarding the environment frankly laughable."¹⁴⁴ Paradoxically, members of Tudor Shaft, like the other sites in the study, seemed to rely blindly on the government to solve the problem whilst distrusting it to get anything done.¹⁴⁵ The only form of agency available to these residents was to move (or be moved) away from the difficulty.¹⁴⁶

Liefferink concurs that there is "no cohesion" in the township and points to community members' lack of resources to initiate mobilization. There is no money to make phone calls or send faxes, she states. In her own activism, she needs to rely on community members to extend her reach into the settlement and reimburses them for this work, but this in turn engenders intense jealousies as those who are able to benefit are necessarily limited.¹⁴⁷

4. Litigation

However, resident's immobility on environmental issues changed on 29 June 2012 when Mintails' heavy machinery rumbled into the settlement to start moving the tailings dam. Mjadu's affidavit captures the confusion and terror this engendered amongst the residents:

None of the residents were consulted before the remediation operation commenced. When earthmovers came onto the property on 29 June 2012, we thought we were about to be evicted.¹⁴⁸

^{142.} Ibid at 947.

^{143.} Ibid at 949.

^{144.} Ibid.

^{145.} Ibid at 952.

^{146.} Ibid.

^{147.} Interview, 1 November 2012.

^{148.} Mjadu, supra note 104 at para 7.

After consultation with the SERI, which had already initiated an engagement with Tudor Shaft residents on their housing rights, the FSE and LRC were in court within 24 hours requesting an order interdicting the operations until such time as the NNR and Mogale City demonstrated their compliance with applicable environmental legislation.¹⁴⁹ The stance of the FSE was that until the protagonists had completed comprehensive assessments determining the risks associated with the removal of the radioactive mine residue and completed a comprehensive public participation process, the operation was illegal.¹⁵⁰ There was at this stage no explicit reliance on the environmental or socio-economic constitutional rights, but this was influenced by the need to bring the matter as an urgent application.¹⁵¹

After the court had granted the interim interdict, Tudor Shaft residents alleged intimidatory tactics on the part of the municipality and the local councillor. In their affidavit they state that the municipality threatened to evict 68 shacks in close proximity to the tailings dam and identified these by marking each with a yellow cross, though the markings seemed completely arbitrary.¹⁵² They also alleged that the local councillor threatened to use the Red Ants¹⁵³ to remove them and demolish their homes, or that they would face arrest if they resisted relocation.¹⁵⁴

Although residents were not initially part of the court action, they subsequently submitted an application to be joined as a party to the proceedings with SERI serving as their legal representative. In their application, the residents relied explicitly on section 24 of the Constitution, arguing that this right obliges the Mogale City and the other respondents "to engage reasonably and meaningfully with the residents in relation to the remediation operations, and their

^{149.} Interview with LRC attorney, Michael Power, 17 December 2012.

^{150.} Sheree Bega, "Removal of Mine Dump Halted," IOL News (7 July 2012).

^{151.} Supra note 149.

^{152.} Mjadu, *supra* note 104 at para 8.

^{153.} The "Red Ants" refers to the workers of companies contracted to effect evictions operations. Such workers frequently wear red overalls.

^{154.} Ibid at para 34.

consequences . . . " 155 The application to be joined was granted in October 2012.

The NNR. Mogale City and the DEA were cited as state respondents in the matter.¹⁵⁶ In its responding affidavit the DEA maintains that it should never have been cited and that the appropriate regulatory authority is the NNR.¹⁵⁷ Mogale City intimates it is the responsibility of the mines and the NNR.¹⁵⁸ The NNR in turn however maintains that it does not oppose the action (only the costs order against it), on the basis that the relief sought by the FSE would be unenforceable against it. Citing the NNR's legislative mandate, Mkhize points out that it is not the NNR's function to remove mine residue after mining operations have been concluded.¹⁵⁹ As the tailings dam is situated on a "derelict and ownerless" mine, the NNR maintains, it is unclear who conducted the mining operations and generated the tailings.¹⁶⁰ The NNR and Mintails are thus presented as the good Samaritans filling the legislative gap by nevertheless undertaking a joint venture to remove the dump quickly, although it is repeatedly emphasized that they are under no legal obligation to do so.¹⁶¹ The FSE, in turn, points out that Mintails has a poor environmental track record evidenced, for example, in its failure to implement any of the recommendations from the 2009 Remediation Action Plan. It is also claimed that Mintails is depositing the toxic and radioactive tailings at an undisclosed site.¹⁶²

Contrary to the testimony of Mjadu, the affidavit of Mogale City maintains that "the community at large had been liaised with and consulted with and were in full agreement

161. Ibid at para 3.23.

^{155.} Ibid at para 20.

^{156.} The Minister of Energy is also cited as a respondent as is a company called "Powerstar." Mintails was not cited as a respondent.

^{157.} Sonnyboy Bapela, "Fourth Respondent's Replying Affidavit," in the Application of *Ex Parte Mjadu: Federation for a Sustainable Environment v National Nuclear Regulator* (South Gauteng High Court, Case No. 24611/2012), 19 October 2012 at para 7.

^{158.} Mogale, "Affidavit," supra note 133 at para 23.

^{159.} Mkhize, *supra* note 135 at para 2.11.

^{160.} *Ibid* at para 3.2.

^{162.} FSE, "Responding Affidavit," supra note 125 at 18–19.

with the steps being taken . . .^{"163} while the NNR states that Mogale City consulted with "the relevant community leaders" about the operations.¹⁶⁴ In these affidavits Liefferink is presented as an interfering and obstructive agent that was deliberately excluded from consultative processes relating to the remediation operation at the request of community leaders.¹⁶⁵ There is a notable silence in the affidavits, however, on the commercial interests at play and a failure to acknowledge that while Mintails benefits from reprocessing the tailings at Tudor Shaft without needing to have obtained any form of regulatory permit. At the same time, the NNR and Mogale City benefit from being seen to have "solved" the problem.

As it currently stands, the community applicants are submitting a supplementary affidavit and the hearing on the final interdict is likely to be heard in August or September 2013.

5. Tudor Shaft's Service Delivery Protests

The account of the nature of Tudor Shaft residents' environmental justice strivings would be incomplete, however, without reference to the settlement's protests around housing, water, sanitation and electricity (commonly known as "service delivery protests" in South Africa) and the power relations within which they are embedded.

In October 2011, a local blog recorded the unhappiness about service delivery in Tudor Shaft. In it, Geffrey Ramoruti, a resident, complains that three containers were donated to the community, housing computers, a library and a sewing room respectively, but that the councillor of the area, Susan Seloale, had the keys to the containers and refused to open them for people to use.¹⁶⁶ Ms Seloale also directed him to stop mobilizing people to collect the refuse in the township on the basis that the local municipality would employ people to do so.

^{163.} Mogale, "Affidavit," supra note 133 at para 55.2.

^{164.} Mkhize, *supra* note 135 at para 3.24.

^{165.} *Ibid* at para 2.16; Mogale, "Affidavit," *supra* note 133 at para 58.

^{166.} Sammi-Jo Botha, "Service Delivery Anger Erupts at Tudor Shaft" (31 October 2011), online: Looklocal ">http://www.looklocal.co.za/looklocal/content/en/krugersdorp/krugersdorp-news-general?oid=4808132&sn=Detail&pid=489868&Service-delivery-anger-erupts-at-Tudor-Shaft>">http://www.looklocal.co.za/looklocal/content/en/krugersdorp/krugersdorp-news-general?oid=4808132&sn=Detail&pid=489868&Service-delivery-anger-erupts-at-Tudor-Shaft>">http://www.looklocal.co.za/looklocal/content/en/krugersdorp/krugersdorp-news-general?oid=4808132&sn=Detail&pid=489868&Service-delivery-anger-erupts-at-Tudor-Shaft>">http://www.looklocal.co.za/looklocal/content/en/krugersdorp/krugersdorp-news-general?oid=4808132&sn=Detail&pid=489868&Service-delivery-anger-erupts-at-Tudor-Shaft>">http://www.looklocal.co.za/looklocal/content/en/krugersdorp/krugersdorp-news-general?oid=4808132&sn=Detail&pid=489868&Service-delivery-anger-erupts-at-Tudor-Shaft>">http://www.looklocal.co.za/looklocal/content/en/krugersdorp/krugersdorp-news-general?oid=4808132&sn=Detail&pid=489868&Service-delivery-anger-erupts-at-Tudor-Shaft>">http://www.looklocal/content/en/krugersdorp/krugersdorp-news-general?oid=4808132&sn=Detail&pid=489868&Service-delivery-anger-erupts-at-Tudor-Shaft>">http://www.looklocal/content/en/krugersdorp-news-general?oid=4808132&sn=Detail&pid=489868&Service-delivery-anger-erupts-at-Tudor-Shaft>">http://www.looklocal.co.za/looklocal/content/en/krugersdorp-news-general?oid=4808132&sn=Detail&pid=489868&Service-delivery-anger-erupts-at-Tudor-Shaft>">http://www.looklocal.co.za/looklocal/content/en/krugersdorp-news-general?oid=4808132&sn=Detail&pid=489868&Service-delivery-at-2011">>http://www.looklocal/content/en/krugersdorp-news-general?oid=4808132&sn=Detail&pid=489868&Service-delivery-at-2011">>http://www.looklocal/content/en/krugersdorp-news-general?oid=480814&sngersdorp-news-gene

The people who are employed by the municipality, Ramoruti complains, are not local and do not clean the area. $^{167}\,$

In February 2012, Jack Bloom of the DA requested Liefferink to provide his "Forgotten People" entourage with a tour of Tudor Shaft. As they enter the settlement an angry Seloale confronts them, pulling Liefferink aside, whilst shouting that the cameras must not shoot her. As the cameras nevertheless record Bloom's criticism of her action, audible in the background is the exchange between Seloale and Liefferink. In plaintive tones Liefferink explains: "I am not ANC, I am not DA... I'm an environmentalist," to which Seloale, overriding her entreaties, booms "No listen you have to come to me and explain 'Susan I want to do this in your area' and I understand clear ... I'm the owner of this place I have told you that before" (my emphasis). Every time Liefferink comes, Seloale accuses, "the community is fighting with us, with everything that we don't know."¹⁶⁸

The entourage nevertheless enters the site and proceeds to view the toilets that are available for the thousands of residents to use. The toilets are either broken or locked. A local DA supporter explains that the locked toilets are for the councillor and the persons who are close to her.¹⁶⁹ "Corruption is rife here," notes the commentator, "some people say that the councillor keeps their ID books [identity documents], only giving it to them in time to vote with a clear instruction about who to vote for."¹⁷⁰ Another resident angrily explains how many of the people in the settlement had RDP houses sold from under their nose by corrupt officials who are still in office.¹⁷¹ A vendor selling fast food comments: "We are not looking for the colour, we are looking for delivery, what is important is delivery... a better life that we have been promised is not done at all."¹⁷²

In August 2012 the Tudor Shaft settlement once again caught the eye of the media when their violent protest

^{167.} *Ibid*.

^{168.} C-TV, supra note 105 at 3'25"ff.

^{169.} Ibid at 7'00".

^{170.} Ibid at 7'13".

^{171.} Ibid at 8'10".

^{172.} Ibid at 5'48".

required the police to deploy teargas, stun grenades, water cannons and a SAPS helicopter against them. The residents' anger had been sparked when a truck along the main road through the settlement had knocked down two children, injuring one and killing the other. This escalated into fullscale violence when the residents added their long outstanding issues of housing, electricity, water and sanitation to the demands for speed bumps along the road.¹⁷³ Although police were able to restore order that same day, a resident who had been arrested and then released vowed "I will fight until I die. No retreat, no surrender."¹⁷⁴ That night, protestors burnt down Seloale's house, fed-up with her lack of service delivery.¹⁷⁵

III. A BRIEF ANALYSIS

As noted in the introduction to this piece, there are many interesting parallels between Foster's account of the Chester community and Tudor Shaft. While space constraints prevent a detailed analysis of these, they include the phenomenon of buck-passing between different government agencies and industry;¹⁷⁶ collusion between local politicians and agencies responsible for creating environmentally hazardous conditions;¹⁷⁷ alliances between residents and public interest lawyers;¹⁷⁸ and the use of legal strategies, including rights-based actions, to further claims for environmental justice.¹⁷⁹ In response to the question: "What is the environmental injustice here?" one might conclude, as Foster did in the case of the Chester study, that it centres on the legitimacy of decisionmaking processes that exclude the people whose lives are

^{173.} Lebogang Seale & Ntombi Ndhlovu, "Kagiso Residents Vow Battle Will Go On," *IOL News* (1 August 2012).

^{174.} Ibid.

^{175.} Chemélle Barnard, "Protesters Burn Down Councillor's House," online: Looklocal <http://www.looklocal.co.za/looklocal/content/en/krugersdorp/krugersdorpnews-general?oid=5950417&sn=Detail&pid=489909&UPDATE--Protesters-burndown-councillor-s-house>.

^{176.} Foster, *supra* note 1 at 811 and 812.

^{177.} Ibid at 814.

^{178.} Ibid at 815.

^{179.} *Ibid* at 815–20.

most fundamentally impacted by the decision, in this case the legitimacy of decision to move the dump rather than the people which was apparently cemented at the crucial meeting between the NNR, Mogale City and Mintails in June 2012. This is illustrative of the continuing lack of participatory parity deemed so critical for the project of transformative constitutionalism. However, unlike the Chester study,¹⁸⁰ a legal strategy linking responsible and meaningful engagement with the right to environment is allowing some residents of Tudor Shaft to challenge this culture of political participation directly, and this may yet yield a useful precedent.

Staving with this question, for the residents of Tudor Shaft however the chief environmental injustice does not seem to centre on the uraniferous tailings dam at all and, as the afore going narrative demonstrates, they are only passively implicated in the genesis of the surrounding mine waste as a toxic and radioactive threat. Their agency and power in relation to "environmental" issues only comes into view when the lens pans out to incorporate their "service delivery protests" in which the issues of housing and sanitation emerge as paramount. And, it could be argued, it was only through their existing relationship with SERI around housing issues that they have come to be involved in the legal action relating to the tailings dam at all. Although the environmental justice literature in South Africa provides an established basis to view environmental justice issues as inclusive of such basic needs as housing and sanitation, there is still a prevailing tendency to parse the two apart, and the Constitution's distinction between the right to "environment" and the socioeconomic rights of access to housing, water and sanitation in fact encourages this. What the residents of Tudor Shaft desperately need is both: adequate housing, sanitation and water in an environment that is not harmful to health or well-being and yet since 1994 the promise of housing has been the basis for their relocation from one damned site to the next on the Witwatersrand mining wasteland. There is a danger, then, in claiming socioeconomic

^{180.} See *ibid* at 816ff, where the basis of the Chester community's legal challenge to one particular permitting process is set out.

rights without simultaneously claiming the right to environment and *vice versa*. The decision pertaining to the removal of the tailings dam should thus be inscribed as an affront to the right to housing just as much as it is viewed as a violation of the right to environment.¹⁸¹

It is tempting to view Foster's account of the Chester community as representative of a particular paradigm of environmental resistance: one in which a group of people, sufficiently homogenous in nature and unified in purpose that they can be designated a "community" is shocked into environmental awareness, reaches a breaking point of tolerance and then organizes to resist the imposition of further environmental hazards through self-education, the formation of alliances, use of the legal process, and the power of the ballot box at the local level. The community in this paradigm represents civil society acting in a more or less predictable normative landscape of a single public order patterned upon legal rights, equality before the law and due process.

This paradigm does not seem applicable to the grassroots environmental resistance of the Tudor Shaft Informal Settlement, and there is little indication of residents of Tudor Shaft functioning as a community in this way. Dugard, Macleod and Alcaro's research suggests that rights talk does not galvanize the residents to form social organizations that advance their environmental justice strivings, whilst media reports of residents' violent protests and the burning of the councillor's house suggest that rights do not constrain their actions either. Although there is insufficient data to detail the nature of political society or the extent of multiple and overlapping local moral orders, there are many clues pointing to their presence. Key to the emergence and sustenance of political society are the resources that constitute the basis of the deals between subalterns and local elites. In the scrounging for power that characterizes life in Tudor Shaft

^{181.} There is a well-established literature on the interdependency and interrelatedness of human rights, and the South African Constitutional Court has also frequently affirmed this principle. See Liebenberg, *supra* note 30 at 52. However whilst there is clear recognition that political and socio-economic rights are integrally related—that socio-economic rights also advance racial and gender equality for instance—there is less emphasis on the relationship between socio-economic and environmental rights.

these resources include the promises of RDP housing, the toilets that are locked for the councillor and her friends, the monopoly of giving out jobs for collecting waste, and the use of resources donated by third parties. In these circumstances of extreme material deprivation and need, even the meager resources of NGOs such as the FSE become points of contestation around which moral codes may form. The local councillor seems to play a pivotal role in doling out access to these resources and is sufficiently confident of her power to declare "I'm the owner of this place" to outsiders. Her lack of a sense of the workings of civil society is revealed in the altercation with Liefferink in which the latter's identification with being a non-politically-aligned environmentalist holds little sway. Although the affidavit submitted by the NNR does not indicate with whom consultation took place, it seems likely that the "relevant community leaders" in this instance would at least include the councillor, pointing to her position as a point of articulation between the local moral order of the settlement and the normative framework within which the NNR and other government agencies function. The benefits that the majority of residents derive from being locked into the councillor's networks of patronage are not clear although it appears that threats and coercion (keeping of the ID books. threats of arrest and relocation) could be playing a significant role. The violent protests and arson sparked by the death of two children point to a "remaking" of the law as the residents take it in their own hands to punish the councillor for her "lack of deliverv."

In so doing they function outside of the constitutional order, but when the opportunity presents itself, some residents nevertheless access the rights-based constitutional order, whether to claim socioeconomic rights or the right to environment, through the mediating work of third party organizations that more closely resemble civil society actors. Such mediation is made possible by virtue of the Constitution's generous provisions on *locus standi*, which allows someone to bring a rights-based action to court on behalf of another or in the "public interest." But civil society actors such as the FSE and SERI must then also negotiate and move between the complex, overlapping moral orders constituted by their own work, the order constituted by the social process of government and industry and the shifting, multi-dimensional allegiances of the settlement.

The recognition of political society and local moral orders opens up a vast new area of investigation in terms of understanding how the different types of order align with or bump up against each other and how different actors are able to move across the boundaries of and manage the tensions of functioning within different normative orders. This has important implications for intellectual work, not only in the areas of environmental justice and human, but more broadly for understanding the evolving project of transformative constitutionalism.

CONCLUSION

This paper has sought to demonstrate that while there was a potentially synergetic relationship between environmental justice struggles and human rights in South Africa by the end of the 1990s, the fruits of this relationship have been strange. There have been few attempts to rely directly on the section 24 right to environment and cases fought on the basis of the sections 26 and 27 socioeconomic rights are not framed as environmental issues. Instead, environmental justice advocates have relied on the rights of access to information and the right to administrative justice to advance their struggles. The current litigation in which the Tudor Shaft Informal Settlement is involved will be the first to explicitly link rights of participation to the constitutional environmental right. This could serve as a first step to ensuring parity of participation. A case study of this settlement, and the manner in which the environmental hazard endured by the residents has been constituted, shows that the constitutional legal order based on human rights is not sufficient to contain the "grassroots environmental resistance" of the settlement. The fundamental environmental injustices of these residents seem to centre on the allocation of housing and sanitation and the way in which decisions impacting upon these resources are made. This is a bitter struggle fought by people who have seemingly nothing to lose, who have deployed violence within the context of a local moral order just as, through their alliances with more traditionally conceived civil society organizations, they are attempting to use the rightsbased constitutional order to protect themselves. Any account of the relationship between environmental justice and rights in South Africa must therefore be prepared to engage with such complexities.