IN THE HIGH COURT OF SOUTH AFRICA
GAUTENG LOCAL DIVISION, JOHANNESBURG

Case No: 2020/32777

In the matter between:

KABWE AND OTHERS Applicants

and

ANGLO AMERICAN SOUTH AFRICA LIMITED Respondent

APPLICANTS' HEADS OF ARGUMENT:
CERTIFICATION OF CLASS ACTION

TABLE OF CONTENTS

TABLE OF ABBREVIATIONS, ACRONYMS AND TERMS

"*Anglo*"	Anglo American South Africa Limited, previously known as the Anglo American Corporation of South Africa Ltd.
"*AACCA*"	Anglo American Corporation (Central Africa) Limited.
"*Anglo Group*"	Anglo and its subsidiaries (past or present), and any other company which acted in concert with the companies in the Anglo Group and which had available to it the benefit of the financial, commercial and technical services of such companies as a group.
"*BLLs"*	Blood lead levels.
"*CDC*"	The United States Centers for Disease Control and Prevention.
"*Lead*"	The element (Pb) and all compounds of lead.
"*Lead pollution*"	Lead that is released into the environment as a result of human activity, in the form of dust, smoke, fumes, water-borne particles, waste rock, tailings, slag, dross and all other lead-bearing waste material.
"Long ton" or "*ton*"	The British imperial measure, equivalent to approximately 2204 pounds. A "short ton" is the American imperial measure, equal to 2000 pounds. Both measures are different from the "metric tonne", which is equal to 1000 kilograms. Reference to tons in these heads of argument are to "long tons".

"*MCMMA*"	The Managerial, Consultancy and Metal Marketing Agreement concluded on or about 26 June 1970 by the Zambian government and the Anglo Group.
"*Mine*"	The Broken Hill Lead and Zinc Mine in Kabwe, Zambia and its operations. The Mine was also called "the Kabwe Mine" after 1966.
"*Mine operations*" or "*the operations*"	include mining, blasting, sintering, crushing, smelting, waste disposal, and all activities connected to these processes, conducted at or in the vicinity of the Mine's premises in the Kabwe District, Zambia.
"*NCCM*" .	Nchanga Consolidated Copper Mines, later renamed ZCCM.
"*RAAL*"	Rhodesian Anglo American Limited.
"*RBHDC*"	The Rhodesian Broken Hill Development Corporation, later renamed ZBHDC.
The "*relevant period*"	The period of Anglo's direct involvement in the Mine's operations, from 1925 to 1974.
"*WHO*"	The World Health Organization.
"*ZBHDC*"	The Zambian Broken Hill Development Corporation, the post-independence name for RBHDC.
ZCCM	Zambian Consolidated Copper Mines, renamed from NCCM.

"*The aim of this Group is, and will remain, to earn profits for our shareholders, but to do so in such a way as to make a real and lasting contribution to the communities in which we operate*"

– Sir Ernest Oppenheimer, Founder and Chairman of Anglo, 1954[1]

"It is specifically denied that [Anglo] had any duty to conduct monitoring and evaluation; that it had any duty to take steps to monitor the health impacts of lead pollution on the surrounding community; that it was aware of the alleged problem of lead pollution in the area during the relevant period; and/or that it had any duty to warn the residents of Kabwe about the alleged danger."

– Anglo's Answering Affidavit, 2021[2]

I INTRODUCTION AND OVERVIEW

1 In this introductory chapter, we encapsulate the core of the Applicants' case by identifying the primary factual and legal issues that arise. All of this will be elaborated upon in the chapters that follow, as well as the further issues that must be determined at the stage of certification.

2 While there is much that is disputed by the respondent, Anglo American South Africa Limited ("Anglo"), there is no material dispute that:

2.1 The town of Kabwe, Zambia (known as "Broken Hill" until 1966) and its environs are severely polluted by lead.

2.2 Lead poisoning can have severe, even fatal, effects on children and can severely harm the health of pregnant women and their unborn children.

---

[1] Quoted in the Anglo Group's Sustainable Mining Plan, Annexure ZMX 56 p 001-1042.

[2] Anglo's Answering Affidavit ("AA") p 001-3100 para 1178.

3 The Kabwe District is, in fact, one of the most lead-polluted places on earth.[3]

4 Generations of Kabwe children have been exposed to dangerous levels of lead, causing deaths and injuries including brain damage, developmental disabilities, and organ damage. Many were first poisoned while in the womb.[4]

5 The source of this poison is the Broken Hill Mine, later known as the Kabwe Mine, which operated from 1906 to 1994.

6 For almost 50 years, from 1925 to 1974, Anglo was directly involved in the Mine's affairs. It was the parent company and head office of the Anglo Group that operated, managed, and advised the Mine, in particular with regard to relevant aspects of medical surveillance and control of environmental pollution, from its headquarters in Johannesburg. As consulting engineer and manager of the Mine, it supervised the design and installation of the Mine's smelting equipment over the years, which was a primary source of the pollution. It also provided guidance and direction on Mine safety and the management of lead pollution.[5]

7 The Mine was firmly a part of Anglo's "group system", which Anglo's 1968 Annual Report described in these terms:[6]

---

[3] Founding Affidavit ("FA") p 001-48 para 79; Kříbek et al Annexure ZMX14, 001-709 ("*Kabwe Town and its surroundings (central Zambia) belong to the most contaminated districts in Africa*"); Yabe et al 2019 Annexure ZMX 19 p 001-761 ("*Kabwe is known as one of the most significant cases of environmental pollution in the world*"). See Chapter II below.

[4] FA p 001-24 para 25.1 and 25.2; Yabe et al 2015 Annexure ZMX 18 p 001-757 ("*childhood Pb poisoning in Zambia's Kabwe mining town is among the highest in the world, especially for children under the age of 3 years*"). See Chapter III below.

[5] FA p 001-51 para 81. See Chapter IV(B) below.

[6] FA p 001-52 para 84; Annexure ZMX 22 p 001-812. Not denied AA p AA pp 3070 – 3072 paras 1075 – 1079.

> "*The term 'group' has a wider meaning in the South African mining industry than its statutory definition of a parent company and its subsidiaries. The mining finance houses in South Africa have over a long period developed what is called the 'group system', by which the parent house not only plays a role in management, but also provides a complete range of administrative, technical and other services to the companies within the group. Thus the Anglo American Corporation Group comprises a large number of companies whose administration and management are closely linked to the Corporation.*"

8 Anglo's direct involvement at the Mine coincided with the highest levels of lead production. More than 66% of all lead produced in the Mine's lifetime was mined and smelted on Anglo's watch, from 1925-1974, causing substantial contamination.[7]

9 Lead fumes and dust poured from the Mine's smelters and dumps, which blanketed the surrounding area. Poor, black communities living downwind of the smelter were worst affected, but the fallout also spread across the District.[8]

10 Years may have passed since Anglo left Kabwe, but the toxic legacy of the Mine's operations remain. Lead is a long-lasting, inter-generational poison. It is heavy and stable, meaning that once lead settles in the soil and unless remediated, it remains there for many decades, if not centuries. Present-day maps of lead in the Kabwe soil reflect this, showing that lead contamination is most concentrated in the soil around the Mine, in the direction of the prevailing winds.[9]

---

[7] FA p 001-105 – 106 paras 221 – 222; Annexure ZMX 79 p 001-1206. Sharma p 001-3318 ("*65.5.% of the lead produced at the Plant was processed between 1925 and 1974*").

[8] FA p 001-45 para 75; p 001-112 para 237; Replying Affidavit ("RA") p 001-7674 para 216. See Chapter VI below, and the discussion at [456] – [461].

[9] FA p 001-47 para 78. See Chapter II below, and the map at [56].

11 Young children under the age of 5 in Kabwe are particularly vulnerable to this lead pollution. They live and play in dusty backyards and streets, coating them in lead-contaminated dirt. When they touch their faces and mouths, they ingest large quantities of lead. Their growing bodies and brains absorb more of this lead than adults do, causing irreparable brain damage. In extreme cases, lead poisoning can kill children. When girls grow up and fall pregnant, the lead stored in their bones as young children is released back into their bloodstream, poisoning them and their unborn children.[10]

12 Anglo knew of these dangers or, at best, turned a blind eye to them.[11] Children were already falling ill and dying of lead poisoning, and a high proportion of them were suffering from massive blood lead levels ("BLLs"), while it exercised control over the Mine.[12] Its own internal reports and correspondence show that it knew or reasonably ought to have known of the hazards of lead pollution,[13] the threat to the Kabwe community,[14] and what had to be done to address this threat.[15]

13 That the Mine was likely to be poisoning people in the surrounding area surrounding was obvious. As early as the 19th century, it was clear that lead mining and smelting presented a serious risk of poisoning residents of the neighbouring community. This was established in the 1893 report of the New

---

[10] FA p 001-36 paras 59-60. See Chapter III below.

[11] See further Chapters IV and VI below.

[12] FA p 001-91 para 181.1, referring to Clark ZMX3 p 001-357.

[13] FA p 001-70 Section VII "Anglo's Knowledge of the Dangers of Lead Pollution".

[14] Id.

[15] FA p 001-96 Section VII "Anglo's Knowledge of the Measures Required to Prevent and Address Lead Pollution".

South Wales commission of inquiry into lead poisoning at the mine in Broken Hill, New South Wales, after which Kabwe and the Mine itself were originally named.[16]

13.1 Using basic common sense, the New South Wales commission surmised that residents living downwind of the Broken Hill smelter would be exposed to dangerous levels of lead pollution, investigated whether this was the case and established that it was.

13.2 The commission then put in place a range of recommendations to protect the residents of Broken Hill, New South Wales, from the risk of lead poisoning caused by the lead mining operations.

14 So long before the Kabwe Mine was even established, the risks of lead mining and smelting to neighbouring communities were clear. Yet Anglo did not take the necessary action to investigate and address the problem, timeously or at all.[17] Had it conducted even a cursory investigation, the extent of the problem of lead poisoning and pollution it was causing in Kabwe would have been unavoidably clear to it. That much is evident from what emerged between 1969 and 1974 when two individual doctors employed by the Mine, Dr Lawrence and Dr Clark, independently conducted the investigations into lead poisoning in Kabwe that their employer had inexplicably failed to conduct for close to fifty years.

---

[16] ZMX2 pp 001-205 to 001-226.

[17] FA p 001-101 – 105 Sections X and XI “Anglo’s Duty of Care” and “Anglo’s Breach of its Duty of Care”.

14.1 Concerned at the high death rate of children he saw on his arrival in Kabwe, Dr Lawrence took blood samples from around 500 local children in late 1969/1970 and found that virtually all of their blood lead levels exceeded 40 micrograms of lead per decilitre of blood (µg/dL) and many exceeded 100 µg/dL, with one as high as 403 µg/dL.[18]

14.2 Dr Clark's research, which was published in his MSc thesis in 1975, showed elevated soil lead concentrations in Kasanda, Makululu and Chowa villages in the vicinity of the mine and significantly elevated blood lead levels in children, many of which exceeded 80-100 µg/dL. [19]

15 Elsewhere in these heads of argument we discuss in detail the pathology of lead poisoning and the significance of BLLs. For present purposes, to put these Kabwe BLLs into perspective, we point out that

15.1 the scientific consensus is that there is no safe level of lead in the blood;[20]

15.2 the National Institute of Communicable Diseases, which is the responsible South African organ of state for monitoring communicable diseases, treats a BLL of 5 µg/dL as a confirmed case of lead poisoning which must be notified to the Department of Health within 7 days of diagnosis;[21]

---

[18] Affidavit of Dr Lawrence pp 001-2635 para 13 to p 001-2637 para 25.

[19] Annexure ZMX 3 p 001-357.

[20] FA p 001-37 para 62. See Chapter III below.

[21] Item 11 of Table 2 to Annexure A of the Regulations relating to the Surveillance and the Control of Notifiable Medical Conditions GN 1434 Government Gazette 41330 of 15 December 2017 read with the NICD diagnosis document at https://www.nicd.ac.za/wp-content/uploads/2021/12/NMC_category-2-case-definitions_Flipchart_01October-2021.pdf.

15.3 the Applicants' experts, Prof Bellinger and Prof Lanphear show that BLLs as of 5 µg/dL in children are likely to cause irreparable brain damage; and

15.4 the recent Flint Michigan lead poisoning class action was settled with judicial approval in terms of a compensation scheme that provided different levels of compensation to claimants according to their blood lead levels, with the highest compensation band reserved for claimants with BLLs only of 10 µg/dL and above, and compensation provided to claimants with BLLs of 3 µg/dL without any further compensation eligibility requirements.

16 This class action seeks to hold Anglo responsible for the ongoing harm suffered by Kabwe residents (and in particular, Kabwe children) flowing from the environmental disaster in Kabwe that Anglo caused.

A. THE CERTIFICATION RELIEF SOUGHT

17 The Applicants seek certification of their class action, that is, judicial permission to launch a class action against Anglo, on behalf of two proposed classes:

17.1 The class of children, comprising:

17.1.1 Children under the age of 18 on the date that this certification application was launched, 20 October 2020;

17.1.2 Who reside in the Kabwe District, Central Province, Zambia;

17.1.3 In the case of children over the age of seven, they have lived in the Kabwe District for at least two years between the ages of zero and seven; and

17.1.4 Who have suffered injury as a result of exposure to lead.

17.2 The class of women of child-bearing age, comprising:

17.2.1 Women over the age of 18 and under the age of 50 on the date that this certification application was launched, 20 October 2020;

17.2.2 Who reside in the Kabwe District, Central Province, Zambia;

17.2.3 Have lived in the Kabwe District for at least two years between the ages of zero and seven;

17.2.4 Have been pregnant or are capable of falling pregnant; and

17.2.5 Have suffered injury as a result of exposure to lead.

18 The proposed class action will advance in two stages:

18.1 In the first stage, questions of fact and law that are common to all class members will be decided on an opt-out basis. This will not fully determine the merits of the class members' individual claims, but it will go a considerable way to resolving their claims.

18.2 In the second stage, class members will come forward on an opt-in basis to prove their individual claims, including proof of individual harm and quantum, after the common issues have been determined.

19 This proposed bifurcated procedure is in accordance with the class action certified by this Court in *Nkala*,[22] on behalf of mineworkers suffering from silicosis and related injuries. As we will demonstrate, this approach is equally appropriate for a class action of this scale.

B. THE TEST FOR CERTIFICATION

20 The question in these proceedings is <u>how</u>, not whether, the Kabwe victims should be allowed to pursue their claims against Anglo.

21 As this is a procedural step, this Court is <u>not</u> asked, at this stage, to decide the merits of the claims against Anglo, nor is this Court asked to prescribe precisely how the class action should be heard, managed, and decided once it is under way. Those matters are for the trial court and ongoing case management.

22 The Constitutional Court and the SCA have identified the following considerations in assessing whether a class action is the appropriate procedural vehicle for claims:[23]

22.1 there is a class or classes which are identifiable by objective criteria;

22.2 there is a cause of action raising a triable issue;

22.3 the right to relief depends upon the determination of issues of fact, or law, or both, common to all members of the class;

---

[22] *Nkala and Others v Harmony Gold Mining Company Limited and Others* 2016 (5) SA 240 (GJ).

[23] *Children's Resource Centre Trust v Pioneer Foods* 2013 (2) SA 213 (SCA) at para 26 ("CRC Trust"), approved with qualification in *Mukaddam v Pioneer Foods* 2013 (5) SA 89 (CC) at paras 34 – 37.

22.4 the relief sought, or damages claimed, flow from the cause of action and are ascertainable and capable of determination;

22.5 where the claim is for damages, there is an appropriate procedure for allocating the damages to members of the class;

22.6 the proposed representatives of the classes are suitable to be permitted to conduct the action and represent the class;

22.7 a class action is the most appropriate means of determining the claims of class members, given the composition of the class and the nature of the proposed action.

23 In *Mukaddam***,** the Constitutional Court emphasised that these are merely considerations to be taken into account in an application for certification. None is a necessary condition or jurisdictional requirement for certification. The overriding consideration is the interests of justice.[24]

C. THIS CLASS ACTION IS IN THE INTERESTS OF JUSTICE

24 This class action, in South Africa, is the only feasible way to secure justice for the proposed class members.

25 Anglo is resident within this Court's jurisdiction. So it is common cause that this Court has jurisdiction over the Applicants' claims against Anglo. While Anglo concedes that this court has jurisdiction over this matter and the prospective class members' claims,[25] it urges this Court to refuse certification, arguing that the class members should instead pursue their claims in Zambia.

---

[24] *Mukaddam* id.

[25] AA p 001-3137 para 1327.

26 Our law does not recognise the doctrine of *forum non conveniens*.[26] Courts may not decline to hear cases that are within their jurisdiction, merely because another court may have jurisdiction.[27] So each of the members of the proposed class could sue Anglo individually in South African Courts and Anglo would not be entitled to ask a South African Court to decline to exercise jurisdiction over an individual class member's claim.

27 Yet Anglo seeks to recast the *forum non conveniens* principle as a basis for refusing to certify a class action. In doing so in the context of the present case, it subverts the interests of justice principle that is decisive of all certifications because it ignores the undisputed barriers to justice in Zambia that would preclude a class action of this nature. In this regard, it is instructive that even in jurisdictions that do recognise the doctrine of *forum non conveniens,* the Courts will insist on exercising jurisdiction in a matter involving a domestic defendant if to refuse to do so would deny the plaintiff access to justice because s/he had no effective means of obtaining relief in a court more closely connected to the dispute.[28]

28 Mr Musa Mwenye SC, the former Attorney General of Zambia, has outlined the profound obstacles facing the class members if they were to attempt to bring their claims in Zambia, concluding that "*the vast majority of claimants would not be*

---

[26] *Standard Bank of South Africa Ltd and Others v Mpongo and Others* [2021] ZASCA 92; 2021 (6) SA 403 (SCA) at para 31, citing *Agri Wire (Pty) Ltd and Another v Commissioner, Competition Commission and Others* [2012] ZASCA 134; 2013 (5) SA 484 (SCA) para 19. The only exception is in admiralty cases.

[27] *TMT Services & Supplies (Pty) Ltd t/a Traffic Management Technologies v MEC: Department of Transport, Province of KwaZulu-Natal and Others* [2022] ZASCA 27 (15 March 2022) at para 34.

[28] See for example *Connelly v RTZ Corpn plc (No 2)* [1998] AC 854 at 873 and *Lubbe v Cape plc* [2000] 1 WLR 1545 at 1555.

able to receive effective legal representation" in Zambia.[29] This is because Zambia does not offer any form of opt-out class action procedure; it does not allow contingency fee arrangements; it prohibits any form of third-party funding; and there is no prospect for legal aid or other suitable funding for the class members.[30] Anglo's own Zambian law expert does not deny these barriers to justice.[31]

29 In addition, the class members could not afford to launch individual litigation against a well-resourced opponent like Anglo on such complex matters, nor would the small quantum of their individual claims justify the exorbitant costs.[32] On this, too, there is no genuine dispute. Thus, the absence during the past fifty years of any lead poisoning claims on behalf of Kabwe residents in the Zambian courts, is testament to the insuperable access to justice obstacles there.

30 Therefore, this proposed class action, in this Court, at this time, is the only way that the rights of the class members can be effectively vindicated, in the interests of justice.[33] This point is crucial.

30.1 The present case is not an ordinary certification application where the Court is called upon to balance considerations of convenience in allowing plaintiffs to vindicate their rights through class action proceedings or requiring them to proceed by way of individual action.

---

[29] Mr Mwenye SC p 001-1717 para 6.53.

[30] FA p 001-140 – 142 para 314; Bald denial and avoidance AA p 001-3137 paras 1327 – 1329.

[31] Prof Ndulo Annexure AA13 p 001-3900.

[32] FA para 312

[33] We elaborate on these themes in Chapter XI below.

30.2 In the present case the choice is between allowing plaintiffs to vindicate their rights through class action proceedings or accepting that they will never have access to justice to vindicate their rights.

30.3 In any class action, that ought, in itself, to be decisive of the argument against certification once the Applicants can show a prima facie case.

30.4 In the context of the present application, the case for certification is even stronger because

30.4.1 this is a class action designed to provide compensation for an ongoing environmental disaster that continues to cause brain damage in young children, and

30.4.2 under section 14 of the Children's Act every child (including a Zambian child) has the right in South Africa "*to bring, and to be assisted in bringing, a matter to a court, provided that matter falls within the jurisdiction of that court*."

31 Anglo's numerous technical objections, which we address in detail below, fail to address the essential access to justice considerations. Nor does Anglo offer any meaningful, practical alternative to a class action to secure effective relief for the class members.

32 Moreover, the Mine was firmly a part of Anglo's "group system", the operation of which has been described above. Against this background – of a South domiciled company, orchestrating and managing an international business, where the profits flowed back to South Africa – it seems entirely appropriate that Anglo

should be held to account legally in its home courts for damaged alleged to have arisen

D. ANGLO'S STANCE ON THE MERITS

33 Anglo has attempted to turn these certification proceedings into a full dress rehearsal for the trial. It took more than 10 months for Anglo to produce a voluminous affidavit of over 400 pages, supported by over 4,000 pages of expert reports and annexures, involving a vast legal team. It has subsequently sought to introduce further expert affidavits and reports with highly detailed technical evidence from various experts

34 Anglo has fundamentally misunderstood the low-threshold test for a triable issue in certification proceedings, which merely requires the demonstration of a) a prima facie case on the evidence and b) an arguable case on the law.[34] The Supreme Court of Appeal has affirmed that this *"is not a difficult hurdle to cross*".[35]

35 Anglo's strenuous efforts to resist the Applicants' case on the merits more than amply demonstrate that there are weighty, triable issues of fact and law to be determined in the class action. Most of these issues can only be resolved by expert evidence, as demonstrated by the competing opinions of the experts on both sides. Moreover, the time and resources that have already been devoted

---

[34] *CRC Trust* (n 23) at paras 35 – 39; see also *Pretorius and Another v Transnet Defined Benefit Fund and Others* 2014 (6) SA 77 (GP) at para 19.

[35] *CRC Trust* (n 23) at paras 40 – 41.

to these disputes reflect why no individual litigant could be expected to take on Anglo alone.

36 Anglo's defence is a blanket denial of any duty to prevent lead pollution, any negligent breach of that duty, and any material contribution to the resulting lead pollution.

37 Much of this defence is one of what-about-ism. Anglo alleges that Zambia Consolidated Copper Mines (ZCCM) the state-owned company that ran the Mine from 1974 until its closure in 1994, is responsible for all present-day lead pollution. It further alleges that ZCCM's failure to clean up the lead pollution after the Mine's closure in 1994 is to blame. It attempts to portray ZCCM's negligence and omissions as an unforeseeable intervening event, that absolves Anglo of all liability.

38 Anglo's attempt to blame shift is fundamentally flawed for medical, technical and historical reasons that are convincingly explained by the Applicants' experts and elucidated below. Moreover, in adopting this strategy, Anglo relies heavily on the evidence of Dr Banner, Dr Beck and Mr Sharma, three United States-based witnesses who have close connections with the lead industry and have a track-record of opposing mainstream scientific thinking, in defence of major polluters. This is addressed further in Chapter VIh) below. Suffice to state here, that their lack of objectivity is further reason for exercising caution in assessing their opinions.

39 Anglo's attempt to shift the blame to ZCCM is self-evidently a matter for trial, which we address in detail in Chapters IV and VI below. This dispute involves complex questions of causation and historical evidence, which cannot be disposed of at certification stage. In any event, there are obvious flaws in Anglo's defence, which are readily apparent:[36]

39.1 First, the Kabwe environment was already severely polluted under Anglo's watch. The uncontested evidence shows that there were high levels of lead contamination and resulting poisoning in the late 1960s and early 1970s.[37] Anglo accepts that such contamination would still be present today.[38]

39.2 Second, Anglo's 50-year involvement in the Mine corresponded with over 66% of lead production during the Mine's lifetime. By contrast, the period from 1974 to 1994 accounted for little over 22% of lead production. Only 7% was produced during the period from 1985 to 1994, which Anglo alleges was the worst period of ZCCM's negligence.[39] It is inconceivable that five decades of substantial lead production under Anglo would leave no material contamination.

39.3 Third, Anglo's efforts to highlight ZCCM's alleged negligence reflect poorly on its conduct. Anglo points to numerous "common sense" interventions that ZCCM ought to have undertaken to address the problem, including

---

[36] See Chapter VI below.

[37] See, for example, Clark's thesis Annexure ZMX 3 p 001-357.

[38] AA p 001-2707 para 103.

[39] FA p 001-105 – 106 paras 221 – 222; Annexure ZMX 79 p 001-1206.

the replacement of soil and regular medical monitoring. Yet it is precisely those "common sense" measures that Anglo failed to implement while it was directly involved in the Mine.[40]

39.4 Fourth, Anglo's argument proceeds from the fallacy that the duty to clean up more than 90 years of lead contamination only arose in 1994, when the Mine was closed. Yet the Applicants' case is that Anglo had the uncontroversial duty in tort law, throughout the period of its control, to clean up lead pollution and to protect the surrounding community. That work involved such "common sense" interventions as conducting ongoing investigations and monitoring, replacing topsoil, educating communities about the dangers of lead contamination, and capping mine dumps. Anglo could also have made reasonably easy adaptations to the technology at the Mine during its period of direct involvement with the aim of reducing environmental exposure. Professor Betterton sets out what Anglo could have done in some detail in his first and second expert reports.[41]

39.5 Fifth, the Applicants further plead that between 1925 and 1974 Anglo was duty-bound to advise and instruct the Mine to cease smelting and dumping at the premises, and to relocate those operations if necessary, to protect the surrounding communities. If the trial court agrees that Anglo had such a duty, then complaints about ZCCM's omissions after 1974 are of little moment. But for Anglo's negligent failure, little of the resultant ongoing harm would have occurred.

---

[40] RA p 001-7600 para 25.3.

[41] Betterton 2020 p 001-1638 para 6, Betterton 2022 p 001-9636 para 12.31.

39.6 Sixth, ZCCM's alleged negligent conduct, and the ongoing problem of lead poisoning, cannot be classified as unforeseeable intervening events that broke the chain of causation. The fact that future generations would fall ill from exposure to lead pollution in the Kabwe environment was manifestly foreseeable and was, in fact, foreseen. It was equally foreseeable that without active intervention to clean up the environment, the problem would persist. ZCCM's alleged omissions were hardly a new intervening event. They mirrored Anglo's own inaction and negligence.

39.7 Seventh, if Anglo had handed over the Mine to ZCCM with systems in place that had ensured that the Kabwe population was protected from lead pollution, it is likely that ZCCM would have continued to implement those systems and the Kabwe population would have continued to be protected from lead pollution.

39.8 Eighth, Anglo remained an active minority shareholder in ZCCM from 1974 until at least 2000, with directors on the ZCCM board. The evidence further suggests that Anglo played a leading role in the privatisation of ZCCM operations which, Anglo now suggests, deprived ZCCM of the skills and resources to conduct effective remediation at the Mine. In these circumstances, Anglo's attempt to distance itself from ZCCM's conduct ring hollow.

40 An undercurrent running through Anglo's case is that a damages claim will not solve the ongoing lead pollution crisis in Kabwe. The legacy of lead mining in Zambia, as with all historical environmental disasters, is indeed complex and will require multi-faceted solutions. But the complexity does not mean that Anglo can

escape responsibility and liability for its role, nor should it deprive the victims of available remedies. Whatever the difficulties of present day efforts to fix the problem, this cannot allow Anglo to escape accountability for its historical wrongdoing that has caused class members to suffer bodily harm.

E. THE APPLICANTS' CASE FOR CERTIFICATION

41 In the chapters that follow, we will demonstrate that the Applicants have satisfied the test for certification.

42 Before we address the individual elements required for certification we emphasize that the ultimate test for certification is the interests of justice. The various factors that have been identified by the courts to guide decisions are merely guidelines: *"[t]he absence of one or another requirement must not oblige a court to refuse certification where the interests of justice demand otherwise*.[42]

43 Once the interests of justice is the test for certification, the case for certification in the present case is overwhelming.

43.1 The Applicants have amply satisfied the requirement of showing that members of the class have a prima facie case against Anglo to recover the harm that they suffer from being lead poisoned. In this regard, for the purposes of a prima facie case, the following evidence of the Applicants must be accepted:

[42] Mukaddam (n 23) at para 35

43.1.1 The environmental lead hazard in Kabwe is possibly the worst in the world and causes ongoing harm to residents of Kabwe. In particular, it has caused and continues to cause brain damage and a range of other injuries to children who ingest lead polluted dust and soil. It also has caused and continues to cause harm to pregnant women and their babies when lead transferred from a young girl's blood stream to her bones is released back into the bloodstream when the young girl grows into a woman and falls pregnant;

43.1.2 Lead pollution from the Mine did not disappear over time. It stayed in the soil near the surface. It continued to pollute the environment and will still continue to do so until it is removed;

43.1.3 Under the Anglo Group System, Anglo itself advised the Mine and was responsible for the relevant aspects of medical surveillance and control of environmental pollution at the Mine;

43.1.4 66% of lead production over the lifetime of the Mine took place while Anglo was responsible for the relevant aspects of medical surveillance and control of environmental pollution at the Mine;

43.1.5 The dangers of lead poisoning have been known for thousands of years;

43.1.6 Anglo knew that the operations of the Mine were presenting a material lead poisoning health risk to Kabwe residents;

43.1.7 Even if Anglo did not know this, it ought to have. Common sense dictated that lead fumes and lead dust from the Mine would poison Kabwe residents as the wind blew them into residential areas. Long before Anglo became involved in the Mine, the New South Wales Broken Hill commission of inquiry had clearly identified that lead mining and lead smelting will poison neighbouring communities unless proper preventative measures are taken;

43.1.8 At the very least, Anglo knew that the risk of lead poisoning was present and was under a duty to investigate whether the operations of the Mine were poisoning Kabwe residents. Had it conducted even a cursory investigation in this regard, it would have established that the Mine was poisoning Kabwe residents. This is clear from the investigations conducted by Dr Lawrence and Dr Clark before the Mine was handed over to ZCCM.

43.1.9 Once the extent of the lead poisoning hazard had been established, Anglo would have been obliged to clean up the lead pollution and either to put in place measures sufficient to prevent its recurrence, or to close the mine. On either scenario, no members of the class would have suffered the lead poisoning harm that they currently suffer.

43.2 The prima facie case of the class members will, however, be worthless to them without certification of the class action because, as pointed out

above, there is no prospect of their obtaining relief from Anglo through any process other than the proposed class action.

43.3 So, the interests of justice demand that the class action be certified so that, if the Applicants can show that Anglo is liable to Kabwe residents who have suffered lead poisoning harm, those residents are not deprived of the compensation from Anglo to which they are entitled.

44 Once the case for certification is clear on the interests of justice, the guideline issues identified in the case law, cannot serve as a reason to deny certification. In any event, the guideline issues serve only to confirm the case for certification. We will address them in turn.

45 Class definition:[43] The proposed class definitions are objective and of appropriate breadth. Anglo's attempt to severely limit the classes to specific townships, BLLs and injuries, would arbitrarily and unfairly exclude thousands of Kabwe children and women who share an interest in the resolution of the common issues.

46 Triable issues:[44] There are weighty, material triable issues in which the Applicants have demonstrated more than a *prima facie* case on the evidence and an arguable case on the law:

46.1 Anglo owed a duty of care to protect Kabwe residents from the harmful effects of lead pollution, due to its *de facto* oversight and control of the key

[43] Chapter V.

[44] Chapter VI.

Mine operations, and relevant advice given to the mine, between 1925 and 1974. Anglo accepts that this question of *de facto* control can only be resolved at trial.[45] Its English law expert further concedes that, in light of recent UK Supreme Court judgments, there is a "real issue" to be tried.[46]

46.2 Anglo breached this duty of care by acting negligently in that:

46.2.1 the danger to Kabwe residents were both foreseen and reasonably foreseeable; and

46.2.2 Anglo failed to take reasonable steps to prevent this harm.

46.3 Anglo acted negligently in at least five material respects:

46.3.1 it failed to investigate;

46.3.2 it failed to protect;

46.3.3 it failed to cease and relocate;

46.3.4 it failed to remediate; and

46.3.5 it failed to warn.

46.4 Anglo's negligence caused the present-day levels of lead pollution in the Kabwe District and the resulting harms to the class members.

46.4.1 This negligence was the "but for" cause of the resulting harm: had Anglo imposed safe systems of work, or ceased and relocated the

---

[45] AA p 001-3071 para 1079.

[46] Affidavit of Mr Gibson QC p 001-3946 para 23.

smelting operations to the extent that it was impossible to ensure safety, the resulting environmental disaster would not have eventuated.

46.4.2 Even if Anglo was not the "but for cause", its negligence materially contributed to the harm. Anglo was responsible for 66% of lead pollution over the lifetime of the Mine, resulting in a broadly commensurate level of lead pollution; that lead pollution remains in the Kabwe soil, posing an ongoing danger; and this pollution likely dwarfs the pollution caused by the pre- and post-Anglo periods (before 1925 and after 1974).

46.4.3 If Anglo had transferred the Mine to ZCCM in 1974 in a safe operating state, then lead pollution would not have arisen during ZCCM's period of operation.

46.5 Events after 1974 did not break the chain of causation between Anglo's negligence and the resulting harm. The harms to Kabwe residents were not remote, as they were foreseen and foreseeable. ZCCM's conduct was not a *novus actus interveniens*, but a continuation of the pattern of neglect that was already established under Anglo's watch.

47 Commonality:[47] The triable issues raise questions of fact and law that are common to the class members and can be appropriately determined in the first, opt-out stage of the class action. It would not be just or efficient to litigate and

[47] Chapter VII.

re-litigate these common questions in a multiplicity of separate trials, particularly when the members of the plaintiff class are indigent.

48 Suitable class representatives:[48] The twelve proposed class representatives are suitable, with the willingness and capacity to see this class action to its conclusion. There are also no material conflicts of interest between the class members.

49 Suitable lawyers and funding arrangements:[49] The experienced team of attorneys and counsel, supported by consultants from Leigh Day ("LD"), is suitable to a class action of this size and complexity. The third-party funding arrangements and contingency fee arrangements are both necessary and reasonable to secure access to justice.

50 Determination and allocation of damages:[50] The damages claims flow from the cause of action, are capable of determination, and an appropriate mechanism has been proposed to allocate any award or settlement to the class members.

51 Appropriateness and interests of justice:[51] The two-stage class action, in South Africa, is appropriate and in the interests of justice. This class action, in this Court, at this time, is the only appropriate means to provide access to court for class members to vindicate their claims against Anglo.

---

[48] Chapter VIII.

[49] Chapter IX.

[50] Chapter X.

[51] Chapter XI.

52 Notification:[52] Appropriate class notices have been formulated and suitable methods have been proposed to bring this class action to the attention of the class members and to inform them of their rights to opt out.

F. THE STRUCTURE OF THESE HEADS OF ARGUMENT

53 These heads of argument are structured as follows:

53.1 Chapters II to IV address the relevant factual background:

53.1.1 Chapter II outlines the ongoing health and environmental disaster in Kabwe;

53.1.2 Chapter III summarises the medical evidence on the harm of lead poisoning and the injuries suffered by the class representatives;

53.1.3 Chapter IV addresses the historical evidence showing Anglo's responsibility for this ongoing harm.

53.2 Chapters V to XII address the various requirements for certification in detail, as outlined in the previous section.

53.3 Chapter XIII concludes by addressing the relief sought and the question of costs.

[52] Chapter XII.

II THE ONGOING HEALTH AND ENVIRONMENTAL DISASTER IN KABWE

55 As a result of the Mine's operations, Kabwe is now one of the most lead-polluted sites in the world. There is incontrovertible evidence of massive lead contamination of soil and of staggeringly high levels of lead in the blood of a substantial proportion of the local population, particularly very young children.

56 Numerous studies have been carried out in Kabwe, which have confirmed that the Mine is at the heart of the ongoing lead exposure of the residents. The dispersion of lead from the smelter stacks and Mine dumps is reflected in the "heat map" of soil lead contamination surrounding the Mine, which is reproduced below.[53]

56.1 The map, which was prepared by a team of Czech researchers led by Bohdan Kříbek, depicts data on the lead concentration in topsoil and reference subsurface soil.[54]

56.2 The purpose of the study was to assess the extent of the anthropogenic contamination in Kabwe, as indicated by excessive topsoil concentrations. As confirmed by Prof Taylor, this pattern indicates that surface soil contamination has emanated from the mine rather than from naturally occurring lead in the area, as Anglo has attempted to argue.

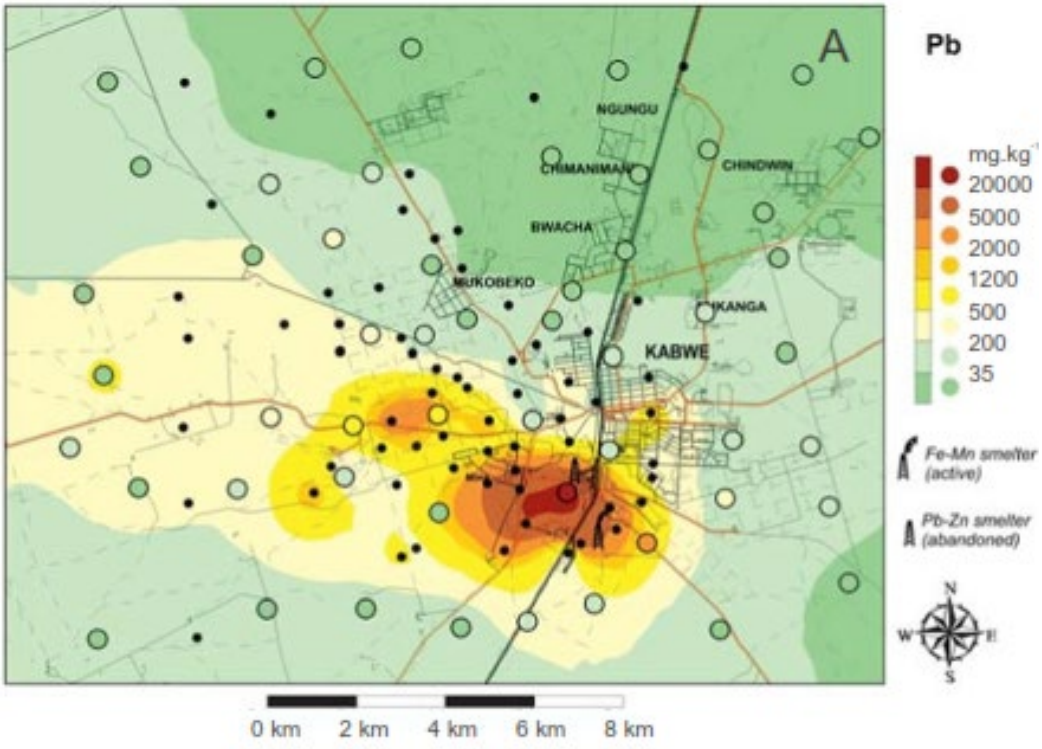
---

[53] FA p 001-47 para 78.

[54] Annexure ZMX14 p 001-709.

56.3 The contoured areas in this map represent the topsoil lead concentration, with the sampling sites shown as black dots, whereas the circles or "*classed points*" represent lead concentration in subsurface soil.

56.4 The darker areas reflect the highest levels of lead contamination in the communities in close proximity to the Mine: Kasanda, Makululu and Chowa. However, the map also illustrates the far reaching extent of the contamination.[55]



57 The Applicants' experts, Professors Harrison and Betterton, explain that during the Mine's operations the prevailing winds carried lead fumes and dust over the townships, where it settled, and note that patterns of lead in soil are consistent

[55] Ibid. Annexure ZMX14 p 001-712 – 001-713.

with the prevailing wind directions, reducing with distance.[56] The experts further confirm that emissions from the Mine were dispersed across Kabwe District. The underlying calculations are set out in some detail by the experts in their respective reports.[57]

A. ANGLO'S SUBSTANTIAL CONTRIBUTION TO THE ONGOING CONTAMINATION

58 Based on the available evidence, it is clear that lead dispersed from the smelter stacks and Mine dumps during Anglo's period of control contributed very substantially to the current lead contamination in the surrounding communities.[58]

59 Kabwe was already heavily polluted by 1974. As discussed in more detail below, two young mine doctors, Dr Lawrence in 1969/1970 and Dr Clark in 1971 to 1974, carried out detailed investigations into lead poisoning. Dr Lawrence took blood samples from around 500 local children and found that virtually all of their BLLs exceeded 40 µg/dL and many exceeded 100 µg/dL, putting the children at risk of death.[59] Dr Clark's research, which was published in his MSc thesis in 1975, showed elevated soil lead concentrations in Kasanda, Makululu and Chowa villages and significantly elevated blood lead levels in children, numerous of which exceeded 80-100 µg/dL, and in pregnant women living in these villages. Dr Clark identified substantial atmospheric emissions from the smelter and Mine

---

[56] FA p 001-46 paras 76-77.

[57] RA p 001-7639 paras 141-148.2. See also RA p 001-7732, paras 396-397; 399.

[58] RA p 001-7639 paras 141-148.2; see also Harrison 2022 p 001-9543 para 8(e).

[59] RA p 001-7603 paras 30-30.4.

dumps as primary source of lead pollution and attributed the soil lead pollution directly to the atmospheric lead emissions.[60]

60 A 1972 study by Ann and Connor Reilly further demonstrates the scale and extent of the lead pollution before 1974. The study noted that the highly contaminated area in Kabwe extended into a residential area and highlighted the occurrence of lead poisoning.[61]

61 Lead is heavy, stable, and does not easily corrode. Once it is released into the environment and deposited into soil and dust it generally remains in place, does not degrade, and accumulates over time.[62] So, absent remediation efforts, lead deposited in the soil a century ago, will remain in the soil today.

62 Anglo's period of control corresponded with the highest levels of lead production in Kabwe and resultant lead pollution of the Kabwe environment. More than 66% of all lead produced in the Mine's lifetime was mined and smelted between 1925 and 1974. By contrast, the period from 1974 to 1994 accounted for little over 22% of the lead production and only around 12% was produced before 1925. As Professor Harrison explains, by reference to the various practices and technologies employed at the Mine over the relevant period, emissions between 1925 and 1974 have had a major influence upon current soil lead levels.[63] In addition, the various alleged operational failures post-1974 were in fact a

---

[60] FA p 001-91 paras 181-181.6; see also RA p 001-7624 paras 94-96.

[61] FA p 001-91 para 180.

[62] FA p 001-55 para 35.

[63] RA p 001-7599 para 25.2., Harrison 2022 p 001-9540 para 7.48

continuation of the negligent operation of the Mine during Anglo's period of control, and only serve to highlight the contamination caused by Anglo's operations.[64]

63 Various academic studies confirm that the town of Kabwe has remained highly polluted to this date. For instance, a World Bank study in 2001/ 2002 compared findings of various soil sampling programs and found that environmental lead pollution was greatest in Kasanda and Chowa (a range of 25-36,000 ppm, compared with the WHO limit of 1,000 ppm). The sources of the lead pollution were reported to be smelter activity from the Mine; on-site smelter waste and tailings dumps.[65]

64 Moreover, a 2016 World Bank study reported lead levels in soil next to the Mine site ranging from 139 mg/kg to 62,142 mg/kg, with a geometric mean concentration of 1470 mg/kg. Of the 339 soil tests included in the underlying data, 86 readings (25.4%) showed a concentration more than 400 ppm, which has been set as soil hazard standard for lead for bare soil where children play by the US Environmental Protection Agency (EPA).[66]

B. THE CORRELATION BETWEEN SOIL LEAD LEVELS AND BLL

65 Despite almost twenty-five years since the smelters' closure, blood lead levels – vividly demonstrated by the blood lead levels of the Applicants discussed further

---

[64] RA p 001-7600 paras 25.3; p 001-7645 para 150.

[65] FA p 001-48 para 80.3. Annexure ZMX15 p 001-714.

[66] FA p 001-49, paras 80.4 and 80.6. Annexure ZMX17 p 001-747.

below – reflect that historical contaminants remain present in the contemporary soils and dust and thus the exposure to lead is persistent.[67]

66 Studies carried out in Kabwe have consistently found a strong correlation between BLL and soil lead levels.[68] The pathways and patterns of lead distribution from the Mine to members of the Kabwe community, in particular children, has been via soil and dust ingested and inhaled from the local environment. The soil and dust in Kabwe were contaminated primarily by airborne emissions, and to a lesser extent by dispersion from various dumps of waste material and the Kabwe canal.[69] Since the closure of the Mine, the lead deposited in soil and dust is the primary source of exposure.

67 The 2001/ 2002 World Bank study reported on BLL testing carried out between 1994 and 1999-2000 in Kasanda. In 1994, average BLLs were found to be 45 µg/dL, the highest of the villages sampled, and 58 µg/dL for those aged 0-5 years old, the most at risk group. Average BLLs in Kasanda in 1999/ 2000 were reported to be 44.5 µg/dL.[70] As has been pointed out above, in South Africa a BLL of 5 µg/dL constitutes a confirmed diagnosis of lead poisoning which must by law be notified to the Department of Health within 7 days.[71] As will be

---

[67] FA p 001-108 para 225.3.

[68] See for example, Prof Harrison RA p 001-7638 para 139.

[69] RA p 001-7674 paras 215-224 [V(E)2, 'The pathways and patterns of lead distribution from the Mine to members of the Kabwe community, particularly children'].

[70] FA p 001-48 para 80.2.

[71] Item 11 of Table 2 to Annexure A of the Regulations relating to the Surveillance and the Control of Notifiable Medical Conditions GN 1434 Government Gazette 41330 of 15 December 2017 read with the NICD diagnosis document at https://www.nicd.ac.za/wp-content/uploads/2021/12/NMC_category-2-case-definitions_Flipchart_01October-2021.pdf.

discussed below, a level of 45 µg/dL is the threshold at which chelation treatment is required.

68 Numerous subsequent studies provide further confirmation of the scale and magnitude of the environmental contamination in Kabwe.

68.1 For instance, in 2020, Yabe and others published a study of BLLs and exposure variations among household members in Kabwe. Their subjects were drawn from across the Kabwe district and were divided into four groups - children aged 0-3 years and 4-9 years, women (with an average age of 39 years) and men (with an average age of 46 years and above).

68.2 The mean BLL for all of the participants in the study was 20.8 µg/dL with 0-3 year old children having a mean BLL of 29.9 µg/dL, 4-9 year old children having a mean BLL of 24.3 µg/dL, women having a mean BLL of 14.8 µg/dL and men having a mean BLL of 15.7 µg/dL. [72]

68.3 80% of the 0-3 year old children sampled were found to have BLLs over 5 µg/dL with 27% having BLLs of 45 µg/dL and above. 78% of the 4-9 year old children sampled were found to have BLLs over 5 µg/dL with 18.4% having BLLs of 45 µg/dL and above. 63% of the women and 61% of the men sampled were found to have BLLs above 5 µg/dL. [73] Several of the children sampled had BLLs in excess of 100 µg/dL. [74]

---

[72] ZMX20 p 001-794 Table 1.

[73] ZMX20 p 001-794 Table 2.

[74] ZMX20 p 001-793 para 3.2.

68.4 The study showed that BLLs were highest in the villages closest to the Mine waste dumping site and that they tended to decrease with distance, but even in Kangomba village which is 15km from the Mine, the mean BLL was 8.48 with a maximum BLL of 63.5 100 µg/dL in one sampled child and in Hamududu village which is 30km from the Mine, a sampled child had a BLL of 35.6 µg/dL. [75]

68.5 Anglo has attempted to argue that due to the variability of and alleged lack of correlation between surface soil lead levels BLLs, BLLs in the Kabwe District must be the result of other (non-Mine related) sources. However, the evidence of Professor Harrison clearly shows that soil lead exposures do account for the community blood lead levels, including communities with lower BLLs at substantial distances from the Mine.[76]

68.6 Two papers published in 2021 by a team of researchers led by Hokuto Nakata of Hokkaido University collected data from a number of different townships in Kabwe District. The first study found that mean BLL in the youngest age group, aged 0-4, was 16.84 µg/dL, with the highest mean BLL measured in Kasanda at 85.61 µg/dL. Mean BLL in adults was 11.63 µg/dL in females and 13.23 µg/dL in males, with the highest mean again measured in Kasanda where the mean BLL in females was 25.47 µg/dL and 31.31 µg/dL in males. The second study found a mean BLL of 15.4 µg/dL in infants and of 23.4 µg/dL in children aged 1-5 years old, where

[75] ZMX20 p 001-795 Table 3 read with p 001-791 para 2.2 and p 001-793 Fig 3.

[76] Harrison 2022 p 001-9543 para 8.

mothers had a mean BLL of 10.6 µg/dL and fathers of 11.6 µg/dL.[77] All of these mean BLLs exceed the level above which brain damage and other lead-induced harm is caused.[78]

69 Whilst BLL measurements reflect more recent exposure to lead, as is evident from the published studies, Kabwe residents have been exposed continuously to lead since birth and continue to be exposed chronically in a highly contaminated environment. The majority of lead (~75%) absorbed is stored in bone from where it can be remobilised into the bloodstream over many years, if not decades, even if ongoing exposure were to cease.[79] Consequently, despite the scale and magnitude of the BLL reported in the various studies, this remains an underestimation of the disaster at hand, as Kabwe residents, in particular young children, are likely to have large quantities of lead in their bones, which can be remobilised into the bloodstream, causing further harm.[80]

[77] RA p 001-7645 and p 001-7697 paras 148.2; 287-287.2; see also Annexures ZMX115 p 001-8141 and ZMX126 p 001-8328.

[78] RA p 001-7690 para 263.

[79] RA p 001-7698 para 288.

[80] RA p 001-7698 para 290.

III THE HARMS CAUSED BY LEAD POISONING AND THE HARM SUFFERED BY THE PLAINTIFFS

A. APPLICABLE STANDARDS

70 The scientific and medical consensus is that there is no safe level of lead in the blood.[81]

71 The World Health Organisation (WHO), the United Nations' agency responsible for international public health, and United States Centers for Disease Control and Prevention ('US CDC') are the leading standard setting bodies internationally in this area. After rigorous evaluation of the scientific evidence, the WHO and US CDC, as well as other standard setting bodies, have come to the consistent conclusion that no threshold could be identified for lead's adverse effects on the nervous system. Lead harms cognition and causes neurobehavioral problems at the lowest BLLs. [82] Children, whose brains are still developing, are at particular risk of harm. Even at very low blood levels, lead causes neurodevelopmental, clinical and sub-clinical effects, some of which are irreversible. The chronic exposure to lead has an exacerbating effect.[83]

72 The Applicants' experts Professors Dargan, Bellinger and Lanphear and their research on the health effects of lead, including at very low levels, have been highly influential in formulating the internationally recognised standards and

---

[81] FA p 001-37 para 62; RA p 001-7686 paras 250-251; Annexure ZMX125 p 001-8318 (Executive summary of WHO guidelines for clinical management of exposure to lead) at p001-8322: "*Exposure to lead, even at very low levels, has been associated with a range of negative health effects, and no level without deleterious effects has been identified*."

[82] RA p 001-7689 paras 260-268.

[83] FA p 001-37 para 62.

guidelines published by WHO and US CDC. Their involvement has included the following:

72.1 Professor Dargan was a member of the WHO Working Group that elaborated the 2010 World Health Organisation ("WHO") report on 'Childhood Lead Poisoning' and of the Group that developed the WHO Lead Poisoning Management Guidelines 2021.[84]

72.2 Professor Bellinger, whose lead-related research has focussed on lead neurotoxicity in children, was a member of various US CDC work groups and committees, for example, the Work Group on Health Effects of Blood Lead Levels < 10 µg/dL, (2002-2004), and was asked by the WHO to chair of the meetings of the WHO Committee on Guidelines for the Diagnosis and Treatment of Lead Poisoning (2021).[85]

72.3 Professor Lanphear's research, published in 2000 and 2005, on the supralinear dose-response relationship – that is, disproportionately greater effects at very low levels- of lead and children's IQ scores at the lowest levels was key evidence used to revise down the blood lead levels considered harmful by the WHO and other public health organisations.[86]

73 According to the WHO 2021 guideline for clinical management of exposure to lead, individuals with a BLL of 5 µg/dL and above should be monitored regularly through venous blood lead sampling, among other required interventions. Consistent with this guideline, in South Africa a BLL of 5 µg/dL is treated as a

---

[84] FA p 001-36 para 57; Dargan affidavit in reply 2022, 001-9111 para 4.

[85] Bellinger 2022 p 006-499 para 4.

[86] Lanphear 2022 p 006-579 para 4.

confirmed case of lead poisoning which must be reported to the Department of Health under the Regulations relating to the Surveillance and the Control of Notifiable Medical Conditions.[87] The US CDC's recently updated guidelines indicate that public health actions and medical monitoring should be initiated from a BLL of 3.5 µg/dL.[88] These recommendations reflect the opinion of these internationally recognised bodies that such BLLs constitute a significant health concern. This view is founded on scientific studies by Professors Bellinger, Lanphear and others, which have demonstrated a causal relationship between lead and cognitive impairment, including neurodevelopmental and behavioural problems, in populations with these BLLs.

74 On the basis of the consistent and compelling data from such studies, Professors Bellinger and Lanphear consider that it is more likely than not that cognitive impairment, to which lead has significantly contributed, will have occurred in an individual child with a BLL above 5 µg/dL.[89]

75 For comparison purposes, it is instructive to consider the approach to settlement taken in the Flint lead poisoning case regarding the effects caused by lead contaminated water in Flint, Michigan.

76 Multiple lawsuits instituted by those affected were consolidated into the *re Flint Water Cases.* On 11 November 2021, a $626 million settlement of the

---

[87] Item 11 of Table 2 to Annexure A of the Regulations relating to the Surveillance and the Control of Notifiable Medical Conditions GN 1434 Government Gazette 41330 of 15 December 2017 read with the NICD diagnosis document at https://www.nicd.ac.za/wp-content/uploads/2021/12/NMC_category-2-case-definitions_Flipchart_01October-2021.pdf

[88] RA p 001-7688 paras 257-258.

[89] RA p 001-7690 para 262.3; Bellinger SR1 p 001-9354 para 25.

consolidated lawsuits was granted court approval.[90] The categories of settlement are set out in a "*compensation grid*", which is briefly summarised below:[91]

76.1 The highest category of award is reserved for children aged 6 and younger at first exposure with BLL at or above 10.0 µg/dL.[92]

76.2 The relevant BLL decreases in the remaining compensation categories to 5.0 and 9.9 µg/dL, then 3.0 and 4.9 µg/dL; and 0.1 and 2.9 µg/dL along with a requirement to cognitive deficit or if they were born preterm (i.e. prior to 37 weeks of gestation or low birth weight (i.e. 2500 grams or 5 lbs. 8oz).[93]

77 BLLs in Kabwe are of a significantly higher magnitude. As demonstrated by the scientific studies summarised in paragraphs 67 to 68.6 above, average BLLs in Kabwe far exceed the threshold for the highest category of award in Flint, and a substantial proportion of children in Kabwe have BLLs more than four times as high as that threshold.

78 In respect of women of child-bearing age, the CDC has determined that the threshold level of greater than 5 µg/dL requires monitoring and nutritional intervention. Prof Dargan confirms that women of child-bearing age with a BLL of greater than 5 µg/dL are at an increased risk of pre-eclampsia, a life

---

[90] RA p 001-7710, para 328; Annexure ZMX129 p 001-8363.

[91] ZMX130 p 001-8543.

[92] RA p 001-7711 para 330.1.

[93] RA p 001-7711 para 330.2.

threatening condition, and adverse pregnancy outcomes.[94] Prof Dargan further notes that studies in recent years have demonstrated that BLLs of adult females in Kabwe are typically greater than 5ug/dL.[95]

79 Chelation therapy is recommended for all children aged 10 and below and pregnant women in their second and third trimesters with BLLs from 45µg/dL and above, irrespective of whether they present with any discernible symptoms of lead poisoning. For girls and women of children-bearing age with BLLs of 45µg/dL and above, without symptoms, chelation therapy should be considered.[96]. Chelation therapy is a medical treatment using various chemical agents to draw heavy metals out of the body, itself not without significant side effects.[97] In Kabwe, an estimated number of 7,000 to 9,000 children have BLLs above 45 µg/dL,[98] not including any older children or adults who had such levels when they were small, which is likely to have caused additional ongoing harm. Eight of the remaining Applicants require chelation therapy.[99] Due to the chronic exposure that these children have suffered, several courses of chelation therapy will be required over a number of years.

80 The Kabwe community, and specifically small children due to their particular susceptibility, are exposed to lead as a result of the heavy contamination soil and

---

[94] FA, 001-109, para 233.

[95] Dargan 2022 p 001-9288, para 14.5.1.3.1.

[96] Dargan 2022 p 001-9273 para 14.3.4.

[97] FA, 001-41, para 66.

[98] FA, 001-123, para 264.2arw Prof Mary Lou Thompson 2020 page 11, 001-1686, para 43.

[99] This excludes Applicant A6 who has withdrawn as a class representative but also has BLLs which require chelation therapy.

dust in the environment. Elevated soil lead levels and excessive BLLs are correlated, as demonstrated by Dr Clark's research on lead contamination in Kabwe, undertaken between 1971 and 1974.[100] The US EPA soil lead has set a soil hazard standard for lead of 400 ppm for bare soil where children play. Several studies, such as the 2016 World Bank study,[101] have shown that soil lead levels in the vicinity of the mine site can exceed this threshold by multiples. This is nothing new: the soil lead levels found by Dr Clark ranged from 100 to 9,400ppm (with the soil lead levels in the areas marked as 'within limits of prevailing wind' and Chowa ranging up to 3,900 and 3,000ppm respectively), demonstrating that the soils were already heavily polluted at the end of Anglo's period of control. A and C Reilly's research study highlighted the extent of the soil lead contamination as at 1972.[102]

81 Authors of studies on Kabwe have repeatedly commented on the extreme nature of the extent and magnitude of the environmental contamination and BLLs in Kabwe.

81.1 For instance, Clark highlighted that the air sampling results collected in Kasanda in 1973 and 1974 showed that the community was "*subject to an abnormally high atmospheric lead concentration*" and that it exceeded the applicable USA standard.[103] He further noted that Kasanda was also "*the most severely affected group mean blood lead levels*" exceeding the

---

[100] See for example, RA p 001-7624 para 94, ZMX 3 p 001-357.

[101] Annexure ZMX17 p 001-747.

[102] FA p 001-91 para 180 and Annexure ZMX77 p 001-1200.

[103] Clark, ZMX3 p 001-392.

accepted normal upper limit of blood lead for urban populations throughout childhood.[104]

81.2 More recently, the 2016 World Bank study, referred to above, described the Kabwe situation as follows: "*11. The old mining town of Kabwe has shown unacceptably high levels of lead in the soil resulting from past lead mining in the area. […] Due to both naturally occurring mineralization and the impact of the smelting/reprocessing of lead tailings, the lead content in soil in certain areas is as high as 26,000 mg/kg in the most polluted areas (as against USEPA's standard for lead of 400 ppm in play areas and 1200 ppm for non-play areas) and generally land up to 14 km from Kabwe has been found to be unsuitable for agricultural purposes. […] 13. […] The BLLs have been found to range on an average from 15 micrograms per deciliter of blood (µg/dL) to 85 µg/dL (as against a [WHO] benchmark of 10 µg/dL and USEPA standard of 5 µg/dL). As per WHO, each 10-20 µg/dl of BLL in children represents about 2 points reduction in IQ levels, thereby posing a significant risk for children in Kabwe*."[105]

81.3 John Yabe, who along with others has authored multiple studies on the environmental lead contamination in Kabwe, summarised elsewhere in the papers, has expressed his concern about the "*alarming*" levels of childhood lead poisoning, relative to prevailing international standards, which were "*among the highest in the world*", especially in small children. He noted that the BLL results presented in his 2015 study were higher than

[104] Clark, ZMX3 p 00-407.

[105] Annexure ZMX17 p 001-747.

mean BLLs in children near lead mines and smeltering plants in China, and were also alarming when compared to most European countries where the median BLL in the general population was below 5 µg/dL.[106]

81.4 Based on a comparison with lead results from studies in other African countries, including north-western Nigeria, where artisanal lead mining has caused widespread lead poisoning in children, and Johannesburg-Soweto metropolitan area, Nakata and others in their 2021 study, referred to above, concluded that the elevated BLL in Kabwe "*relative to that in other countries has sounded the alarm due to the serious effects on human health*".[107]

82 Following their respective examinations of the class representatives, two of the Applicants' medical experts, Professors Dargan and Adnams, expressed their significant concerns at the adverse effects of lead observed in the class representatives and requested urgent action and medical, environmental and educational intervention to address the situation in Kabwe in a joint letter to the Zambian health authorities dated 15 April 2020. The experts' concerns are further testament to the severity of the public health crisis at hand.

[106] Annexure ZMX18 p 001-756 – 001-757.

[107] Annexure ZMX126 p 001-8328.

B. THE INDIVIDUAL APPLICANTS

83 The twelve Applicants are children and young women who have suffered harm from exposure to lead in and around Kabwe where they have lived for their entire lives.[108]

84 The Applicants were clinically examined and assessed by Professors Dargan and Adnams, whose reports set out their observations and findings. The Applicants' blood lead levels were tested in November 2019 and in February 2020.[109] All but four of the Applicants' BLLs exceed 50 µg/dL and two of them exceed 100 µg/dL (BLLs summarised more fully below). In circumstances where individuals in the US as recently as November 2021 are being compensated for BLLs below 5 µg/dL, as explained above, the Applicants' BLLs are extreme.

85 At the time of assessment, the Applicants comprised 11 children between the ages of 2 and 10, and two young women (aged 17 and 20) of childbearing age. A summary of the individual Applicants is set out below. The Applicants all present with recognised *sequelae* of lead exposure and lead poisoning.

86 Prof Dargan cautions that the neurodevelopmental and cardiovascular adverse effects of childhood exposure to lead are persistent and irreversible.[110]

87 The opinions expressed by Professors Adnams and Dargan in their reports on the individual Applicants are in stark contrast to the opinions of Anglos' medical

---

[108] FA 001-112 p para 237.

[109] FA p 001-112 para 239.

[110] PID5 p 001-1955 para 9.2.5.

experts, Drs Banner and Beck, who – without having examined the Applicants – suggest that none of the Applicants have suffered lead-induced harm, despite the fact that four of the Applicants' BLLs exceed 50 µg/dL and two of them exceed 100 µg/dL (ie 10 and 20 times higher than the threshold for mandatory reporting of lead poisoning in South Africa).

88 The first Applicant acts on behalf of her three year old daughter (A1). A1's blood lead concentrations in November 2019 were 69.5 µg/dL and 73.70 µg/dL. In February 2020 her BLL was 84.75 µg/dL.[111] Prof Adnams found that A1 was "distractible and impulsive",[112] at a very high risk for a range of neuro-cognitive effects of exposure to lead and at an acute risk for encephalopathy.[113] Prof Dargan opined that A1's distractible and impulsive behaviour likely relates to lead toxicity.[114]

89 The second Applicant acts on behalf of her three year old son (A2). His blood lead concentrations in November 2019 were 83.60 µg/dL and 82.15 µg/dL. In February 2020 it had increased to 87.53 µg/dL.[115] Prof Adnams records that A2's BLL is cause for concern and may impair development.[116]

---

[111] FA p 001-113 para 241.1 and PID1 p 001-1867 at p 001-1870 para 4.1.

[112] PID1 p 001-1874 para 6.3.5 and CMA1 p 001-1474 para 11.2.

[113] CMA1 p 001-1476 para 17.

[114] PID1 p 001-1874 para 7.1.

[115] PID2 p 001-1888 para 4.1.

[116] CMA2 p 001-1485 para 16.

90 Prof Dargan considers that A2 will already have developed sub-clinical effects of lead toxicity related to his lead exposure both ante-natally and since birth. He is also at risk of developing future further adverse effects.[117]

91 The third Applicant acts on behalf of her two year old son (A3). In November 2019 his blood lead concentration was 106 µg/dL. By February 2020 it had increased to 114.22 µg/dL.[118] Professors Dargan and Adnams concur that he is at high risk for lead encephalopathy.[119] He has a poor appetite and chronic abdominal pains which are accompanied by vomiting and diarrhoea. He had a low birth weight and is small for his age. His growth parameters are below average for his age. Prof Dargan considers that these features are all consistent with lead toxicity, and were likely caused by lead.[120]

92 The fourth Applicant acts on behalf of her two year old son (A4). In November 2019 his blood lead concentration levels were 114 µg/dL and 118 µg/dL. In February 2020 his blood lead level concentration was 81.37 µg/dL.[121] He has severe lead poisoning and is at high risk for encephalopathy.[122] Blood indices showed iron deficiency anaemia, [123] which is symptomatic of lead poisoning.[124] Prof Dargan advised that A4 requires urgent chelation therapy.[125]

---

[117] PID2 p 001-1891 para 7.2.

[118] PID3 p 001-1903 para 4.1.

[119] CMA3 p 001-1495 para 17.

[120] FA p 001-113 para 243; PID3 p 001-1908 para 7.1.

[121] CMA4 p 001-1504 para 12.1; PID4 001-1927 para 8.1.

[122] CMA4 p 001-1504 para 13.

[123] CMA4 p 001-1504 para 12.2.

[124] FA p 001-114 para 244.

[125] PID4 p 001-1933 para 9.2.1.

93 The fifth Applicant acts on behalf of her ten year old son (A5). His blood lead level concentrations were 57.05 µg/dL and 52.60 µg/dL in November 2019. In February 2020 it had increased to 64.24 µg/dL.[126] His mother reports that he has cognitive problems and learning difficulties. He is forgetful, lacks concentration and his language development is slower than normal. He frequently misses school because of abdominal pain.[127] He has had abdominal pains since he was 2 years of age. [128]

94 Prof Dargan described a range of lead-related effects that A5 will likely develop. His symptoms are attributable to lead poisoning as the most probable cause.[129] He will require chelation therapy and frequent blood tests. Because the neurodevelopmental and cardiovascular adverse effects of childhood exposure to lead are persistent and irreversible and are not improved with chelation therapy and environmental remediation, A5 has already suffered a permanent and irreversible injury consequent upon lead poisoning.[130]

95 The seventh Applicant acts on behalf of his ten year old son (A7). His blood lead level concentrations were 57.70 µg/dL and 52.20 µg/dL in November 2019, and 54.28 µg/dL in February 2020. His father reported that A7 has learning difficulties, difficulty with concentration, neurodevelopmental delay and attention problems which are all recognised sequelae of lead poisoning.[131]

---

[126] PID5 p 001-1939 para 4.1.

[127] PID5 p 001-1941 para 6.1.6.

[128] PID5 p 001-1944 para 6.2.2.8.

[129] FA p 001-115 para 245.3.

[130] PID5 p 001-1955 para 9.2.5.

[131] FA p 001-115 para 247.

96 Prof Dargan explained that blood lead concentrations in children peak at the age of 2-3 years and it is therefore likely that his blood lead concentrations were higher earlier in his childhood with the consequent impact on long-term sequelae of lead toxicity.[132]

97 The eighth Applicant acts on behalf of her five year old son (A8). His blood lead level concentrations were 46,60 µg/dL and 49,10 µg/dL in November 2019. It increased to 51.47 µg/dL in February 2020.[133] Prof Dargan described that his blood concentration lead levels fall within the range associated with acute symptoms of lead toxicity and chronic sub-clinical longer-term lead related *sequelae*.[134]

98 The ninth Applicant acts on behalf of her four year old daughter (A9). In November 2019 her blood lead level concentration was 52.05 µg/dL and in February 2020 it was 50.78 µg/dL.[135] She was found to be mildly anaemic with an iron deficiency.[136] Prof Dargan expressed the opinion that lead is contributory to the anaemia.[137] Prof Adnams found that her visual-motor integration function is below average and in the low normal range for her age.[138]

---

[132] PID7 p 001-19 para 7.4.

[133] FA p 001-115 para 248; PID8 p 001-1997 para 4.1.

[134] PID p 001-2001 para 7.3.

[135] PID9 p 001-2014 para 4.1.

[136] FA p 001-115 para 249.

[137] PID9 p 001-2019 para 7.4.

[138] CMA9 p 001-1557 para 18.

99 The tenth Applicant acts on behalf of her seven year old daughter (A10). She measured blood lead concentration levels in November 2019 of 45.80 µg/dL and 44.70 µg/dL and 43.88 µg/dL was measured in February 2020.[139] She has poor concentration, forgets instructions and becomes aggressive. She often plays in the dirt and does eat soil. She has a poor appetite.

100 Prof Dargan explained that she has iron deficiency which is the predominant cause of A10's hypochromic microcytic anaemia. Iron deficiency is associated with increased absorption of lead from the gastrointestinal tract because lead is absorbed through the same pathways as iron.[140] These features are consistent with lead poisoning, and she is at significant risk of developing further adverse effects of lead.[141]

101 The eleventh Applicant acts on behalf of her two year old son (A11). He measured blood lead concentration levels of 26.10 µg/dL in November 2019 and 25.63 µg/dL in February 2020.[142] His growth is below average. Whilst he demonstrated no clinically apparent features of lead toxicity, Prof Dargan expressed the view that A11 will already have developed subclinical effects of lead toxicity.[143]

102 The twelfth Applicant acts on behalf of her daughter, who was 17 at the time the application was launched but is now an adult (A12). She measured a blood lead

---

[139] PID10 p 001-2032 para 4.1.

[140] PID10 p 001-2039 para 7.5.

[141] PID10 p 001-2040 para 7.9.

[142] PID11 p 001-2053 para 4.1.

[143] PID11 p 001-2058 para 7.4.

level concentration of 26.10 µg/dL in November 2019 and in February 2020 it was 28.04 µg/dL. As a child she used to play in the soil and return home covered in dust. She had learning difficulties and headaches which affected her eyesight. Her growth is below average for age. Both experts opined that her presentation and sequelae were consistent with lead poisoning.

103 The thirteenth Applicant (A13) is a 21 year old young woman who left school in Grade 12 and was working in a Western Union office at the time of Prof Dargan's report. She reported that in school her performance was low and that she found it difficult to learn and remember things. She measured a blood lead level concentration of 26.10 µg/dL in November 2019, and in February 2020 it was 10.06 µg/dL.[144] When she was two to three years old she had a BLL of 84 µg/dL.[145] Prof Dargan opined that A13's mild cognitive impairment, if confirmed with more definitive testing, likely relates to lead toxicity.[146]

104 The sixth Applicant has been withdrawn as a class representative and an applicant, due to difficulties with communication. A notice of withdrawal was filed with the reply.[147] The sixth applicant will remain a member of the proposed class and this withdrawal does not prejudice the merits of their claim. He (A6) is reflective (in absence) of the vast majority of children in and around Kabwe who, but for this class action, would remain voiceless and faceless despite the egregious insult visited upon them through no fault of their own. For these

---

[144] PID12 p 001-2088 para 4.1.

[145] FA p 001-117 para 253.3.

[146] PID13 p 001-2093 para 6.4.4.2.

[147] RA p 001-7909.

reasons we reflect the BLLs of A6, who was six years old at the time that the application was launched.

105 A6's blood lead concentration levels were 51.7 µg/dL and 49.50 µg/dL in November 2019, which increased to 54.58 µg/dL in February 2020.[148] He had an abnormal liver function test. He has mild anaemia not related to haematinic deficiency which Prof Dargan considered to be likely related to lead toxicity.[149]

106 The reported injuries and *sequelae* of the Applicants are consistent with the summary of adverse health effects produced in a Table 1, extracted from the 2015 WHO report (ZMX9),[150] as well as with Table 2 which sets out the threshold for clinical effects consequent upon lead poisoning.[151]

107 It is so, that whether the specific injuries were caused by lead exposure is a determination which is made by way of a clinical assessment.[152] Professors Dargan and Adnams have performed a clinical assessment of the thirteen Applicants. They have the required expertise to make a clinical assessment and to express an opinion, based on their clinical examination and assessment, as to whether the Applicants' presenting symptoms and *sequelae* are consistent with lead poisoning. The blood lead levels in the Applicants' blood are not only cause for concern, but it would be to ignore the obvious (as Anglo seeks to do) to

---

[148] FA p 001-115 para 246.; PID6 p 001-1959 para 4.1.

[149] PID6 p 001-1965 para 7.3.

[150] FA p 001-38 para 63.

[151] FA p 001-39 para 64.

[152] AAp 001-2919 para 692.1.

suggest that their reported injuries and *sequelae* were not caused by or materially contributed to by lead poisoning to which they have been exposed since birth.

108 Anglo does not deny that once lead is deposited in the soil and environment, it poses a long-term danger.[153] Anglo's actions both caused and materially contributed to the ongoing harm suffered by the Applicants , despite the blanket denials to the contrary..[154]

[153] AA p 001-2707 para 103.

[154] FA, 001-26, para 33.

IV ANGLO'S RESPONSIBILITY FOR THE DISASTER AND ONGOING HARM

109 In this chapter, we chart the history of Anglo's involvement in the Mine and its responsibility for the ongoing disaster. We address:

109.1 The divergent responses to lead poisoning cause by mining operations in Broken Hill, Australia and Broken Hill, Zambia;

109.2 Anglo's group structure and its involvement in the Mine's affairs;

109.3 Anglo's public statements about its obligations to communities and society, dating back over a century;

109.4 The history of the Mine's operations from 1904 to the present, reflecting:

109.4.1 Anglo's direct involvement from 1925 to 1974 and its indirect involvement after 1974;

109.4.2 The knowledge of the dangers of lead throughout this period;

109.4.3 Anglo's actual knowledge of the dangers to the Kabwe community; and

109.4.4 Its repeated failure to take reasonable and effective steps to investigate, prevent and address lead pollution.

109.5 A summary of the prima facie case against Anglo.

A. THE TWO BROKEN HILLS

110 The history of the present environmental disaster in Kabwe (previously named "Broken Hill") – begins in its erstwhile namesake, Broken Hill, Australia.

111 In the late 1880s, children and adults in Broken Hill, Australia fell ill with lead poisoning. The New South Wales authorities were so alarmed that they appointed a commission of inquiry to investigate the problem of lead poisoning, "*not alone among the getters and smelters of silver-lead·ores, but also among·the townspeople who live in houses clustered round the mines and smelter nests, who are not themselves engaged in mining*."[155]

112 The suspect was identified: the lead smelters at the edge of the town, from which "*fumes … escape day and night without ceasing from the smelter stacks.*"[156] The commission set to work sampling the air, water, and soil for lead. They medically examined children at local schools and held interviews with townspeople. The tests and methods they used were already advanced, accessible, and well-known by this time.[157]

113 In its report, released in 1893, the commission concluded that lead fumes and dust from the smelters were the source of the lead poisoning. It observed that *"matters are emitted from the stacks in large quantities, which could, and, in one case at all events probably did destroy human life."*[158] It was satisfied that *"the*

---

[155] Broken Hill Report, Annexure ZMX 2 p 001-207 para 3.

[156] Id p 001-206 para 2.

[157] Id Appendices K and L pp 001-342 – 343; FA p 001-72 para 140.4 – 140.5.

[158] Annexure ZMX2 p 001-213 para 12.

fumes are injurious to the general population".[159] The commission noted that "*[t]he kind of poisoning to be expected among both classes [workers and townspeople] is almost exclusively of the chronic sort*".[160]

114 These observations on the dangers of lead were nothing new. The poisonous effects of lead have been known for thousands of years, in far greater detail than perhaps any other industrial poison. For as long as human beings have mined, smelted and used lead, they have recorded the toxic consequences of exposure.[161] The commission's report acknowledged that "*[a]ll these effects are so well known and so much feared that several European Governments regard the production and use or lead with great jealousy, and have enacted searching laws to shield workmen and the public from risk of leading, in as far as they may be so protected.*"[162]

115 The commission went on to recommend a variety of practical steps to reduce the risks to both mine workers and the people living near the smelters,[163] noting the "*far-reaching importance*" of the matter, which meant that it required "*urgent attention in the general public interest*".[164]

116 The commission's work is striking for its common sense. Children and townspeople were falling sick, requiring urgent, thorough investigation. The tools

---

[159] Id.

[160] Id p 001-207 para 3.

[161] FA p 001-70 paras 137 – 138. Not denied AA p 001-3076 paras 1094 – 1096.

[162] ZMX2 p 001-207 para 3.

[163] Id p 001-221 – 224.

[164] Id p 001-225.

to investigate the levels of lead pollution, from soil sampling to air quality monitoring were readily available and required no great skill or foresight. The necessary steps to address the problem were also clear and well-understood.

117 In 1902, less than ten years after publication of the Broken Hill report, a prospector discovered substantial lead deposits in what was then Northern Rhodesia. He was so impressed by what he found that he named the place "Broken Hill", after the famous Australian lead mining town.[165]

118 Two years later, the Rhodesian Broken Hill Development Company Limited[166] ("RBHDC") established the Broken Hill Mine, which began operations in 1906.[167] The town that developed around it was also called "Broken Hill", until it was renamed Kabwe.

119 There can be little doubt that the disaster in Broken Hill, Australia was well known to the lead mining industry. There is initial evidence that the Mine was in direct contact with the Broken Hill mines in Australia and sought advice on the management of lead poisoning.[168]

120 Despite the danger, the Mine developed townships and staff quarters for black residents and workers in the most undesirable areas, downwind of the mine

---

[165] Barlin Annexure ZMX11 p 001-654.

[166] In 1964, the company changed its name to the Zambian Broken Hill Development Corporation ("ZBHDC")

[167] FA p 001-54 para 88.

[168] FA p 001-74 paras 141 – 142. Anglo denies all knowledge of the Broken Hill report, but does not deny knowledge of lead poisoning in Broken Hill, Australia, nor does it deny that this was well known to the industry: AA p 3078 – 3079 paras 1104 – 1108.

dumps and the smelter. By contrast, white employees and residents lived to the north of the Mine, away from the worst fumes and dust.[169] This colonial pattern of development followed the template that was already familiar in South Africa.

121 The Mine and its smelter blanketed the surrounding areas with lead-bearing dust and fumes. The prevailing north-westerly winds carried the largest quantities of lead fallout to the townships to the west of the Mine, Kasanda and Makululu.[170] The townships to the east, including Chowa, were also affected when the wind changed direction seasonally and were further contaminated by the sludge that flowed through the Mine's drainage canal.[171]

122 For most of the 20th century, the predominantly African residents of Broken Hill, Zambia received none of the concern that was given to their counterparts in Broken Hill, Australia. There were no commissions of inquiry, no urgent investigations, no mass medical testing, and no urgent proposals for reform.

123 This was not due to a lack of warning. From the earliest days of the Mine's operations, there were alarming reports of deaths from lead poisoning. Residents also complained about the noxious fumes from the Mine and the death of dogs and livestock.[172]

---

[169] FA p 001-45 para 74; Annexure ZMX13 p 001-708.

[170] FA p 001-46 para 76; Betterton 2020 p 001-1618 para 2.

[171] Id; AA p 001-2811 para 406 ("A drainage canal from the plant site has been (and continues to be) an important source of off-site lead contamination").

[172] See, for example, Annexures ZMX 65 p 001-1154 at 1158; ZMX75 p 001-1194, ZMX106 p 001-7971 and ZMX97 p 001-7908.

124 Despite these warnings, the first concerted investigations were only conducted in the early 1970s. It was left to two young mine doctors, Dr Lawrence and Dr Clark, acting on their own initiative, to conduct the first detailed investigations of lead poisoning in Kabwe.

125 When Dr Lawrence arrived at the mine in 1969, he witnessed children dying of lead poisoning in the communities surrounding the Mine. He set to work testing the blood lead levels of children, which revealed widespread lead poisoning. Dr Lawrence was so concerned about his findings that he delivered his report to the Mine's Chief Medical Officer in person, at her home on a Saturday because he believed that the matter was so serious that it could not wait until the next working day.[173] He could not understand why no one had thought to do such testing before.[174]

126 Dr Clark continued this work from 1971 to 1974, publishing a thesis on his findings in 1975.[175] He took air, soil and water samples in Kasanda, Makululu and Chowa and measured blood lead levels residents in these areas, focusing on children under the age of 16 and pregnant mothers. His findings show substantial lead contamination, linked to high levels of lead poisoning. The source of this contamination was clear to Clark:

> "*[The] wind takes up lead particles from the effluent of the Imperial Smelting Furnace and Sinter Plant stacks creating a looping or fumigating plume. The wind also picks up particles from the waste ore*

[173] Lawrence p 001-2637 para 25; p 001-2634 para 6a.

[174] Id p 001-2636 para 17.

[175] Clark Annexure ZMX 3 p 001-357.

> *deposited on the ground on the lee side of the mine forming ground level dust clouds which sweep towards Kasanda*."[176]

127 Soil samples taken at Kasanda, Chowa, and Makululu showed elevated lead levels, which Clark attributed to "*lead oxide fall out originating from the smelter stack*".[177] He further demonstrated that the elevated levels of lead pollution in these communities were correlated with dangerously high blood lead levels.

128 Dr Lawrence and Dr Clark's single-handed efforts involved the same common sense that was applied in Broken Hill, Australia, more than 80 years before.

129 What explains the decades of inaction in Kabwe? It was not a lack of knowledge of the danger. It was not a lack of warning. It was not a lack of means. It is explicable only on the basis of a callous indifference to the plight of the victims.

---

[176] Id p 001-390.

[177] Id p 001-395.

B. ANGLO'S GROUP STRUCTURE AND INVOLVEMENT IN THE MINE

130 For most of the 20th century, Anglo was one of the largest and most influential mining houses in the world. At one time, the Anglo Group accounted for half the value of the Johannesburg stock exchange.[178]

131 Anglo's involvement in the Mine began in 1925. It would remain directly involved in the Mine's operations for fifty years, until 1974, after which it remained an active shareholder and assisted with technical advice.

132 Anglo exercised control over the Mine's operations in its capacity as the parent company and head office of the Anglo Group. Its many roles in the Mine's affairs are documented in detail in the papers, on which there is no material dispute. These roles included:[179]

132.1 Consulting engineer to the Mine between 1925 to 1927;[180]

132.2 Owner and manager of Rhodesian Anglo American Limited ("RAAL") which was the consulting engineer to the Mine from 1928 to 1930;[181]

132.3 Manager and consulting engineer to the Mine from 1937 to 1964;[182]

132.4 Owner of the Anglo American Corporation (Central Africa) Limited ("AACCA"), the consulting engineer to the mine from 1964 to 1970;[183] and

---

[178] Annexure ZMX 23 p 001-813.

[179] See organograms at Annexure ZMX 21 pp 001-798 – 802.

[180] FA p 001-54 para 89.

[181] FA p 001-55 para 93; AA p 001-2701 para 75 and AA p 001-3071 para 1077.1

[182] FA 001-56 para 97; Barlin Annexure ZMX 11 p 001-653. Partially admitted AA p 001-2701.

[183] FA p 001-60 paras 109 – 110; Not denied AA p 001-3070 paras 1075 – 1079.

132.5 Owner of the Anglo American Corporation Management Services AG ("AACM") which took over as consulting engineer from 1970 to 1974.[184]

133 In these roles, Anglo provided management, technical engineering, and medical oversight and direction in respect of the Mine operations, including the control of lead pollution.[185]

134 Anglo exercised this control through an ever-changing set of subsidiaries. However, the complexity of its organisational structure belies the centralised style of governance. The Mine was firmly a part of Anglo's "group system". We have previously referred to Anglo's description of this system, in its 1968 Annual Report, which bears repeating:[186]

> "The term 'group' has a wider meaning in the South African mining industry than its statutory definition of a parent company and its subsidiaries. The mining finance houses in South Africa have over a long period developed what is called the 'group system', by which the parent house not only plays a role in management, but also provides a complete range of administrative, technical and other services to the companies within the group. Thus the Anglo American Corporation Group comprises a large number of companies whose administration and management are closely linked to the Corporation."

135 This centralised control of the Anglo Group was reflected in Anglo's internal culture. For most of the 20th century, the Anglo Group was ruled by a "gentleman's club", headed by the Oppenheimer family and their trusted associates.[187]

---

[184] FA p 001-61 para 116.

[185] FA p 001-51 – 65, paras 81 – 122. AA pp 3070 – 3072 paras 1075 – 108.

[186] FA p 001-52 para 84; Annexure ZMX 22 p 001-812. Not denied AA p AA pp 3070 – 3072 paras 1075 – 1079.

[187] FA p 001-52 para 85; Annexure ZMX 23 p 001-813. Not denied AA p AA pp 3070 – 3072 paras 1075 – 1079.

136 This "gentleman's club" featured prominently on the Mine's board:[188]

136.1 Sir Ernest Oppenheimer, the founder of Anglo and its Chairman from 1925 to 1957, served as a director of RBHDC from 1925 to 1945, and its chairman from 1950 to 1957.

136.2 Harry Oppenheimer, Chairman of Anglo from 1957 to 1982, was Chairman of ZBHDC (RBHDC's successor) from 1957 to 1970.

136.3 They were joined by a string of other senior Anglo directors over the years, who occupied positions on the RBHDC / ZBHDC board[189] and later served on the ZCCM board.

136.4 As a result, there was little that happened at the Mine during this time that would have escaped the attention of Anglo's senior leadership.

137 Over the course of the 20th century, Anglo assisted the Mine in growing and expanding. It was Anglo's substantial investment in 1937 that saved the Mine from closure, allowing it to begin mining deep below the water line, after the easily accessible ore bodies were depleted.[190] As the Mine's consulting engineer, Anglo was further instrumental in designing and installing new smelting equipment, including:[191]

---

[188] See Annexure ZMX21 pp 001-804 – 806 (Web of cross-directorships); p 001-807 - 810 (Lists of cross-directorships)

[189] FA p 001-53 para 86.

[190] FA pp 001-56 – 58 paras 99 – 102. "*Anglo's financial investments in the Mine further facilitated the ongoing production of lead at the Mine and substantially increased the rate of production of lead at the Mine, with a consequent increase in lead pollution. For example, Anglo's investment in 1937 was decisive in allowing the Mine's operations to survive and grow.*" [FA para 203]

[191] FA p 001-58 para 103; Not denied AA p 001-3070 paras 1075 – 1079.

137.1 The Newnam Hearth plant, installed in 1946 and operated from 1946 to 1953 and again from 1957 to 1962.

137.2 Dwight-Lloyd sintering machines together with new lead blast furnaces, which operated from 1953 to 1957, after which they were decommissioned and the Mine returned to using the Newnam Hearth plant.

137.3 The Imperial Smelting Furnace and Sinter Plant, installed in 1962, which operated for the remaining life of the Mine, until 1994.

137.4 The Waelz kilns, designed and planned by Anglo, and installed in 1975.[192]

138 These facts are not meaningfully contested by Anglo. It is content to issue a series of bald denials that it exercised effective control over the relevant Mine operations, stating that the degree of its control is a matter that cannot be determined at the certification stage.[193] These are self-evidently matters for trial.

C. ANGLO'S PUBLIC STATEMENTS ABOUT ITS RESPONSIBILITY

139 From its creation in 1917, the Anglo Group has held itself out as having a duty to promote and protect the welfare of the communities in which it conducts mining.

140 In 1954, Anglo's founder and then chairman of the RBHDC, Sir Ernest Oppenheimer, issued a statement that remains an article of faith for the Anglo Group:

---

[192] FA p 001-63 para 121; Barlin Annexure ZMX 11 p 001-705; RA p 001-7647 para 152

[193] AA p 001-3071 para 1079: "*the determination of the "de facto control" issue presented by the Applicants is not an issue that is capable of determination at certification stage, and I have thus been advised that it would be inappropriate to address this issue meaningfully in this response.*"

> *"The aim of this Group is, and will remain, to earn profits for our shareholders, but to do so in such a way as to make a real and lasting contribution to the communities in which we operate"*.[194]

141 Countless variations of this quotation are found in Anglo's company literature and speeches through the decades, presented as evidence of the group's alleged commitment to ethical practices.[195]

142 Similar commitments were reflected in Anglo's contemporaneous public statements about its involvement in the Mine. In a 1942 letter from Anglo to the Chief Secretary of the Government of Northern Rhodesia, Anglo's representative sought to reassure the government that "*the company is operating (and must continue to operate for some time) entirely for the benefit, directly and indirectly, of its employees, the Government, the Rhodesian Railways, and the community as a whole"*[196] (Emphasis added).

143 These sentiments are now reflected in Anglo's public support for international human rights principles. Since at least 2011, the Anglo Group has endorsed the UN Guiding Principles on Business and Human Rights, which establishes a charter of human rights obligations for private actors:

143.1 Principle 13 obliges Anglo to:

> *"(a) Avoid causing or contributing to adverse human rights impacts through their own activities, and address such impacts when they occur;*
>
> *(b) Seek to prevent or mitigate adverse human rights impacts that are directly linked to their operations, products or services by their business relationships, even if they have not contributed to those impacts."*

143.2 Principle 22 specifically commits Anglo to remediating the harm that it has caused:

---

[194] FA p 001-66 para 126; Annexure ZMX 56 p 001-1042.

[195] FA pp 001-66 - 68 paras 128 – 131.

[196] Annexure ZMX 53 p 1035.

> *Where business enterprises identify that they have caused or contributed to adverse impacts, they should provide for or cooperate in their remediation through legitimate processes.*

144 The Anglo Group's own Human Rights Policy acknowledges these duties and undertakes that "*[w]here we have caused or contributed to adverse human rights impacts we will contribute to their remediation as appropriate*."[197]

145 These public commitments and statements stand in contrast to Anglo's attempts in the present application to avoid responsibility for its historical involvement in the Mine and the ongoing harms this has caused.

[197] Annexure ZMX 5 p 001-509.

D. THE MINE OPERATIONS AND ANGLO'S INVOLVEMENT

146 The history of the Mine's operations and Anglo's involvement can be broken into seven distinct periods.[198]

147 Throughout its involvement, Anglo must have known of the dangers of lead and the risk to surrounding communities, and the measures required to reduce these risks. Yet it failed to investigate the harm it was causing to Kabwe residents and took operational decisions aimed primarily at ensuring the profitability of the Mine over the protection of the surrounding community.

148 Despite piecemeal attempts at pollution control over the decades, the Mine remained a dirty, dysfunctional operation. This was the product of what would later become known as the "Broken Hill Attitude" of long-standing disregard and neglect.

1904 – 1925 (the pre-Anglo period)

149 The Broken Hill Mine was established in 1904 under the ownership and control of the RBHDC. The early years of the Mine's operations were plagued by financial and technical difficulties, resulting in limited production and frequent stoppages.[199]

---

[198] The changes in metallurgical practice over the 70 years of Anglo's involvement were "brought about to a large degree by the varying mineralisation encountered as mining progressed deeper into the orebodies". See p 001-8088

[199] FA p 001-54 para 88. Not denied AA paras 1075 – 1079 p 001-3070-1.

150 In 1915, a small experimental blast furnace with a capacity of 60 long tons of lead per month was constructed.[200] The commercial production of lead began the next year, in 1916.[201]

151 Between 1917 and 1920, four water-jacketed blast furnaces, each with a capacity of about 430 long tons (the British imperial measure) per month, were constructed.[202] Concentration and sintering equipment was eventually installed when the oxidised ore that had been mined between 1916 and 1922 was depleted.[203]

152 The original four blast furnaces were located in an open-sided building with roof vents,[204] and had no air pollution controls whatsoever.[205] Both the sinter hearths and blast furnaces were vented directly to the atmosphere with no attempt at fume collection".[206]

---

[200] Barlin Report Annexure ZMX 11 p 001-661

[201] AA p 001-2705 para 96.

[202] Barlin Report Annexure ZMX 11 p 001-661 RA p 001-7662 para 189.

[203] Barlin Report Annexure ZMX 11 p 001-673.

[204] Betterton 2020 report p 001-1616.

[205] Id. AA p 001-2706 paras 99 – 101.

[206] Barlin Report Annexure ZMX 11 p 001-674.

1925 – 1937

153 In 1925, Anglo acquired shares in RBHDC[207] and became the Mine's consulting engineer.[208] That same year, Anglo erected buildings in Broken Hill to act as their offices in Northern Rhodesia, described as the "*technical nerve-centre".*[209]

154 From 1928, Rhodesian Anglo American Limited ("RAAL", subsequently known as "Zamanglo"), Anglo's mining finance subsidiary, acquired shares in RBHDC and took over as consulting engineer until 1930.[210]

155 Anglo became involved in the Mine at a time when knowledge of the hazards of lead was already well-developed:

155.1 In the late 19th century, European nations had passed laws to protect against the harmful effects of lead, including the United Kingdom's Factory and Workshop (Prevention of Lead Poisoning) Act of 1883, which required lead factories to conform to certain minimum standards, as well as 1911 lead smelting regulations providing for limiting of exposure in the workplace.[211]

---

[207] AA p 001-2700 para 71.

[208] FA p 001-54 para 89.

[209] FA p 001-55 para 91. Not denied AA p 001-3070-1 paras 1075-9.

[210] FA p 001-55 para 92 - 93; Not denied AA p 001-3071 para 1077.1 – "*it was RAAL which was at all relevant times the direct but minority shareholder in RBHDC, not the Respondent*". AA p 001-2701 para 74 "*From 1928 to 1970, RAAL was always the company which held the direct shareholding interest in RBHDC*".

[211] FA p 001-78 para 148.

155.2 The 1893 Broken Hill Report had reported clear evidence of lead poisoning of surrounding communities in Broken Hill, Australia, caused by fumes from the lead smelters.[212]

155.3 A 1925 South Australian Royal Commission Report on Plumbism had documented the well-understood medical knowledge at the time about the risks of lead poisoning, acknowledging that the "*sole causative agents in industrial plumbism are leady dust and fume*".[213]

155.4 The Mine was well aware that the location of residential areas, in close proximity to the Mine, presented a danger to residents. An early letter from the RBHDC to the Mine's General Superintendent and consulting engineer, dated 30 August 1907, reported that:[214]

> "It is recognised by all who have experience in mining that a township existing close to a mining location is not desirable, and while benefits of little real value are obtained the interests of the Mine and the Public are, sooner or later, bound to clash in many ways…refuse, fumes and smoke from the furnaces of the mine plant, as well as water contaminated by the mining and metallurgical operations are drawbacks to which those employed in mining are of necessity always exposed, but which would be objected to by the outside public, and which would therefore give rise to dispute with Municipal Authorities, if the Township is too near to the mine area and works".

155.5 Just a year prior to Anglo's entry, in 1924, the Broken Hill Council had reported that "*[t]he fumes from the smelter cause discontent and trouble. They are indeed most noxious. One or two deaths have occurred from*

---

[212] FA p 001-71 para 140.

[213] FA para 144.4 p 001-76; Annexure ZMX58 p 001-1064 para 35.

[214] FA p 001-82-3 para 159; Annexure ZMX 64 p 001-1148 at 1150.

lead poisoning".[215] The matter-of-fact nature of the report on these deaths suggests that this was not unusual.

156 Despite this existing knowledge of the dangers, Anglo's acquisition of the Mine did not bring about any change in the highly pollutive technologies it employed, as the four open blast furnaces remained in operation.

157 The period until 1936 coincided with a significant decline in lead prices and the exhaustion of ore above the water table level.[216] Commercial smelting operations were discontinued in 1929 and a small production was maintained for plant use only. Between 1930 and 1936, lead production at the Mine was suspended and there was no consulting engineer.[217]

1937– 1946

158 By 1937, the Mine *"had reached a critical point*".[218] Easily mined ore reserves above the water table had been exhausted. To continue mining, different and more expensive extraction methods were required to exploit new ore reserves below the water table.

159 It was at this time that Anglo decided to expand its investment and involvement in the Mine significantly.[219]

---

[215] FA p 001-83 para 160. Annexure ZMX 65 p 001-1154 at 1158.

[216] AA p 001-2708 para 106.

[217] FA p 001-51 para 81.3; AA p 001-2708 para 107.

[218] Barlin Annexure ZMX 11 p 001-663.

[219] FA p 001-57 para 100 - 102; Admitted AA p 001-3071 para 1078.

160 From 1937, Anglo took over as the manager and consulting engineer,[220] through which it assumed "technical control" of RBHDC and the Mine.[221] It would remain in the role of consulting engineer for the next 27 years, until 1964.

161 Anglo financed and oversaw the sinking of a new shaft – the Davis Shaft – the installation of pump equipment, and a concentrator for the separation of lead and zinc sulphides.[222]

162 This "*bold venture*"[223] transformed the Mine's fortunes, allowing it to mine rich ore deep below ground, ensuring continued operations for much of the 20th century.

163 Despite this substantial investment, no efforts were made to replace the primitive blast furnaces or to introduce emission controls during this period. When production at the Mine resumed in 1936, the blast furnaces installed in the late 1910s were still in use, emitting lead-rich fumes directly into the atmosphere.[224]

164 Throughout this period and beyond, the Mine, under Anglo's direction, continued to construct accommodation for workers and their families on contaminated

---

[220] FA 001-56 para 97; Barlin Annexure ZMX 11 p 001-653. Partially admitted AA p 001-2701 para 76 (Anglo admits that from 1937 – 1949, it was appointed as "Managers and Consulting Engineers in South Africa and that between 1949 and 1962, Anglo was appointed as "Consulting Engineer"); AA 001-3082 para 1123 (Anglo denies that it was the "Mine Manager").

[221] FA p 001-57 para 100; Annexure ZMX 32 p 001-850.

[222] Barlin Annexure ZMX 11 p 001-664.

[223] Id "*this represented a bold venture into the integrated mining and treatment of the underground ores*".

[224] Harrison 2020 p 001-2653 para 19.

ground, in close proximity to the Mine site, placing them at great risk of ingesting and inhaling lead-contaminated dust from the Mine.[225]

165 Correspondence from 1942 shows that Anglo engaged directly with the North Rhodesia government, setting out the plans for further worker accommodation at the Mine and vigorously defending these housing plans against criticisms. There is little doubt that Anglo was the controlling mind.[226]

1946 – 1963

166 The post-war period, between 1946 and 1963, saw a substantial increase in lead production, generating approximately 29% of total lead production over the Mine's lifetime.[227]

167 In 1946, a new smelter, comprising five Newnam Hearths, was constructed to process lead from underground sulphide ore bodies.[228]

168 The primary purpose of these rudimentary emission controls was the recovery of valuable lead, not the protection of workers or local communities.[229] That much was apparent from a 1946 photograph of the Newnam Hearth plant in operation, showing "*copious emissions*" pouring from the furnace stacks:[230]

---

[225] RA para 85 p 001-7620. See also Annexure ZMX 102.

[226] Letter dated 28 June 1942 Annexure ZMX 53 p 1035.

[227] Annexure ZMX 79 p 001-1206; AA p 001- 2711 para 117.

[228] FA p 001-58 para 103.1; AA para 111 p 001-2709; Barlin FA Annexure ZMX 11 p 001-675.

[229] Betterton 2020 p 001-1628.

[230] Barlin Annexure ZMX 11 p 001-676; Betterton 2020 p 001-1625 (these emissions "*suggest that the baghouses were off-line at the time or not operating efficiently*").

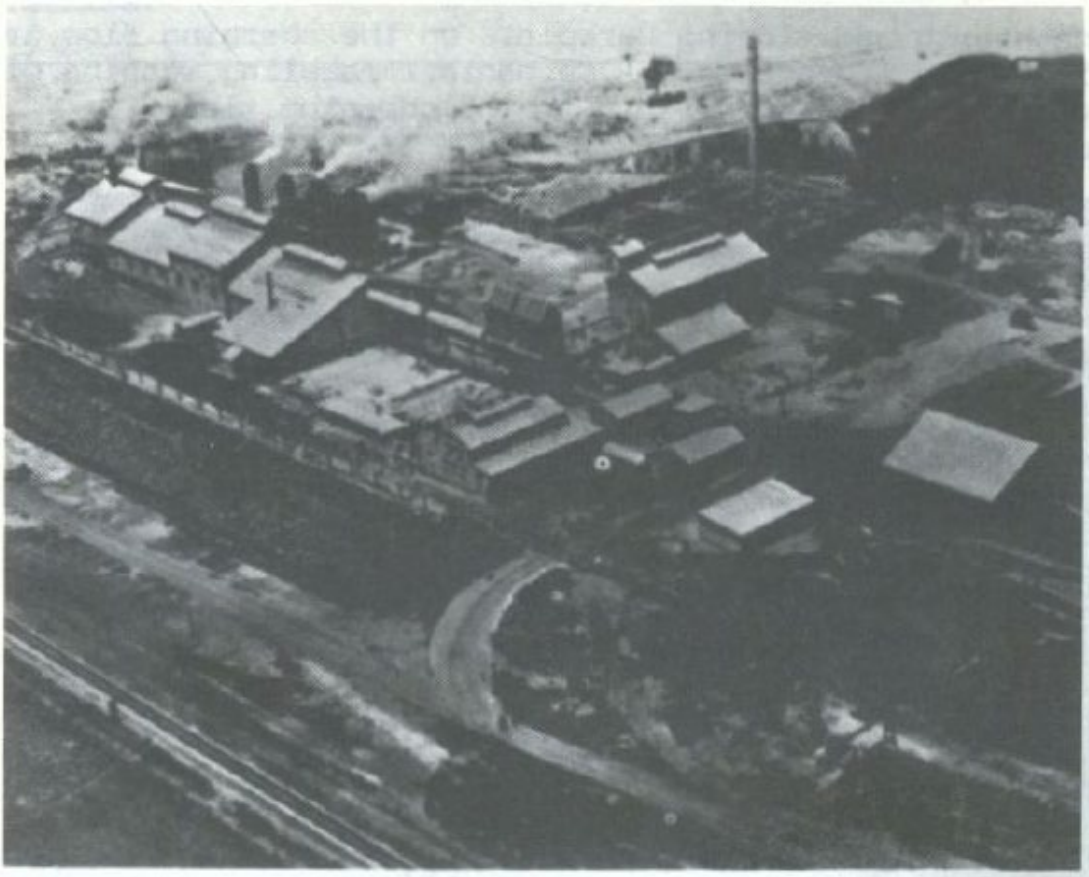


Figure 6 : Newnam Hearth Plant 1946 with sinter beds top right, and cupola type furnace stacks top left.

169 The prevailing conditions were vividly described by Mr CT Hardy, who conducted an inspection of the Mine in 1948.[231] "*An observer is struck*," Mr Hardy noted, "*by the enormous amount of fume given off from the blast furnace during the tipping of slag and lead*."[232] The furnaces "*stood in the open and the prevailing winds carry away the dust and fume in a direction past the main building*".[233]

---

[231] Hardy report Annexure ZMX 59 p 001-1066.

[232] Id p 1078.

[233] Id.

170 From 1947 onwards, RBHDC monthly reports described significant "stack losses" from the chimneys, numerous baghouse failures, and electrical problems with the precipitator, indicating that dust emissions were not well-controlled.[234]

171 Anglo's awareness of the gravity of the air pollution and the danger it posed is evident from correspondence in the late 1940s and early 1950s between Anglo's Chief Medical Officer, Dr van Blommestein, and Mine officials:[235]

171.1 In October 1947, the same month that the RBHDC's monthly reports described dust losses and baghouse failures, Dr van Blommestein alerted the Mine's management to the dangers of lead dust and fumes "*both inside and outside the plant*".[236]

171.2 Dr van Blommestein recommended a series of interventions, including better dust controls and frequent air quality testing. If such measures were not adopted, he predicted that there would be further cases of lead poisoning:

> *"The fact that there have already been cases of lead poisoning confirms the view that there should be stricter surveillance over the African employees in the change-house and further, means should be introduced for the detection of atmospheric lead and that the present system for the prevention of lead fumes should be improved upon in the smelting plant. If these methods are not adopted, it is my opinion that there will be a steady increase in the number of cases of lead poisoning in the future."*[237]

---

[234] Betterton 2022 p 001-9613 paras 11.1.5 – 11.1.11; Harrison 2022 pp 001-9537 - 9538 paras 7.42 – 7.43.

[235] FA p 001-83 – 88 paras 163 – 172; RA pp 001-7610 – 7612 paras 53 – 56. Annexures ZMX37 p 001-891; ZMX 67 – 70 pp 1164 – 1170 and Annexure AA19 p 001-4251.

[236] Van Blommestein October 1947 letter ZMX 67 p 001-1164.

[237] Id p 001-1165.

171.3 A December 1948 report from the Mine's manager, Mr Pickard, stated that Mine management "*largely agree[d] with the indictment in Dr van Blommestein's memorandum*" and would "*do [its] best to rectify matters*".[238] Further correspondence between Mine management that followed van Blommestein's letter are replete with vague statements of intent to address "*contamination of the air in the building*" and to "*maintain standards of cleanliness*".[239]

171.4 However, by October 1949, two years after his first intervention, Dr van Blommestein remained scathing in his assessment of the conditions at the Mine. He described air quality levels in the smelter plant as being *"far from satisfactory"* and noted that *"[t]he recognised standard for the air content in factories, workrooms and smelter plants ... have been considerably exceeded on every occasion on which an air analysis has been carried out".*[240] At the time, Anglo itself conceded that van Blommestein expressed "*a serious view of present conditions*", noting the "*gross vitiation of the air in the lead plant*".[241]

171.5 Despite Dr van Blommestein's warnings and recommendations, Anglo and the RBHDC Board elected not to incur the costs of implementing any significant preventative measures to address the problem.

---

[238] FA Annexure ZMX 68 p 001-1166 para 3.

[239] Id para 6.

[240] Annexure ZMX37 p 001-891.

[241] Annexure ZMX 68 p 001-1166 para 9.

171.6 The Assistant Manager of the Mine acknowledged the risk of lead poisoning but suggested it would be prudent to delay any capital expenditures on the dust control measures.[242]

171.7 The RBHDC board evidently agreed with this cost-cutting approach, as it approved only those pollution-reduction measures "*which could be completed within six months*".[243]

171.8 These documents show that officials sought to justify the delays and cost-cutting measures on the basis that a new smelting plant would be installed to replace the heavily polluting Newnam Hearth plant.[244]

171.9 However, the new Dwight Lloyd plant would only be introduced in 1953, more than six years after Dr van Blommestein first issued his warnings, and three years after the Mine resolved to take action. Such foot-dragging could hardly be described as a proactive approach to the problem, as Anglo now suggests.[245]

172 In January 1953, the new Dwight-Lloyd plant was installed, incorporating an eight-metre blast furnace fed by three Dwight-Lloyd sintering machines.[246] Dust emissions from the sintering machines were captured in three cyclone separators

---

[242] Annexure ZMX69 p 1167.

[243] Annexure AA 19 p 001-4251.

[244] Annexure ZMX69 p 1167. Betterton 2020 p 001-1635.

[245] Id.

[246] FA p 001-79 para 151.3; Betterton 2020 p 001-1625.

before being ventilated through a common stack, while the blast furnace emissions were captured by an electrostatic precipitator.[247]

173 Anglo contends that these new measures were "*modern pollution control technologies*".[248] However, the Mine's own reports and internal correspondence reveal that high levels of emission control were not achieved, and that the emission controls in place were not adequate to bring lead dust and fumes to acceptable levels. For example:

173.1 In July 1953, a report sent directly to Anglo in Johannesburg noted the seriousness of the dust conditions at the Mine and included review from the Mine medical manager stating that "*[u]nder present conditions, excessive lead absorption is unavoidable*".[249]

173.2 In September 1953, the RBHDC again wrote to Johannesburg seeking urgent guidance on this problem, noting that "*serious consideration be given to closing down the plant until adequate provisions are made for dust and fume collection otherwise we are likely to find ourselves in serious trouble with labour organisations and Government Authorities*".[250]

173.3 A monthly report to Anglo in August 1955 records that "*most of the bags in the fan recovery baghouse are known to be in poor condition which*

---

[247] Betterton 2020 p 001-1625.

[248] AA p 001- 2715 para 130.

[249] FA p 001-88 para 173.1; Annexure ZMX 71 p 001-1171.

[250] FA p 001-88 para 173.2; Annexure ZMX 71 p 001-1172.

account for the increased loss amounting to 5.4% in comparison with only 3.8% last month".[251]

173.4 High losses in the baghouse were also recorded in the monthly report for September 1955 which referred to a breakdown of the main flue chain leading to ventilation to atmosphere.[252] This was clearly not resolved quickly as the report for November 1955 refers to considerable leakage to atmosphere from hoods and flues, and the baghouse mechanism being in need of overhaul.[253]

173.5 The monthly reports also list frequent problems with the Cottrell electrostatic precipitator, which led Prof Harrison to the conclusion that it was not operating effectively for much of the time.[254]

174 The impact of smoke and fumes on the surrounding community did not pass unnoticed or unremarked. In 1955, the government's Provincial Medical Officer reported that he had received complaints from the residents of Kabwe about the fumes from the Mine that were blowing "*directly over their houses*" and covered the area in "*dense smoke and pungent fumes*" which were "*most offensive and irritating*". He reported that the Mine's medical officer was dismissive and "*didn't think much could be done about it*".[255]

---

[251] RA p 001-7633; Annexure ZMX 108 p 001-7973; Harrison 2022 p 001-9537 para 7.42.

[252] RA p 001-7634 para 126.2; Annexure ZMX109 p 001-8009; Harrison id.

[253] Id; Annexure ZMX110 p 001-8043.

[254] Id.

[255] FA p 001-88 para 174; Annexure ZMX 72 p 001-1173.

175 By 1957, it had become apparent that the Dwight-Lloyd plant was not yielding the desired profits.[256] At this point, the old, heavily polluting Newnam Hearth plant was brought back into operation from 1957 to 1962.

176 There is no evidence to suggest that the recommissioning of the old plant was accompanied by any new pollution controls, as recommended by Dr van Blommestein almost a decade earlier.[257] This was despite the fact that the Mine ostensibly delayed investments to address Dr van Blommestein's concerns until the Newnam Hearth had been replaced.[258]

177 The immediate consequences of inadequate emissions control at the Mine during this period, from 1946 to 1962, are apparent from the Mine's own reports and Anglo's own expert's assessments:

177.1 Monthly reports of the RBHDC from 1954 and 1955 refer to a substantial percentage of lead (typically up to 25%) in the process being "*unaccounted for*". There is evidence of annual atmospheric emissions of lead amounting to 407 long tons in 1952 and 252 long tons in 1954.[259]

177.2 In early 1957, an investigation by the Anglo Research Department into the lead loss from the blast furnace stack revealed stack losses from furnaces of approximately 506 long tons annually.[260]

---

[256] Barlin Report p 001-669.

[257] FA p 001-89 para 176; Not denied AA p 001-2717 para 136, p 001-3092 paras 1164 – 1165.

[258] See [171171] above.

[259] Harrison 2022 p 001-9537 para 7.42, p 001-9539 para 7.45.

[260] Betterton 2022 p 001-9614 para 11.1.9.

177.3 In June 1960, a report entitled "*Lead Losses from Newnam Hearth Doyle Impingers*" revealed that a total of approximately 26 long tons of lead were discharged from stacks each month, amounting to 312 long tons per year, in addition to the emissions from the blast furnaces.[261]

177.4 Anglo's own expert, Mr George, admits that "*measurements in 1960 showed that under 2% of lead feed was lost through the Doyle impinger stacks compared to 3% from the bag house*" and, further, that in relation to the Dwight-Lloyd sinter machines, "*Barlin states 4.7% stack and unaccounted loss which is comparable to the loss on the 1962 sinter plant fitted with an ESP*".[262]

177.5 Prof Harrison puts these figures in proper perspective, explaining that a 5% loss of lead to the atmosphere would, on a conservative estimate, have equated to between 750 – 1000 tons of lead emissions per annum in this period.[263]

178 By May 1959, the Mine's management knew about lead poisoning in local dogs[264] and damage to local livestock and crops at the neighbouring Routledge Farm. In a candid letter addressing this lead contamination at the farm, the Mine acknowledged that "*for many years past, we have without doubt been polluting the Kamakuti dambo and the Muswishi River*".[265]

---

[261] Betterton 2022 p 001-9615 para 10.1.8, citing report entitled "Lead Losses from Newman Hearth Doyle Impingers", June 1960 (EABref28)

[262] George Report pp 001-3411-2 paras 32.5 and 32.7.

[263] Harrison 2022 p 001-9538 para 7.42.

[264] Annexure ZMX 106 p 001-7971.

[265] Annexure ZMX 97 p 001-7908.

179 Despite the prevalence of fugitive lead fumes and dust, and signs that lead pollution was poisoning the surrounding community, Anglo provided substantial capital, in the form of loans, to allow for the investigation and construction of the Imperial Smelting Furnace (ISF).[266]

179.1 In 1957, after a project team was established to study smelting technology at other plants around the world, it was decided that the Mine would install an ISF, similar to the one in operation in Avonmouth, England.[267]

179.2 The ISF process would later be shown to generate appreciable pollution of the terrestrial and aquatic environment in the surrounding area in Avonmouth.[268]

179.3 Nevertheless, Anglo's consulting engineers recommended that the ISF and ancillary plant be erected at the Mine.

1964 - 1974

180 In 1964, Zambia gained independence, leading RBHDC to change its name to the Zambian Broken Hill Development Corporation ("ZBHDC").

181 The mining industry was eventually nationalised by the newly independent Zambian government, leading to the formation of the Nchanga Consolidated

---

[266] See Annexure AA 10 p 001-4256 ("Finance") "*Towards the end of the year, Anglo American Corporation of South Africa agreed to provide additional temporary loan facilities of £750,000 bearing 61 per cent interest on amounts drawn, which are repayable by the end of 1963. By 31st December 1961, drawings against the total loan facilities of £2.25 million, provided by the Corporation, had amounted to £1.59m*".

[267] FA p 001-80 para 152.1.

[268] Harrison 2022 p 001-9517 para 7.1.

Copper Mines Ltd ("NCCM", later “ZCCM”) in 1970. In 1971, ZBHDC became a division of NCCM.

182 Anglo’s role in the Mine underwent changes during this period, but it retained effective oversight and control over the key operations:

182.1 In 1964, Anglo American Corporation (Central Africa) Limited (AACCA) was interposed as the consulting engineer / technical adviser to the Mine.[269] AACCA was a wholly owned subsidiary of Anglo, which was under Anglo’s direction and control as part of the “group system”.[270]

182.2 In 1970, the Anglo Group and the Zambian government concluded an agreement, in terms of which the Anglo group would provide managerial and other services to the NCCM mines, including the Kabwe Mine.[271]

182.3 Pursuant to this agreement, Anglo American Corporation Management and Services AG (AACM), a Swiss-registered subsidiary of Anglo, took over AACCA’s role as consulting engineer / technical advisor in 1970.[272]

182.4 Throughout this period, ZBHDC and the Mine were listed in Anglo documents as being “*administered*” and “*managed*” within the Anglo group.[273] This was further evident from the web of cross-directorships during this time.[274]

---

[269] FA p 001-60 para 109.

[270] FA p 001-60 paras 109 – 110; Not denied AA p 001-3070 paras 1075 – 1079.

[271] FA p 001-61 para 115; Annexure ZMX42 p 001-925.

[272] FA p 001-61 para 116.

[273] FA p 001-61 para 111; Not denied AA p 001-3070 paras 1075 – 1079.

[274] FA p 001-61 para 113; Annexure ZMX21 p 001-805.

183 By early 1962, the Mine had installed an integrated treatment system consisting of the Imperial Smelting Furnace, a concentrator, leach plant and sinter plant.[275]

184 Installation of the ISF plant saw a substantial increase in lead production, with the period from 1964 to 1974 accounting for approximately 31 – 33% of the Mine's lifetime lead production.[276] Nevertheless, this new system proved "*extremely difficult to operate*" and was plagued by breakdowns and problems.[277]

185 While the new plant was equipped with emission controls, a stream of reports and internal correspondence highlighted the inadequacy of the controls during this period:

185.1 Notes prepared for the 1963 RBHDC Annual report confirmed that almost 16 years after the endorsement of Dr van Blommestein's recommendations and the purported adoption of mitigation measures, there were still high incidences of lead absorption in employees.[278]

185.2 Local residents continued to complain about noxious fumes coming from the Mine, as reflected in extracts of minutes of sessions of the Municipal Council of Broken Hill Health and Trade Committee in 1963, which note that the nuisance was becoming more frequent and affecting a wider area.[279]

---

[275] FA Betterton 2020 p 001-1625.

[276] Annexure ZMX 79 p 001-1206. Anglo provides the higher estimate of 33%, see AA p 001-2718 para 139.

[277] Betterton 2020 p 001-1625.

[278] Annexure ZMX 95 p 001-7892 ("this high incidence of lead absorption is causing great concern").

[279] FA p 001-90 para 178; Annexure ZMX 75 p 001-1194.

185.3 An Imperial Smelting Furnace (ISF) Safety Meeting held on 27 June 1968 reported that lead in air tests would be continued to monitor lead contaminations around the various sections of the plant.[280] A year later, these regular tests highlighted the significant issues with the lead-in-air pollution of the sinter plant to such an extent that it was the topic of Report on Accident and Safety from 1969 by the Mine's Safety Engineer, which had the follow to say about the state of pollution at the ISF:

> *"Probably the greatest source of hazard on this plant is an inherited one, that is to say, the lead in air pollution from the sinter plant and the Refinery tends to settle out on the I.S.F particularly In the Charge-handling section"*[281]

185.4 The report goes on to describe the additional safety issues the Mine was contending with:

> *"Another aspect of safety not often mentioned but of great significance if allowed to get out of hand is the control of effluents into the drains and canals. Control at the source is of course the only effective remedy, and all persons concerned are urged to make absolutely certain that any dangerous waste are suitable treated before they become a hazard. So far as possible we should also give the same attention to atmospheric pollution of all kinds".*[282]

186 Despite the many warnings, it was only in 1969, with the arrival of Dr Lawrence, a young doctor appointed as a medical officer at the Mine, that the first attempts to investigate the problem of community contamination in Kabwe began.[283]

---

[280] Annexure ZMX 100 p 001-7936.

[281] Annexure ZMX 101 p 001-7940.

[282] Id p 001-7942.

[283] Dr Lawrence's affidavit and witness statement, pp 001-2631 – 2639.

187 Dr Lawrence's alarming findings have been discussed above. Once Anglo was alerted to these findings, it commissioned Professor Lane and Dr King from the University of Manchester, UK to investigate the findings and produce a report. The Applicants have not yet been able to locate a copy of this report and Anglo claims to have no knowledge of its whereabouts.[284] However, it is clear from contemporaneous memoranda discussed below that report of Professor Lane and Dr King confirm endorsed Dr Lawrence's findings and made recommendations for reduction in environmental lead contamination.

188 By 1970, the same year that Dr Lawrence forwarded his report to the Mine's Management, annual lead production reached over 27,000 tons.[285] In both 1972 and 1973, Dr Whitcombe, the Medical Director of the Anglo Group, discussed Dr Lawrence's work in Kabwe with him during visits to Anglo's head office.[286]

189 In 1971, Dr A.R.L Clark, a young doctor on the mine, followed on Dr Lawrence's investigation with an MSc thesis under the supervision of the London School of Hygiene and Tropical Medicine.[287]

189.1 His research was prompted by reports of eight Kabwe children dying from suspected lead poisoning.[288]

---

[284] RA p 001-7604 para 30.3. Annexure ZMX90 p 001-7863.

[285] Annexure ZMX 79 p 001-1205.

[286] Lawrence p 001-2638 para 28.

[287] Annexure ZMX3 p 001-357.

[288] Id p 001-360.

189.2 Between 1971 and 1974, Dr Clark surveyed the BLLs of children in Kabwe and found these to be up to 20 times the limits set by the US Centre for Disease Control at the time.[289]

189.3 Dr Clark's investigation confirmed extensive lead contamination and adverse health effects caused by significantly elevated blood lead levels in children and pregnant women living in these three villages.

189.4 The study identified atmospheric lead emissions as the primary source of lead pollution and soil samples taken from Kasanda, Chowa, and Makululu showed elevated lead levels, which Dr Clark attributed directly to "fall out originating from the smelter stack".[290]

189.5 Dr Clark also recorded a number of cases of encephalopathy and death in the early 1970s resulting from lead poisoning. Dr Clark demonstrated that the elevated levels of lead pollution in these communities were correlated with dangerously high blood lead levels (BLLs).[291]

189.6 There can be no doubt that the Mine would have been aware of this: in the acknowledgments, Dr Clark thanked the Mine management for their "*permission*" to undertake the survey and the Anglo Group Medical Adviser for "*making this survey possible*".[292]

---

[289] ZMX3 p 001-408 - 412 figure 3^3, 3^4, 3^5 RA p 001-26 para 31.

[290] ZMX3 page 11, RA p 001-92 para 181.4.

[291] ZMX3 page 96-7,RA p 001-55 para 93.

[292] Anglo attempts to disavow knowledge of the report, by claiming that the Group Medical Adviser was an employee of AACCA. However, it must be remembered that AACCA was a wholly-owned subsidiary of Anglo, operated under Anglo's centralised "group system". As indicated above, Dr Lawrence remembers that Dr Whitcombe, the Medical Director of AASA, raised his findings with him in 1972 and1973.

190 Dr Clark's findings were validated by a 1972 study which described Kabwe as a "*highly contaminated area containing mining residues"* and noted that it *"extended into a residential area*".[293] The very high levels of lead in soil were described as "*a well-known and unfortunate side effect of the mining industry*". The authors noted further that "*cases [of lead poisoning] do undoubtedly occur. It is a revealing indication of the attitudes of former administrators to find that workers' homes and a school lie within the polluted area, in the path of the prevailing wind*".[294]

191 Notwithstanding the work of Dr Lawrence and Dr Clark, and the preparation of the Lane report, no substantial steps were taken to address the problem of lead pollution in the wider community.

192 A note from July 1970, marked "Urgent and Confidential", acknowledged Professor Lane's recommendation that the whole township be moved but notes that Mr Trevor Lee-Jones, the ZBHDC General Manager at the time, rebuffed the proposal, saying that it "*would be far too expensive*". Lee-Jones apparently asked Professor Lane to "*please think again*."[295]

193 Professor Lane's alternative remediation proposal was to "*[s]crape the top layer of ground from the whole township area and replace it with unpolluted earth or laterite; at the same time the dumps should be covered, and the roads should be tarred*". This was also refused on the basis that it was *"impracticable*" and would

---

[293] Annexure ZMX77 p 001-1200.

[294] Id p 001-1202.

[295] RA p 001-7622 para 92.2; Annexure ZMX107 p 001-7972.

"*lead to potential panic*".[296] Instead, reference was made to a proposal by Mr Lee-Jones to construct 488 new houses, noting that the new houses could be built over a period of time "*causing no panic and satisfying the Union*".

194 In a 10 July 1970 meeting, reference was again made to the "Lane Report", which was to be sent to the "*appropriate people*" with a report on what action had been taken.[297] The meeting notes listed a series of measures to be taken including watering dumps, tarring roads, and replacing 448 houses in the so called "bad area". At the same meeting, the death of a child from lead poisoning was raised in passing, before discussion swiftly moved on to planning for the new Waelz kilns.[298]

195 A letter in September 1970 referred to a further meeting between Anglo and Mine representatives to discuss the Lane recommendations.[299]

195.1 The letter outlined the extent of the lead pollution problem from Mine dust, the cost of suppressing dust on the dumps, tarring roads and moving houses exposed to the dust problem.

195.2 The proposed interventions extended as far as doing the bare minimum to wet the Mine dumps, tar some local roads, and relocate employees from the Kasanda township to the new development in the Chowa township.

---

[296] Annexure ZMX 107 p 001-7972.

[297] RA p 001-7622 para 92.1; Annexure ZMX105 p 001-7969.

[298] Annexure ZMX105 p 001-7969.

[299] FA p 001-90 para 179; Annexure ZMX 76 p 001-1195.

The remediation of the land, by scraping and replacing topsoil in Kasanda, was again rejected.[300]

195.3 The letter also contained repeated reference to the "*squatter problem*" in the area. At paragraph 6, the Mine's General Manager displayed the Mines general attitude of indifference to the harm that it was causing to the local community by suggesting that once the Mine's employees had been moved from the affected townships "*we could withdraw completely from involvement with the squatter problem as none of our employees would be in the area*."[301]

195.4 Despite recognising the problem of lead pollution, no measures were proposed or contemplated to protect this "*squatter*" community against the acknowledged risks of lead pollution and little regard was shown for the other non-employee residents of the affected townships.

196 The deadly level of lead pollution in Kabwe is hardly surprising when one considers an internal memorandum dated 24 April 1970, which confirms that throughout this period, the Mine had not been upholding the highest engineering and maintenance standards:[302]

> "*It has become obvious that the present standard of plant environs maintenance, scrap material disposal, dump materials handling and maintenance spares control is not sufficiently high".*
>
> *"It is undoubtedly true to say that the major contributory factor is the "Broken Hill Attitude", which may be summed up as:- The place has*

[300] Id p 001-1196 para 3.

[301] Id p 001-1198 para 6.

[302] Annexure ZMX 89, p 001-7861. Betterton 2022 p 001-9617 para 11.1.14.

> *always been in a state so a bit more rubbish or another dump here or there will not make much difference*".[303]

197 Contrary to what Anglo now suggests, the report was not concerned with mere housekeeping. Under the heading "*The cause*", the report's author indicated that one of the manifestations of the attitude of neglect was the "*lack of control of water and air borne effluent*".[304]

198 This "Broken Hill Attitude" sheds a rather unflattering light on the Mine's culture while under Anglo's effective control. As Prof Betterton concludes:

> *"[I]t was the Broken Hill Attitude that resulted in so much environmental pollution for so long while Anglo operated the mine and smelting operations. Poor housekeeping as described in the internal memo included the indiscriminate sitting of material dumps; the overloading of vehicles which caused material to be deposited all over the road; the lack of control of air borne effluents. This led to excessive airborne dust which would have deposited in Kabwe just a few kilometres downwind, for example. Roads that were left unpaved also contributed to excessive airborne dust."*[305]

199 A further report, from 1971, detailed an investigation following instructions from the General Manager to determine measures to reduce incidence of "*lead in blood*." The report noted that the "*present system of care and maintenance is totally inadequate and in the opinion of the investigator constitutes a health hazard."*[306]

200 While Anglo's direct control of the relevant Mine operations ceased in 1974, the levels of lead poisoning in Kabwe have remained consistent. As Prof Harrison

---

[303] Id.

[304] Id.

[305] Betterton 2022 p 001-9617 para 11.1.15.

[306] Annexure ZMX 96 p 001-7898.

and Prof Betterton explain, lead pollution that was already in the soil by the time that Anglo's formal involvement ended in 1974 and which was the product of two thirds of the lead output over the full life of the mine, would have accounted for much of the measured soil reservoir of lead still in the soil today.[307]

1974 – 1994

201 From 1974 to 1994, operations continued under the control of NCCM, later renamed Zambian Consolidated Copper Mines ("ZCCM").

202 After 1974, the Anglo Group remained heavily involved in the Mine affairs, even though it may not have exercised *de facto* control:

202.1 Anglo remained an active minority shareholder, through direct and indirect shareholdings.[308]

202.2 There were extensive cross-directorships between Anglo, NCCM/ZCCM, AACCA, Zamanglo and ZCI.[309] Anglo executives continued to sit on the NCCM / ZCCM Board as "B" Directors.[310]

202.3 After nationalisation, Anglo employees were seconded to NCCM.[311]

---

[307] RA p 001-7666 para 195 - 196. Harrison 2022 p 001-9539 para 7.43, p 001-9544 para 8(h); Betterton 2022 p 001-9648 para 13.2.

[308] FA p 001-64 para 123.1; Annexure ZMX 47 p 001-997.

[309] FA p 001-64 para 123.3 Response at AA p 001-3072-5 paras 1083 – 1090.

[310] Annexure ZMX 117 p 001-8159.

[311] FA p 001-64 para 123.2.

202.4 It also appears that ZCCM approached Anglo for engineering advice, well after they stopped acting as consulting engineer to the Zambian operations.[312]

203 A ZCCM report confirmed that metallurgical practices employed in this period were essentially the same as in the pre-1974 period. Only in the operations of the Waelz Kilns had there been a significant change.[313]

204 The Mine installed the Waelz kilns in 1975, which had been designed and planned by Anglo, together with ACCAA, in its capacity as consulting engineer and technical adviser.[314] Those kilns were used to process slag and waste from previous smelting operations, which was then fed into the Imperial Smelter Furnace to increase lead output.[315]

205 Internal reports reveal a history of increasingly troubled operations after 1974, which resulted in low lead production and various breakdowns in the emission-control equipment.[316]

206 After annual lead production reached 26,783 long tons in 1970, it fell to 18,536 long tons in 1975 and to less than 2,000 long tons in 1994 when operations ceased.[317]

---

[312] FA p 001-65 para 123.4; Response at AA p 001-3072-5 paras 1083 – 1090.

[313] Annexure ZMX113 p 001-8096.

[314] RA p 001-7645 para 150.

[315] RA p 001-7645 para 149.

[316] Betterton 2020 p 001-9619 para 11.2.3.

[317] Annexure ZMX 79 p 001-1206; Admitted AA p 001-2730 para 176.

207 Total post-Anglo production amounted to some 180,000 long tons, which is just 34% of Anglo's total lead production (528,000 long tons) and approximately 22% of the total lead production over the lifetime of the mine.[318]

1994 to the present day

208 The Mine closed in 1994, following the years of declining production and profits.

209 This occurred at a time of turbulent economic reforms, as the Zambian government embarked on an aggressive programme of privatisation throughout the 1990s, which included the privatisation of ZCCM assets and operations.[319]

210 Anglo remained the "principal minority shareholder" of ZCCM, through its holdings in ZCI, throughout the 1990s until at least 2000.[320] Its directors also remained on the ZCCM Board through this period.[321]

211 In 1995, Mr JA Holmes, an Anglo director on ZCCM's board until 2000, delivered a speech entitled "The Anglo Group's Views on the Future of ZCCM". He emphasised that Anglo had "*attempted to play a constructive role as minority shareholder*" which Holmes said was "*to be supportive and helpful in the process*

[318] Id.

[319] RAID Report ZMX 122 p 001-8256.

[320] Id p 001-8288.

[321] RA p 001-7657 para 172.

of planning the future of the company".[322] Documents from the time further reflect Anglo's active role in the ZCCM board's affairs.[323]

212 Following the closure of the Mine, various initiatives were attempted by ZCCM and other actors to remediate and rehabilitate the Kabwe environment, in recognition of the substantial lead contamination at the site and surrounding areas. These initiatives included:

212.1 ZCCM's 1995 Decommissioning Plan;

212.2 The Copperbelt Project, an initiative of ZCCM, the OECD and the World Bank, which ran from 2003 to 2011;

212.3 The 2016 "Zambia Mining Environment Remediation and Improvement Project" (ZMERIP) a joint initiative of ZCCM and the World Bank.

213 These initiatives, implemented at great cost, have broadly failed to address the widespread lead contamination in Kabwe.

214 Various reports and reviews over the years have analysed the reasons for these failed remediation efforts. A dominant factor is the sheer enormity and cost of addressing almost a century of pollution and neglect. Blame has been squarely placed on the period before the 1970s, while Anglo was in effective control of the Mine operations:

---

[322] RA Annexure ZMX 119 p 001-8163.

[323] RA p 001-7657 - 7658 paras 174 – 177.

214.1 ZCCM's Decommissioning Plan noted that in Kabwe, "*[a]s is common with all mines world-wide, prior to the 1970's, mining, mineral and metallurgical processing operations were carried out with minimal regard for the protection of the environment*".[324]

214.2 A 2003 report by the World Bank further acknowledged that in Kabwe and the Copperbelt, "*[p]rior to 1980, little attention was paid to the environmental impacts of mining activities in Zambia. Pollution and environmental degradation, and their impact on public health and ecosystem functions, were considered to be an acceptable trade-off given the economic benefits and jobs provided by mining."*[325]

214.3 The report continued, "*[a]t the time of the privatization, ZCCM was burdened with a huge "environmental mortgage" accrued over 70 years of mining operations, which it could not address because it lacked the necessary resources*".[326]

214.4 A further World Bank report from 2011 specifically acknowledged that "*ZCCM was burdened with enormous environmental liabilities accrued over 70 years of mining operations*."[327]

---

[324] Annexure AA 54 p 001-4703.

[325] Annexure AA64 p 001-4936.

[326] Annexure AA 65 p 001-4937.

[327] Annexure AA 90 p 001-6285 para 3.

215 Anglo further seeks to blame ZCCM for engaging in "*hurried and ill-advised*"[328] privatisation efforts through the 1990s and early 2000s, which deprived it of the resources, skills and capacity to conduct a proper remediation effort.

216 The irony, however, is that Anglo played a leading role in these privatisation initiatives and, contemporaneous reports suggest, was a major beneficiary. We return to address this below. It suffices to say that Anglo's role in these disastrous privatisation efforts – described as an "*object lesson in how not to privatise"*[329] – will be a matter of considerable interest in pre-trial discovery.

217 As will be demonstrated in Chapter VI, Anglo's attempts to shift all blame to ZCCM only serve to highlight Anglo's own negligence before 1974. Anglo accuses ZCCM of failing to take "common sense" steps to address ongoing contamination in Kabwe, yet Anglo failed to take those steps when it had the opportunity and means to do so.

218 The effort to remediate the Kabwe environment will undoubtedly require the combined action of the Zambian government, ZCCM and civil society. However, the failure thus far of other parties to clean up the mess created by Anglo does not absolve Anglo of its civil liability for its historical wrongdoing.

---

[328] AA p 001-2850 para 510.

[329] Annexure ZMX 122 p 001-8217.

E. THE PRIMA FACIE CASE AGAINST ANGLO

219 This history of Anglo's involvement in the Mine lays the groundwork for the analysis to follow in Chapter VI, where we address the triable issues to be determined in the class action. The historical evidence presented in this chapter demonstrates that Anglo has more than a prima facie case to answer at trial. In short, the Applicants will show that:

219.1 Anglo owed a duty of care to the members of the classes, due to its *de facto control*, technical advice provided to and management of the relevant aspects of the Mine operations, which is not meaningfully disputed by Anglo.

219.2 Anglo negligently breached that duty of care, as the harms of lead pollution were both foreseen and/ or reasonably foreseeable and Anglo failed to take the required steps to protect the class members from harm;

219.3 Anglo's negligence caused or materially contributed to the existing levels of lead pollution in Kabwe and the resulting actionable harm; and

219.4 ZCCM's actions and omissions after 1974 did not break this chain of causation.

V THE CLASS DEFINITIONS

220 The general requirements for a valid class definition are now well-established:

220.1 First, the class must be defined with sufficient precision that class membership is objectively determinable; and

220.2 Second, the class must not be unnecessarily broad.[330]

221 These requirements are not inflexible rules. They are subordinate to the interests of justice and must be approached purposively. The main purposes of a class definition are to facilitate the notification of prospective class members; to identify who is bound by the outcome; and to determine who is entitled to relief.[331]

222 The test for a valid class definition does not depend on the merits of the claim, nor does it depend on whether all of the prospective class members would succeed in a claim against Anglo. The merits of the prospective class members' claims are one thing, the validity of the class definition is another.[332]

223 This was helpfully articulated in a recent judgment of the Ontario Supreme Court in *Heller*, where the Court explained that a proposed class definition is not defective "*because it may include persons who ultimately will not have a successful claim against the defendants.*"[333]

---

[330] *CRC Trust* (n 23) at paras 29 - 31; *Nkala* (n 22) at para 44.

[331] *Stellenbosch University Law Clinic and Others v Lifestyle Direct Group International (Pty) Ltd and Others* [2021] ZAWCHC 133; [2021] 4 All SA 219 (WCC) at paras 61 – 63 ("*Stellenbosch University*"); *CRC Trust* (n 23) at para 29.

[332] *CRC Trust* (n 23) at paras 32 – 34, warning of the difficulties of making class membership depend on the outcome of the case.

[333] *Heller v Uber Technologies Inc.* 2021 ONSC 5518 at para 171.

224 In this chapter, we demonstrate that the proposed class definition satisfies the requirements by addressing four topics:

224.1 The competing class definitions proposed by the Applicants and Anglo;

224.2 The scope of the Applicants' class definitions is appropriate and not overbroad;

224.3 The classes are objectively determinable; and

224.4 The proposed definitions are in the interests of justice.

A. THE PROPOSED CLASS DEFINITIONS

225 The proposed class definitions, set out in full above, reflect two classes: a) the class of children; and b) the class of women of child-bearing age.[334]

226 Both sets of classes are defined by four criteria: a) age; b) current residence in the Kabwe District; c) a further minimum residence period linked to age; and d) injury.

227 Thus, the class of children comprises: a) children under the age of 18 on the date that the certification application was launched, being 20 October 2020; b) who reside in the Kabwe District, Central Province, Zambia; c) in the case of children over the age of seven, have lived in the Kabwe District for at least two years between the ages of zero and seven; and d) who have suffered injury as a result of exposure to lead.

---

[334] See [17] above.

228 The class of women of child-bearing age, comprises: a) women over the age of 18 and under the age of 50 on 20 October 2020; b) who reside in the Kabwe District; b) have lived in the Kabwe District for at least two years between the ages of zero and seven; and d) have been pregnant or are capable of falling pregnant and have suffered injury as a result of exposure to lead.

229 Anglo complains that the classes are overbroad and not objectively determinable. It attempts to exclude thousands of prospective class members in three key respects, confining the classes to:

229.1 Current residents of Kasanda, Makululu and Chowa (what it terms the "KMC" townships), to the exclusion of all other affected children and women in the Kabwe District;[335]

229.2 Who either have blood lead levels of 80 µg/dL or more, combined with encephalopathy or colic; or have blood lead levels of 45 µg/dL or more, combined with anaemia and peripheral neuropathy;[336] and

229.3 Excluding any adult women who suffered injuries before 20 October 2017.[337]

230 This attempt to narrow the classes is unjustified and inappropriate. Even on Anglo's own evidence, reducing the scope of the class in this way would result in

[335] AA p 001-2945 para 762.

[336] AA p 001-2949 para 771.

[337] AA p 001-2952 para 782.

the arbitrary exclusion of potentially thousands of individuals who share an interest in the determination of the common issues.

231 Anglo's various attacks on the proposed class definitions further reflect an impermissible attempt to ask this Court to decide a range of triable issues under the guise of definitional concerns. Most of Anglo's complaints are, in truth, arguments on the merits of the prospective class members' claims, involving complex factual and legal disputes on which the parties' respective experts disagree. Anglo cannot seek to use the class definition to avoid a fair trial of these disputes.

B. THE SCOPE OF THE CLASS DEFINITIONS: APPROPRIATE BREADTH

232 The breadth of the class definitions is tested, primarily, by the existence of common issues of fact or law that can be conveniently resolved in the interests of all members of the class.[338]

233 As we show in Chapters VI and VII, there are a range of important common issues that will be efficiently determined on a class-wide basis, for the benefit of all class members.

234 In *Hollick,*[339] the Supreme Court of Canada provided a useful test for overbreadth: can the class be defined more narrowly without arbitrarily excluding some people who share an interest in the resolution of the common issues? This

---

[338] *CRC Trust* (n 23) at para 31.

[339] *Hollick v Metropolitan Toronto (Municipality)* 2001 SCC 68 at para 21.

is "*not an onerous"* requirement, as *"[t]he representative need not show that everyone in the class shares the same interest in the resolution of the asserted common issue."*[340]

235 Therefore, the question is not whether the class definitions can be made narrower. It is also not whether the proposed definitions are broad. Instead, the proper question is whether the definitions are unnecessarily broad, such that narrowing the definitions would not arbitrarily exclude people with an interest in the common issues.

236 The Applicants' proposed class definitions are intentionally cast in inclusive and encompassing terms. This is to ensure that those who have claims against Anglo, and an interest in the determination of the common issues, are not irrationally excluded. For the vast majority of these prospective class members, this is the only opportunity to have these matters determined in a court, due to the access to justice considerations we have already outlined. Arbitrary line-drawing will therefore result in irreparable injustice.

237 As against the irreparable prejudice that class members will suffer if they are excluded from the class, Anglo will suffer no prejudice from their inclusion in the class. If the class members whom Anglo seeks to exclude from the class can prove their claims against Anglo, then they ought to be included in the class. If these members cannot prove their claims against Anglo because of issues that

[340] Ibid at para 21.

Anglo raises in an attempt to confine the size of the class, then they will obtain no relief at trial and Anglo will suffer no material harm by their inclusion.

238 The classes in this case are likely to be large, with an upper estimate of more than 140,000 children and women of child-bearing age.[341] That is to be expected of an environmental disaster on this scale. But the size of the potential classes does not render the class definitions over-broad.

239 This Court addressed the point in *Nkala*, where it noted that *"the sizes of the two classes may be very large, but that does not make the class definition overbroad or the class-action trial unmanageable."*[342] This Court added that "*once it is found that there are sufficient common issues affecting the entire classes that can be determined at one hearing or, if the hearing is split into stages, at the first stage, then it follows as a matter of logic that the class definitions are not overbroad. Concomitantly, it cannot be unmanageable.*"[343]

240 This Court endorsed the views of the Federal Court of Australia in J*ohnson Tiles Pty Ltd v Esso Australia Ltd* on this issue of class size:[344]

> *"It would be a strange result indeed if an issue which was clearly a substantial issue if litigated by one party ceased to be a substantial issue merely by reason of the fact that it was being litigated by many parties. If that were so, the benefits to be derived from [the Australian class action rules] . . . namely the saving of court time, the saving of parties' costs, the efficient administration of justice and so on, would*

---

[341] FA p 001-27; Thompson p 001-1686 (Children in Kabwe with elevated BLLs) and p 001-1687 (women of child-bearing age with elevated BLLs).

[342] *Nkala* (n 22) para 53.

[343] Ibid.

[344] J*ohnson Tiles Pty Ltd v Esso Australia Ltd* [1999] FCA 636 para 16.

be available to a small group in a case such as this, but would be lost if the group were very large."

241 Nonetheless, Anglo complains that the definitions are overly broad in three respects:[345]

241.1 The geographical scope;

241.2 The range of injuries; and

241.3 The inclusion of adult women whose claims, it alleges, have prescribed under Zambian law.

242 We address each of these complaints in turn.

Geographical scope

243 Residence in the Kabwe District was chosen as a pragmatic geographical limit to the proposed classes that will facilitate proper notification while also ensuring sufficient commonality.

244 Each of Zambia's provinces are sub-divided into administrative districts. The Kabwe District is one of nine districts in the Central Province, with its headquarters in the town of Kabwe.[346]

245 The merits of this geographic limit are fourfold:[347]

---

[345] AA p 001-2398 745.

[346] RA p 001-7731 para 391.

[347] RA p 001-7731 para 390.

245.1 The Kabwe District has an official, clearly demarcated boundary line;

245.2 It is well understood by prospective class members;

245.3 It allows for targeted class notification; and

245.4 It encompasses all of the areas that Anglo accepts are worst affected by lead pollution.

246 The Applicants' attorney, Ms Mbuyisa, has spent significant time in Kabwe and confirms that prospective class members would immediately know whether they live inside or outside of the Kabwe District.[348]

247 The added benefit is that a court could easily determine and verify whether a person resides within the Kabwe District.

248 By contrast, Anglo seeks to argue for a narrower geographical limit to the classes, confined to the so-called "KMC" townships, or some other ill-defined dividing line, and limited to plaintiffs who have BLLs of 45ug/dL or 80 ug/dL and one of Anglo's four signature injuries. This proposal suffers from patent errors.

249 First, Anglo's proposed restrictions would, on its own version, arbitrarily exclude thousands of potential class members.

249.1 On the estimations provided by Anglo's own expert, Prof Canning, limiting the geographical scope of the class in this way would exclude an estimated

[348] RA p 001-7731 para 392.

1,624 children with a BLLs of over 45 µg/dl and 79,392 children with BLLs of over 5 µg/dl.[349]

249.2 Prof Canning's figures are likely a significant underestimation, as he ignores children who had elevated BLLs in the past.[350] Prof Thompson has presented more accurate figures and shows that the Anglo definition would exclude between 89 000 and 99 000 children with BLLs of over 5 µg/dl, 17 000 to 26 000 children with BLLs of over 25 and 7 000 to 9 000 children with BLLs of over 45.[351] In any event, the figures of Prof Canning provide a powerful illustration, which Anglo cannot deny, of the arbitrary consequences of its position.

250 Second, Anglo's proposal is likely to cause untold confusion, both for the prospective class members and the trial court:[352]

250.1 Ms Mbuyisa confirms that the Kasanda, Makululuu and Chowa townships are not officially demarcated areas. They are loose names used by residents to describe amorphous residential areas that bleed into one another.[353]

250.2 This would make it difficult for residents to determine whether they are members of a class, and virtually impossible for a court to make an

---

[349] Canning p 001-3968 para 93 (summary); p 001-3852 (Table 4b, BLL exceedances in Kabwe); p 001-3856 (Tables 7a – 7c, BLL exceedances in KMC townships). RA p 001-773 paras 401 – 404.

[350] RA p 01-7734 para 405.

[351] See Thompson 2020 p 001-1686; Thompson 2022 p 001-9671 - 9678 paras 23 - 39.

[352] RA p 001-7731 para 392.

[353] Id at para 392.1.

objective determination, particularly as the proposal does not account for the movement of residents within the Kabwe District.

250.3 Equally, a definition based on a particular radius from the Mine would also cause incalculable confusion among prospective class members and would be unworkable.

251 Third, Anglo's arguments in favour of these narrower boundaries are, in truth, disguised arguments on the merits of the prospective class members' claims.

251.1 Anglo contends that a wider class definition, encompassing the Kabwe District, could only be valid if the Applicants can show, at certification stage, that Anglo and the Mine have caused lead contamination in the entire District.[354]

251.2 This is an incorrect test, as Anglo seeks to conflate the merits of the prospective class members' claims, which will be determined at trial, with the question of an appropriate class definition.

251.3 Whether lead contamination from the Mine spread across the Kabwe District, and to what degree, is a key issue in dispute, as it goes to the question of causation. Anglo cannot seek to use the class definition to deprive class members of the adjudication of this issue.

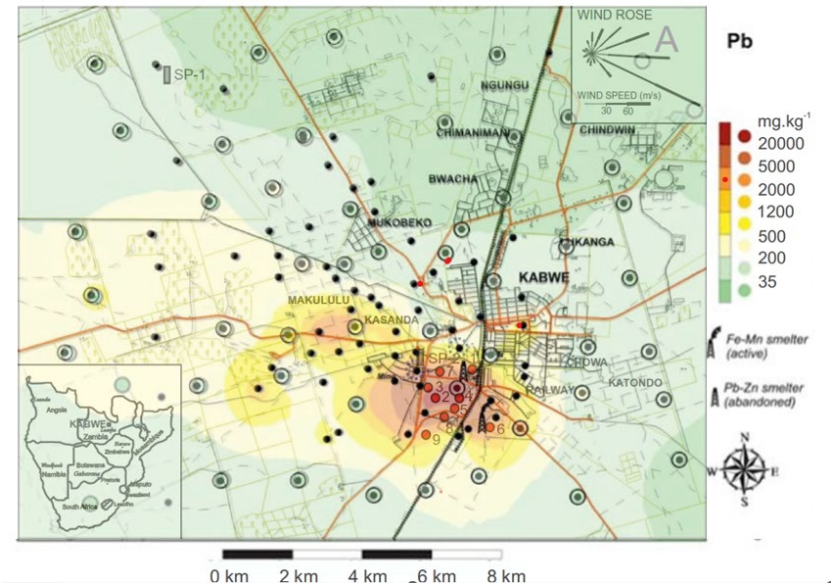
252 Fourth, the Applicants have presented compelling *prima facie* evidence of widespread contamination, that is not confined to the KMC townships or a

[354] AA p 001-2939 para 749.

defined radius. We address this topic of geographical distribution in further detail in Chapter VI.[355] For present purposes it suffices to observe the following:

252.1 Prof Betterton's modelling of the dispersal of lead from the Mine's smelter, which broadly accords with ZCCM's own modelling, indicates that lead pollution from the Mine was indeed capable of spreading across the District and was not confined to the KMC townships.[356]

252.2 The Kříbek study and "heat map" of the worst soil lead contamination, reproduced above, shows that contamination is not contiguous with the KMC townships or any defined radius from the Mine. This is illustrated by overlaying the heat map on a separate map of Kabwe and surrounds, also contained in that study:[357]



[355] See [456] - [461] below ("The geographical distribution of lead contamination").

[356] RA p 001-7640 paras 142 – 148; Betterton 2022 p 001-9605 para 9.

[357] Annexure ZMX14 p 001-711 (Fig 1), p 001-713 (Fig 3).

253 Fifth, Anglo's argument in favour of these narrower boundaries appears to rely on the misconceived understanding, informed by the opinions of Drs Beck and Banner, that the BLLs found in the wider District, do not cause harm,[358] because Anglo does not accept that BLLs evidence actionable harm until they have reached a level almost 10 times that at which the South African statutory framework requires a confirmed diagnosis of lead poisoning to be made and the case to be reported to the Department of Health under the Regulations relating to the Surveillance and the Control of Notifiable Medical Conditions. For present purposes it should be noted that:

253.1 The Applicants' experts Professors Lanphear and Bellinger have set out in detail the strength and weight of the prevailing evidence on the health effects of low level lead exposure. On this basis and in stark contrast to Anglo's experts – whose opinions is at odds with the mainstream medical opinion - they consider that it is more likely than not that a child with a BLL as low as 5 µg/dl will have suffered cognitive impairment, to which lead has significantly contributed.[359]

253.2 Thus, while children and women living in the KMC townships tend to be among the worst affected by lead poisoning, on average, this does not mean that children and women living elsewhere in the District are unaffected. Study after study has shown that children across the Kabwe District register dangerously high BLLs, and in any event, BLLs that fall

[358] AA p 001-2944 paras 758-760.

[359] RA p 001-7689 – 7690 paras 262 – 263; Bellinger pp 001-9340 – 001-9451; Lanphear pp 001-9452 – 001-9514.

squarely above the threshold for actionable harm.[360] As pointed out above, even on the figures of Anglo's own expert, Prof Canning, limiting the geographical scope of the class in the way sought by Anglo would exclude an estimated 1,624 children with a BLLs of over 45 µg/dl. Even Anglo must accept that those 1,624 children have a triable case on the issue whether they have suffered actionable harm. Once it is recognised that the debate over actionable harm must at least engage with the uncontroversial claim that a BLL of 5 µg/dl evidences actionable harm, on Professor Canning's figures, Anglo's definition would exclude from the class on geographical grounds 79,392 children with BLLs of over 5 µg/dl who are entitled to a judicial determination of whether they have suffered actionable harm.

Injuries and blood lead levels

254 Anglo's attempt to confine the classes to significantly elevated blood lead levels (above 45 µg/dl or 80 µg/dl) and just four conditions is also misguided.[361] In contrast, the Applicants do not limit the class to a specific measurement of lead in the blood. As set out above, many members of the class will have suffered an injury directly attributable to lead exposure even at a relatively low BLLs.[362]

255 Anglo again are abusing the certification process in a premature attempt to decide a range of triable issues without a trial. These include the thresholds for

---

[360] Summarised by Dargan p 001-1797 – 1805 paras 6.4 – 6.15; See table of studies in Canning p 001-3834 (Table 1).

[361] AA p 001-2949 para 771.

[362] FA p001-111, para 236.

actionable injury, the causal link between elevated blood lead levels and specific injuries, and the copious expert evidence on these points, which we have addressed in Chapter III and will address further in Chapter VI.

256 Anglo's arguments for limiting the class definitions in this way rely on the evidence of a Dr Banner, a United States-based paediatrician and toxicologist. It suffices to say that Dr Banner's contrarian position on lead poisoning is fringe, at best; his views have not been accepted by trial courts in the United States; and his opinions are heavily skewed in favour of the lead industry. In Chapter VI H below, we summarise some of the questions over his expertise and objectivity that have been raised in the papers, which the Applicants intend to advance in cross-examination at trial.[363]

257 Dr Banner's evidence is also countered by the Applicants' experts, Profs Dargan, Bellinger and Lanphear, who, by contrast, have unimpeachable credentials and are recognised leaders in the field. Furthermore, their opinions – unlike those of Doctors Banner and Beck – are entirely consistent with the recommendations and standards of the WHO and CDC. The existence of such disputes is ample proof that this matter must be resolved at trial and not through quibbles over the class definition.

258 Finally, to place Anglo's extreme position in proper perspective, it would mean that

---

[363] See RA p 001-7714 paras 337 – 339, p 001-7721 – 7728 paras 359 – 380; AA in Strike Out p 006-369 – 372 paras 130 – 137.

258.1 virtually none of the child victims of lead poisoning in Flint, Michigan would have been entitled to pursue a claim. This was one of most well-documented modern examples of mass lead poisoning, which has attracted international outrage and litigation, and

258.2 BLLs of more than 10 times the level at which a confirmed diagnosis of lead poisoning is required by law in South Africa would be treated as insufficient to establish a claim for personal injury.

Zambian limitation law

259 Anglo argues that Zambian law imposes a strict three-year limitation of claims, arising from the date that harm arose, regardless of knowledge of the claim. On that basis, it contends that any adult woman who suffered harm before 20 October 2017 ought to be excluded from the proposed class, irrespective of whether they had knowledge of a cause of action.

260 Anglo's argument turns on two mistaken assumptions:

260.1 First, Anglo wrongly assumes that the Zambian limitation law will automatically apply to any claims before this Court.

260.2 Second, it wrongly assumes that this complex matter of private international law can be disposed of at the certification stage.

261 Under our private international law, the procedural laws of other countries do not ordinarily apply to matters litigated in our courts. Procedural matters are

determined by our law (as the *lex fori*) while substantive issues are determined by the foreign law applicable to the cause of action (the *lex causae*).[364]

262 Our courts recognise a distinction between two different types of time bar provisions: purely procedural limitation laws and substantive prescription provisions. In *Society of Lloyd's v Price*, the SCA explained the distinction in the following terms:

> "*A distinction has traditionally been drawn, in both South African and English law, between two kinds of prescription/limitation statutes: those which extinguish a right, on the one hand, and those which merely bar a remedy by imposing a procedural bar on the institution of an action to enforce the right or to take steps in execution pursuant to a judgment, on the other. Statutes of the former kind are regarded as substantive in nature, while statutes of the latter kind are regarded as procedural."*[365]

263 Limitation laws, such as the Zambian provision, have been consistently classified as procedural in nature by courts in both South Africa and in England, as these laws establish a procedural bar to litigants pursuing remedies while leaving their substantive rights intact.[366]

264 In *Yew Bon Tew v Kenderaan Bas Mara*,[367] dealing with the effect of the English Limitation Act, 1980, the Privy Council explained that the limitation "goes *only to the conduct of the suit; it leaves the claimant's right otherwise untouched in theory so that, in the case of a debt, if the statute-barred creditor has any means*

---

[364] *Society of Lloyd's v Price; Society of Lloyd's v Lee* 2006 (5) SA 393 (SCA) at para 10.

[365] Id. Cited with approval in *FAWU obo Gaoshubelwe v Pieman's Pantry (Pty) Ltd* 2018 (5) BCLR 527 (CC) at para 184; *Competition Commission of South Africa v Pickfords Removals SA* (Pty) Ltd 2021 (3) SA 1 (CC) at para 33.

[366] *Price* id at para 17; *Kuhne & Nagel AG Zurich v APA Distributors (Pty) Ltd* 1981 (3) SA 536 (W) at 537 – 538. Forsyth *Private International Law* 4 ed (2003) at 21 – 22.

[367] *Yew Bon Tew v Kenderaan Bas Mara* [1982] 3 All ER 833 (PC) at 835J – 836A.

of enforcing his claim other than by action or set-off, the Act does not prevent his recovering by those means".

265 The Zambian limitation law is a direct import of the English limitation law.

265.1 Section 2 of the British Acts Extension Act makes the English Limitation Act, 1939 (since repealed in England) applicable to Zambian law, subject to amendment. Section 2(1) of the Limitation Act provides as follows:

> "The following actions shall not be brought after the expiration of six years from the date on which the cause of action accrued, that is to say:
> (a) actions founded on a simple contract or on tort."

265.2 This provision was later amended by the Law Reform (Limitation of Actions, etc) Act of Zambia, which replaced the six-year period in the Limitation Act with a three-year period, but without changing the essential character of the limitation.

265.3 On its plain wording, this provision is merely a procedural bar to an action, which is not destructive of the underlying rights.

266 In contrast with the Zambian law, the characterisation of our Prescription Act is not clear. It has historically been treated as substantive law, as it is framed in terms that extinguish rights rather than merely barring remedies.[368] However, notwithstanding the Constitutional Court treats our Prescription Act as a matter of procedural law and has repeatedly held that the Prescription Act limits the

[368] *Price* id at para 16; *Gaoshubelwe* (n 365 above) at para 184; *Pickfords* (n 365 above) at para 33.

fundamental right of access to court.[369] The fundamental right of access to court concerns itself with issues of process, not issues of substantive law.

267 So, there is a debate over the proper characterisation of the Prescription Act for the purposes of private international law. At best for Anglo, South African law may still treat prescription as a matter of procedural law and that would leave a gap. On a strict application of the private international law rule *neither* law would then apply to the prospective class members claims.

268 Earlier cases determined that where such gaps arise, the South African Prescription Act would always apply by default.[370]

269 In *Society of Lloyd's v Price*,[371] the Supreme Court of Appeal adopted a more nuanced, case-by-case approach.

269.1 That matter concerned a choice of law between the Prescription Act and the English Limitation Act, 1980 in circumstances where litigants sought to enforce judgments granted in English courts based on the law of contract. Under the Limitations Act, 1980 the claim was still alive. Under the Prescription Act, the claim would have prescribed.

269.2 Having found that there was a gap, the SCA explained that the choice between the South African and English law involved a three-stage inquiry:

---

[369] *Makate v Vodacom Ltd* 2016 (4) SA 121 (CC) at paras 87 to 90; *Myathaza v Johannesburg Metropolitan Bus Services (SOC) Limited t/a Metrobus and Others* 2018 (1) SA 38 (CC) at para 22.

[370] See *Society of Lloyd's v Price; In re Society of Lloyd's v Lee* [2005] 2 All SA 302 (T); *Laconian Maritime Enterprises Ltd v Agromar Lineas Ltd* 1986 (3) SA 509 (D).

[371] *Price* (n 364).

a) a provisional determination whether the South African law of prescription (the *lex fori*) was substantive or procedural; b) a provisional determination whether the English limitation law (the *lex causae*) was substantive or procedural; and c) a policy-laden determination of which law ought to apply.[372]

269.3 The SCA explained that the final, policy-laden decision is one that "*is aimed at serving individual justice, equity of convenience by selecting the appropriate legal system to determine issues with an international character*." That decision must further "be *sensitive to considerations of international harmony or uniformity of decisions, as well as the policies underlying the relevant legal rule*."[373]

269.4 The SCA concluded that in the particular circumstances of that case, justice demanded that the English law be applied to keep the contractual claim alive and to give effect to the expectations of the parties, who had contracted in English law and were subject to English law in every other respect.[374]

270 In this case, there are strong considerations of policy and justice that would favour applying our more permissive Prescription Act, with its knowledge requirements. This is because the Zambian limitation law would have the unjust and unconstitutional effect that, in violation of the fundamental right of access to court in South Africa:

---

[372] Ibid at paras 14, 15, 17 and 26.

[373] Ibid at paras 25 – 26.

[374] Ibid at paras 27 – 29.

270.1 Women of child-bearing age, who may have suffered terrible injuries before 20 October 2017, would be entirely excluded from any claim;

270.2 This limitation would apply regardless of whether these women knew of the facts underpinning their cause of action or Anglo's identity;

270.3 The limitation would apply despite the fact that many of these women are poor and indigent, with no means to prosecute their claims in Zambia; and

270.4 This limitation would potentially apply even if the harm suffered by these women is ongoing and would not have prescribed.

271 By contrast, section 12(3) of our Prescription Act is far more permissive, as there is a clear knowledge requirement. Prescription only begins to run when a person has actual or constructive of the wrongdoer's identity and the other minimum essential facts from which their claim arises.[375]

272 Our courts have repeatedly held that they may refuse to apply foreign laws where doing so would be contrary to public policy.[376] In this context, the section 34

---

[375] Section 12(3) provides that a debt is only deemed to be due, and the prescription period only begins to run, when *"the creditor has knowledge of the identity of the debtor and of the facts from which the debt arises: Provided that a creditor shall be deemed to have such knowledge if he could have acquired it by exercising reasonable care.*" See further See *Johannes G Coetzee & Seun and Another v Le Roux and Another* [2022] ZASCA 47 (8 April 2022) at paras 11 – 12; *Truter and Another v Deysel* 2006 (4) SA 168 (SCA) paras 16, 18, 19 and 22; *Minister of Finance and Others v Gore NO* 2007 (1) SA 111 (SCA) para 17; *Mtokonya v Minister of Police* 2017 (11) BCLR 1443 (CC); 2018 (5) SA 22 (CC) para 48.

[376] *Sperling v Sperling* 1975 (3) SA 707 (A): *"[i]t is undoubtedly true that public policy operates generally as an overriding check upon the application in our Courts of the rules of a foreign lex causae*". See further *Weatherley v Weatherley* 1879 Kotze 66 at 83 - 85; *Seedat's Executors v The Master* 1917 AD 302 at 307 – 308; *Burchell v Anglin* 2010 (3) SA 48 (ECG) at para 127. See further Forsyth *Private International Law* (4ed) 109 – 115.

constitutional right of access to court would be best advanced by allowing these women's claims to proceed.[377]

273 Accordingly, there are very strong arguments for the trial court to disregard the Zambian limitation law. But in any event, these complex, policy-laden matters are not suitable for determination at the certification stage, let alone through the fixing of a class definition. They are a triable issue that must be properly ventilated and determined by the trial court.

[377] See, for example, *Mohlomi v Minister of Defence* 1997 (1) SA 124 (CC)*; Moise v Greater Germiston Transitional Local Council: Minister of Justice and Constitutional Development Intervening (Women's Legal Centre as Amicus Curiae)* 2001 (4) SA 491 (CC); *Potgieter v Lid van die Uitvoerende Raad: Gesondheid, Provinsiale Regering, Gauteng en Andere* 2001 (11) BCLR 1175 (CC)*; Engelbrecht v Road Accident Fund and Another* 2007 (6) SA 96 (CC); *Road Accident Fund and Another v Mdeyide* 2011 (2) SA 26 (CC) at para 10; *Makate v Vodacom* 2016 (4) SA 121 (CC) at para 91*; Links v Member of the Executive Council, Department of Health, Northern Cape Province* 2016 (4) SA 414 (CC).

C. THE CLASSES ARE OBJECTIVELY DETERMINABLE

274 The two proposed classes are objectively determinable, as class membership is not determined by subjective beliefs, but by objective criteria.

275 This requirement of objectivity does not mean that all of the prospective members of the class be identifiable at the outset, or even at the first stage of the proceedings. Instead, as this Court explained in *Nkala*, the class must "*be defined with sufficient precision as to allow for a particular individual's membership to be objectively determined*"[378] at some stage in the proceedings.[379]

276 In *Nkala*, the respondents argued that the two proposed classes were not objectively determinable, as mineworkers would have to receive an expert medical diagnosis of silicosis or TB before their membership could be determined. Since most of the mineworkers did not have access to medical experts, it was argued that class membership, and the rights to opt-out and opt-in, were left to the subjective belief of the mineworkers that they may suffer from these conditions. The *Nkala* Court rejected this argument on two primary grounds.

277 First, this Court held that the class definition was sufficiently objective as a "*mineworker's claim to membership is not determinative of his actual*

---

[378] *Nkala* (n 22) at para 44.

[379] Id at para 48.

membership". Instead, membership was to be finally determined through medical examination, which rendered the definition sufficiently objective.[380]

278 Second, this Court held that in two-stage class action proceedings, such as this case, class membership does not need to be fixed during the first-stage determination of common issues. It suffices that class membership would be established during the second, opt-in stage of the proceedings, when class members come forward to prove their individual claims and submit to expert medical diagnosis of their conditions.[381] The Court explained the point as follows:

> *"[T]he mineworkers have consciously elected to ask for a certification that allows for, or endorses, a two-stage process. They describe it as a bifurcated process. For the moment it bears noting that the first stage involves an opt-out procedure. This means that any mineworker or dependants of a mineworker who fail to give notice to opt out of the class action will be deemed to be part of it. During this stage the mineworker or his dependants need not prove actual membership of either of the classes. Thus, proof of actual membership is not a matter that should concern the trial court in the first stage of the proceedings. It is, therefore, no bar to the certification of the class action based on the class definition outlined above."*[382] (Emphasis added)

This Court went on to explain that:

> *"Once the common issues are determined, and should the case proceed to the second stage, then the individual mineworker, or his dependants, will have to produce cogent evidence demonstrating that he contracted silicosis or TB. If he (or they) fails to do so, then he (or they) simply will not have a claim. His (or their) case is no different from any other mineworker, or mineworker's dependants, who fails to prove that he worked on the mines for a period of two years."*[383]

---

[380] Ibid at para 48.

[381] Ibid at paras 47 to 50.

[382] Id at para 48.

[383] Id.

This Court drew support for this view from the practice in Australia and Canada, together with academic writing:

> *"In our view there simply is no need for the entire class membership to be determined before the common issues of fact or law can be determined, or before relevant evidence common to all class members, and which advances the cases of each class member, is entertained. This approach is consistent with the practice adopted in the Australian and Ontario statutes, whose practical utility is well captured in the following dictum of Cummings J sitting in the Ontario Superior Court:*
>
> > *' (T)he undoubted complexity of follow-on individual issues does not detract from the merit in resolving a preliminary common issue . . . .'*
>
> *In terms of this approach there is no need to identify individual class members during the first stage of the class action. As the learned author Professor Mulheron reminds us:*
>
> > *' It must simply be accepted that the determination of whether each individual is a member of the class can only properly be made at some stage after the resolution of the common issues. . . . (T)he class most certainly does not have to be built at the very commencement of the proceedings.'*[384]

279 The Applicants merely ask for the same standard to be applied in this case.

280 We now turn to address the specific complaints raised by Anglo against specific components of the definitions.

---

[384] Id at paras 49 – 50. Citing Mulheron *The Class Action in Common Law Legal Systems: A Comparative Perspective* (Hart: Portland, 2004) at 337.

"Suffered injury as a result of exposure to lead"

281 Anglo's primary complaint is that the requirement that class members must have "*suffered injury as a result of exposure to lead*" is allegedly too subjective.[385] Anglo contends that:[386]

281.1 The definition does not explain what constitutes an injury resulting from exposure to lead;

281.2 This would require the prospective class members to take a blood test to check their blood lead levels, as some class members may feel healthy but have elevated lead levels.

281.3 It is difficult to establish whether particular illnesses are caused by exposure to lead, as opposed to other causes, without expert medical diagnosis.

282 The phrase "*suffered injury as a result of exposure to lead*"" is indeed wide and encompassing, but that is necessary to include the range of illnesses and harms that flow from lead exposure and to avoid arbitrary exclusions. The benefits of this definition are two-fold:

282.1 First, it acknowledges the medical consensus that there is no safe level of lead in the blood, and that harm may occur from exceedingly low levels.

---

[385] AA p 001-2953 para 789.

[386] AA p 001-2954 - 2956 para 790.

282.2 Second, it is consistent with the medical evidence that there is a broad spectrum of conditions and illnesses that flow from lead exposure.[387]

283 Any need for prospective class members to undergo a blood test, potentially followed by medical examination, is no impediment to the class definition. As held in *Nkala,* medical diagnosis is a sufficiently objective measure of membership, which takes this beyond the realm of subjective speculation.[388]

284 Moreover, the fact that an individual's class membership may not be conclusively determined at the first, opt-out stage of the litigation is no barrier to certification of the class. Again, in *Nkala,* this Court held that it is sufficient that class membership be determined during the second, opt-in stage of the class action, when individual class members opt-in to prove their individual claims and undergo medical testing and evaluation.[389]

285 Anglo further contends that the need for medical diagnosis and testing will somehow deprive prospective class members of a meaningful opportunity to opt-out at the first stage of the litigation. It contends that *"[a] healthy person that failed to opt out because she did not know that she had an elevated BLL did not have* a *meaningful opportunity to opt out - and may be bound by* a *judgment without her consent* as a *result."*[390] This concern is unfounded for two reasons:

---

[387] See Chapter III above.

[388] *Nkala* (n 22) at para 48.

[389] Id at paras 47 to 50.

[390] AA p 001-2954 para 790.2.

285.1 First, the scenario that Anglo imagines - of otherwise healthy Kabwe residents, entirely unaware of their injuries, being deprived of a meaningful to pursue future claims against Anglo - is so remote as to be irrelevant.[391] In any event, given the uncontested evidence of the barriers faced by the prospective class members in litigating individual claims, it is clear that this class action represents the only meaningful opportunity for class members to have the common issues decided. So Anglo's notional plaintiff can suffer no prejudice by being included in the class: if the class action is successful, s/he obtains compensation which s/he would otherwise not have received; if the class action fails s/he loses the right to pursue a claim that s/he would not practicably have been able to pursue anyway.

285.2 Second, Anglo's concern applies with equal, if not greater, force to its proposal to confine the classes to specific BLLs and specific injuries. That proposal would also require blood tests and medical diagnosis, but would exclude all but the most severe cases of lead poisoning.

286 As we have pointed out above, confining the classes to high BLLs and four specific injuries would not only arbitrarily exclude the majority of victims of lead poisoning, but would also pre-empt a central triable issue: the thresholds for actionable injury.

---

[391] An analogy can be drawn with the Constitutional Court's treatment of the outlier group of "jammergevalle" in *Minister of Finance v Van Heerden* 2004 (6) SA 121 (CC) at paras 55 – 56. The present case is, obviously an *a fortiori* case. The "jammergevalle" constituted 10% of the class affected by the *Van Heerden* case. If there exist any of Anglo's notional class members who would want to opt out but would not know that they are in the class, they would constitute a tiny fraction of a percent of the total number of class members in the present case.

287 Anglo's complaints about alleged "circularity" therefore ring hollow, given that its own proposals are truly circular, dependant as they are on this Court finding in Anglo's favour on the thresholds for actionable harm.[392]

Cut off date for residence in Kabwe

288 Anglo complains that while the class definition requires that class members must reside in the Kabwe District it does not specify a cut-off date for residence. The Applicants had always assumed that this was obvious: it would be the deadline for filing an opt-out notice, because that is the date on which class membership is fixed. If it is necessary to make that explicit in the order certifying the class, the Applicants have no objection to that.[393]

Date of injury

289 Similarly, Anglo complains that the class definition does not specify when a person must have suffered injury as a result of exposure to lead.[394] This, too, would be the date of the opt-out deadline date because that is the date on which class membership is closed. Again, if it is necessary to make that explicit in the order certifying the class, the Applicants have no objection to that.

---

[392] AA p 001-2956 – 2957 paras 791 – 793.

[393] RA 001-7739 para 425.

[394] AA p 001-2952 para 786.

Cut-off date for children under the age of seven

290 Anglo complains that in relation to the sub-class of children under seven, the class definition contains no requirement for a child to have lived in Kabwe for any length of time. By contrast, children over the age of seven and adult women must have lived in Kabwe for at least two years between the ages of zero and seven, but not for children younger than seven.[395]

291 The two-year residence requirement for older children and adult women is a pragmatic limit. It reflects the medical evidence that young children are most at risk of exposure to lead and register the highest BLLs. By contrast, an older child or an adult woman who did not live in Kabwe during these ages, or has only recently moved to Kabwe, will be less likely to have suffered the worst exposure.

292 To apply the two-year cut-off to young children under the age of seven would arbitrarily exclude those most at risk. It would mean that infants under the age of two would be excluded.

D. THE INTERESTS OF JUSTICE FAVOUR THE PROPOSED CLASS DEFINITIONS

293 The interests of justice ultimately favour the class definitions as proposed by the Applicants. These definitions avoid the arbitrary exclusion of class members with an interest in the resolution of the common issues, while presenting a pragmatic, workable definition that facilitates class notification and identification.

---

[395] AA p 001-2953 para 788.

294 Anglo's attempt to substantially reduce the size of the class by narrowing the class definition is not appropriate, as it results in arbitrary exclusion and unworkable standards which are likely to sow confusion.

VI THE EXISTENCE OF TRIABLE ISSUES

A. THE TEST FOR TRIABILITY

295 For the purposes of certification, this Court need only be satisfied that there is a cause of action raising a "*triable issue*". This is not a high threshold.[396] It requires a two-fold enquiry:

295.1 First, whether there is a "*prima facie*" case on the facts; and,

295.2 Second, whether there is an arguable case on the law.[397]

296 In *Children's Resource Centre Trust*, Wallis JA addressed the requirements for a prima facie case in certification proceedings, emphasising that *"[it] is not a difficult hurdle to cross*" and that it *"should not pose any insuperable difficulties for an applicant for certification.*"[398] He further explained that a prima facie case on the facts is established where:

296.1 The applicant has presented "*evidence which, if accepted, will establish a cause of action and that the mere fact that such evidence is contradicted will not disentitle the applicant to relief — not even if the probabilities are against him*".[399]

---

[396] *CRC Trust* (n 23) at paras 39 to 41.

[397] *De Bruyn v Steinhoff International Holdings N.V. and Others* [2020] ZAGPJHC 145 (26 June 2020) at para 120 ("De Bruyn").

[398] *CRC Trust* (n 23) at paras 40 – 41.

[399] Id at para 40.

296.2 A court would only conclude that there is no prima facie case if "*it is quite clear that the applicant has no action, or cannot succeed*."[400]

296.3 While this test does not "*preclude the court from looking at the evidence on behalf of the person resisting certification*", it would only find that there is no prima facie case where the respondent's evidence "*is undisputed or indisputable or where it demonstrates that the factual allegations on behalf of the applicant are false or incapable of being established.*" (Emphasis added) [401]

296.4 This is "*not an invitation to weigh the probabilities at the certification stage*."[402]

297 As regards novel legal claims, Wallis JA held that "*provided the novel claim is legally plausible, the standard is met and the claim survives scrutiny and must be determined in the course of the action*".[403] Wallis JA also noted that, in respect of the recognition of new legal duties that are policy-laden and fact-sensitive, "*[t]he need for the court to be fully informed in regard to the policy elements of the enquiry militate against that decision being taken without evidence.*"[404]

298 In this chapter we demonstrate that the Applicants have more than satisfied the low-threshold test for triability.

---

[400] Id.

[401] Id at para 41.

[402] Id.

[403] Id at para 37.

[404] Id. See the gloss on this in *De Bruyn* (n 397) at paras 15 – 24.

299 As we have already noted, Anglo has shown little regard for this test. Instead, it has sought to turn this certification application into a full hearing of the merits. The extensive evidence and vigorous disputes between experts that have unfolded in the papers are ample demonstration that there are triable issues. We repeat that it is unnecessary to resolve the disputes in these proceedings, as they are matters for the trial court. Nevertheless, the strength of the Applicants' case and the weaknesses in Anglo's defences are already manifest.

B. THE APPLICABLE LAW AND THE TORT OF NEGLIGENCE

300 As this is an action to be tried in South Africa, based on a cause of action that largely arose in Zambia, the parties agree that substantive issues are to be determined by Zambian law (the *lex causae*).[405]

301 The cause of action is grounded in the tort of negligence, on which Zambian law mirrors relevant English common law principles.[406]

302 The Applicants' expert on Zambian law, Mr Mwenye SC, a former Attorney General, has carefully summarised the role of English law and decisions in Zambian law:[407]

302.1 English common law is part of Zambian law by virtue of section 2(a) of the English Law (Extent of Application) (Amendment) Act 2011, Chapter 11.[408]

---

[405] *Price* (n 364) at para 10.

[406] Mwenye 2020 p 001-1707 para 6.19 – 6.22.

[407] Id p 001-1702 paras 6.1 – 6.18.

[408] Mwenye 2022 p 001-9685 paras 4.3 – 4.11.

302.2 This means that English common law principles form part of Zambian law and are binding on Zambian courts, whereas the decisions of English courts are highly persuasive, even though not absolutely binding.[409]

302.3 In deserving cases, Zambian courts may depart from English decisions if there are good and compelling reasons to do so, but will not depart from established principles.[410]

302.4 Therefore in the present matter, a Zambian court would, for example, be bound to apply English common law principles of negligence and would be highly persuaded by the recent decisions and reasoning of the Supreme Court of the United Kingdom on parent company liability.[411]

303 This much was accepted in *Vedanta*, an action instituted in the UK in which Zambian law applied, which proceeded on the basis that the relevant principles of Zambian tort law are in accordance with English tort law.[412]

304 The components of the tort of negligence are well-settled. The Zambian Supreme Court repeatedly cites and applies the test outlined by the House of Lords in *Donoghue v Stevenson*,[413] and subsequent cases, requiring proof of:

304.1 A duty of care;

---

[409] Id p 001-9688 para 4.12.

[410] Id p 001-9689 para 4.19.

[411] Id p 001-9691 para 5.1.

[412] *Vedanta Resources PLC and another v Lungowe and others* [2019] UKSC 20 at para 56 ("Vedanta"). Hermer p 001-2284 para 6 fn 1.

[413] *Donoghue v Stevenson* (1932) AC 562.

304.2 A breach of the duty of care through negligent conduct;

304.3 Actionable harm; and

304.4 A causal connection between the negligent conduct and the harm, involving both factual and legal causation.[414]

305 In what follows, we address each of these elements in turn.

[414] Mwenye 2020 p 001-1707 paras 6.19 – 6.22. See, for example, *Attorney-General v Mwanza* [2017] ZMSC 140 at 1368 – 1369; *Mwansa v Zambian Breweries PLC* [2017] ZMSC 42 at p 13; *Konkola Copper Mines PLC v Nyasulu and Others* [2015] ZMSC 33 at pp 5 – 6, 9.

C. ANGLO'S DUTY OF CARE

306 It is a triable issue that Anglo owed a duty of care to the Kabwe community and the prospective class members. While Anglo baldly denies such a duty, it cannot deny its triability.

307 Anglo's own English law expert, Mr Gibson QC, readily concedes that "*the duty of care alleged in the draft [particulars of claim] together with its supporting affidavit raises a 'real issue' to be tried.*"[415] This concession is properly made.

308 The question of whether and when a multinational parent company, such as Anglo, owes a duty of care in respect of the actions of a foreign subsidiary is well-settled in English law. The UK Supreme Court's recent decisions in *Vedanta*[416] and *Okpabi v Shell*[417] address the relevant principles with remarkable clarity. The Applicants' English law expert, Mr Hermer QC, who represented the successful parties in both *Vedanta* and *Okpabi*, (instructed by Leigh Day) has provided a helpful overview of these judgments and the broader principles in his affidavits.[418]

309 *Vedanta* concerned a claim launched in the courts of England and Wales by residents of Zambia who alleged that their health and land had been damaged by pollution emanating from a copper mine in Zambia. The claim was brought against the local Zambian company that owned the mine and its London-domiciled parent company, Vedanta Resources PLC.

---

[415] Affidavit of Mr Gibson QC p 001-3946 para 23.

[416] *Vedanta* (n 412).

[417] *Okpabi v Royal Dutch Shell PLC* [2021] UKSC 3.

[418] Hermer 2020 p 001-2284ff (Issue 1); Hermer 2022 p 001-9702ff.

310 *Okpabi* involved a claim against the London-based Royal Dutch Shell PLC, on behalf of the residents of Nigerian oil fields whose water and environment had been contaminated by oil spills, allegedly caused by the negligence of Shell's Nigerian subsidiary.

311 Both cases involved an initial dispute over the jurisdiction of the English courts. Under the relevant procedural laws, one of the questions in determining jurisdiction is whether the claim raises a "real issue" to be tried, a test which broadly mirrors the "triable issue" test for certification in our law.

312 Vedanta and Shell argued that there was no triable case, as they owed no duty of care for the actions of their subsidiaries. The Supreme Court rejected these submissions.

313 The Supreme Court's judgments confirm four key principles that are relevant to this case.

314 First, there is no special doctrine of parent company liability, nor is this a novel category of cases.[419] The question as to whether a duty of care exists is primarily one of fact, applying routine and well-established principles of tort law. The Supreme Court endorsed the pithy summary by Sales LJ on this point, in the earlier case of *AAA & Others v Unilever & Another*:[420]

> *"There is no special doctrine in the law of tort of legal responsibility on the part of a parent company in relation to the activities of its subsidiary, vis-à-vis persons affected by those activities. Parent and subsidiary are separate legal persons, each with responsibility for their own separate activities. A*

[419] *Vedanta* at paras 49 – 50; *Okpabi* at paras 149 - 151.

[420] *AAA & Others v Unilever & Another* [2018] EWCA Civ 1532 at paras 36 - 37.

parent company will only be found to be subject to a duty of care in relation to an activity of its subsidiary if ordinary, general principles of the law of tort regarding the imposition of a duty of care on the part of the parent in favour of a claimant are satisfied in the particular case. The legal principles are the same as would apply in relation to the question whether any third party (such as a consultant giving advice to the subsidiary) was subject to a duty of care in tort owed to a claimant dealing with the subsidiary. Helpful guidance as to relevant considerations was given in Chandler v Cape plc; but that case did not lay down a separate test, distinct from general principle, for the imposition of a duty of care in relation to a parent company."

…

"Although the legal principles are the same, it may be that on the facts of a particular case a parent company, having greater scope to intervene in the affairs of its subsidiary than another third party might have, has taken action of a kind which is capable of meeting the relevant test for imposition of a duty of care in respect of the parent."

315 Second, it is unnecessary for a court to consider the questions of foreseeability, proximity and reasonableness to establish a duty of care.[421] That three-fold "*Caparo* test"[422] for the existence of a duty of care only applies to novel, controversial cases. This test has no application to parent company liability cases, where the relevant principles are well-settled and clear.

316 Third, in parent company liability cases, the central consideration is the degree of control over, intervention in, supervision, or advice provided by the parent company in respect of the relevant operations of the subsidiary.[423] A majority shareholding is not a necessary requirement for the existence of a duty of care.

316.1 In *Vedanta*, Lord Biggs held that:

---

[421] *Vedanta* at para 56; *Okpabi* at para 151.

[422] *Caparo Industries plc v Dickman* [1990] 2 AC 605.

[423] *Vedanta* at para 49; *Okpabi* at paras 25, 146 – 147.

> *"Direct or indirect ownership by one company of all or a majority of the shares of another company (which is the irreducible essence of a parent/subsidiary relationship) may enable the parent to take control of the management of the operations of the business or of land owned by the subsidiary, but it does not impose any duty upon the parent to do so, whether owed to the subsidiary or, a fortiori, to anyone else. Everything depends on the extent to which, and the way in which, the parent availed itself of the opportunity to take over, intervene in, control, supervise or advise the management of the relevant operations (including land use) of the subsidiary. All that the existence of a parent subsidiary relationship demonstrates is that the parent had such an opportunity."*[424] *(Emphasis added)*

316.2 In *Okpabi*, the Supreme Court again stressed that legal ownership and the extent of the shareholding is not the primary consideration:[425]

> *"As Lord Briggs pointed out at para 49 in Vedanta, it all depends on: "the extent to which, and the way in which, the parent availed itself of the opportunity to take over, intervene in, control, supervise or advise the management of the relevant operations … of the subsidiary."*
>
> *In considering that question, control is just a starting point. The issue is the extent to which the parent did take over or share with the subsidiary the management of the relevant activity (here the pipeline operation). That may or may not be demonstrated by the parent controlling the subsidiary. In a sense, all parents control their subsidiaries. That control gives the parent the opportunity to get involved in management. But control of a company and de facto management of part of its activities are two different things. A subsidiary may maintain de jure control of its activities, but nonetheless delegate de facto management of part of them to emissaries of its parent."* (Emphasis added)

317 It follows that the phrases "parent company" and "subsidiary" are used in a loose sense in these cases. Liability is not determined by the percentage shareholding, but by the degree of *de facto* control and management of the relevant activities.

---

[424] Ibid at para 49.

[425] Ibid at paras 146 – 147.

318 Fourth, while this is an open-ended inquiry, there are several well-recognised circumstances in which a parent company may assume a duty of care. In *Vedanta* and *Okpabi*, the Supreme Court distilled a list of four non-exhaustive "routes" by which a parent company may assume a duty of care:[426]

318.1 Route 1: taking over the management or joint management of the relevant activity of the subsidiary;

318.2 Route 2: providing defective advice and/or promulgating defective group-wide safety/environmental policies which were implemented as of course by the subsidiary;

318.3 Route 3: promulgating group-wide safety/environmental policies and taking active steps to ensure their implementation by the subsidiary;

318.4 Route 4: holding out that it exercises a particular degree of supervision and control over the subsidiary.

319 Therefore, it is not a novel proposition that Anglo can be held liable for its involvement in the Mine's activities. It does not matter whether Anglo was a majority or minority shareholder in the Mine at the relevant time. Instead, everything depends on the degree to which Anglo factually controlled, intervened in, supervised, or advised the Mine on the relevant operations that caused the lead pollution and resultant harm.[427]

---

[426] *Okpabi* at paras 26 – 27; 145 – 148; drawing on *Vedanta* at paras 51 – 53.

[427] *Vedanta* at para 49; Okpabi at paras 146 – 147

320 Mr Mwenye is of the opinion that Zambian courts would treat the Supreme Court's judgment in *Vedanta*, as applied in *Okpabi*, as highly persuasive authority. There are no good or compelling reasons for a Zambian court to depart from this reasoning in applying the English common law to the present matter.[428] In any event, *Vedanta* and *Okpabi* did not establish new law, but simply clarified the application of long-established principles of tort law.

321 The evidence of Anglo's control, intervention and supervision of the Mine's affairs establishes more than a *prima facie* case for a duty of care. Anglo's role as mine manager, consulting engineer and Chielf Medical Officer of the Group, its repeated interventions in matters of lead pollution and emissions controls, and its much touted "group system" of centralised control, among other factors, satisfy all four routes identified in *Vedanta* and *Okpabi.*

321.1 Route 1: Over its 50-year involvement, Anglo repeatedly took over the management or joint management of relevant activities, including the design and operation of lead smelting equipment, supervision of emissions and controls, and overseeing efforts to address lead pollution. This was illustrated by its role in designing and installing lead smelting equipment and rudimentary emissions controls over the decades.[429] It is further exemplified by the 1953 memorandum from Mine officials, seeking direction from Anglo's headquarters in Johannesburg on whether to close down the plant "*until adequate provisions are made for dust and fume*

[428] Mwenye 2020 p 001-1710 para 6.28; Mwenye 2022 p 001-9692 para 5.2.

[429] FA p 001-58 para 103; Not denied AA p 001-3070 paras 1075 – 1079.

collection".[430] The fact that the Mine required Anglo's permission or guidance on such matters speaks volumes.

321.2 Route 2: Anglo provided advice and guidance on safety measures and the control of lead pollution, as demonstrated by Dr van Blommestein's interventions in the late 1940s and early 1950s,[431] and Anglo's direct role in guiding piecemeal clean-up efforts in the early 1970s.[432]

321.3 Route 3: Anglo took active steps to ensure that its advice and guidance were implemented, as reflected in the frequent trips made by Anglo officials to the Mine[433] and the numerous occasions on which Mine officials were summoned to Johannesburg.[434]

321.4 Route 4: Anglo held itself out as exercising supervision and control over the Mine, as is most evident from its repeated public statements about the "group system"[435] and its engagement with government officials on behalf of the Mine.[436]

322 Anglo makes no genuine attempt to contest this evidence of its effective control over the relevant Mine activities. It concedes that "*the determination of the 'de facto control' issue … is not an issue that is capable of determination at*

---

[430] FA p 001-88 para 173.2; Annexure ZMX 71 p 001-1172.

[431] FA p 001-83 – 88 paras 163 – 172; RA pp 001-7610 – 7612 paras 53 – 56. Annexures ZMX37 p 001-891; ZMX 67 – 70 pp 1164 – 1170 and Annexure AA19 p 001-4251.

[432] FA p 001-90 para 179; Annexure ZMX 76 p 001-1195; RA p 001-7622 para 92; Annexures ZMX 105 p 001-7969, ZMX107 p 001-7972.

[433] FA p 001-89 para 175; Annexure ZMX73 p 001-1174.

[434] FA p 001-102 para 206, Annexure ZMX78 p 001-1203.

[435] FA p 001-52 para 84; ZMX 22 p 001-812.

[436] Annexure ZMX 53 p 1035.

certification stage" and declines to "*address the issue meaningfully*" in its response.[437] Given its approach and the concessions made by Mr Gibson, there can be no question that the Applicants have established a *prima facie* case for purposes of certification.

[437] AA p 001-3071 para 1079.

D. ANGLO'S NEGLIGENCE

323 At trial, the Applicants will further demonstrate that Anglo negligently breached its duty of care to the Kabwe community, in that:

323.1 The risk of harm was foreseen by Anglo or was reasonably foreseeable;

323.2 A reasonable person in Anglo's position would have taken steps to avert the harm and Anglo failed to take such steps.

The harms were foreseen or reasonably foreseeable

Relevant principles on foreseeability

324 The determination of foreseeability is again a question of fact.[438]

325 Foresight may be actual or constructive, requiring that a reasonable person would have foreseen that *"harm of the relevant description might be suffered by the plaintiff or members of a class including the plaintiff*".[439]

326 As Lord Hoffmann explained in *Jolley*,[440] "*what must have been foreseen is not the precise injury which occurred but injury of a given description. The foreseeability is not as to the particulars but the genus*".

---

[438] See *Attorney-General v Mwanza* (n 414) at p 1379ff.

[439] *Attorney General of the British Virgin Islands v Hartwell* [2004] 1 WLR 1273 at paras 21, 25.

[440] *Jolley v Sutton* LBC [2000] 1 WLR 1082 at 1091D.

327 This entails that the general type of injury must be reasonably foreseeable, not the precise manner in which the injury has occurred or the extent or degree of the injury.

328 For example, in *Smith v Leech Brain & Co*,[441] a worker suffered a burn from molten metal that resulted in cancer and his death. Lord Parker CJ held that "*[t]he test is not whether these defendants could reasonably have foreseen that a burn would cause cancer and that [the plaintiff] would die."* Instead, *"the question is whether these defendants would reasonably foresee the type of injury suffered, namely, the burn*".

329 This means that so long as the risk of injury from lead exposure was foreseen or reasonably foreseeable, that is sufficient. The particularities or degree of the injuries actually suffered by the class members are not relevant to this inquiry.

330 Foreseeability further requires that the risk of harm must be "*real*" in the sense that a reasonable person "*would not brush [it] aside as far-fetched*".[442] The more severe the harm, the more likely a reasonable person would pay heed, regardless of the risk of harm eventuating.

331 In this instance, a reasonable mining house in Anglo's position would not "*brush aside*" the severe risk of causing irreparable brain damage to children or other severe injuries.

---

[441] *Smith v Leech Brain & Co Ltd and Another* [1961] 3 All ER 1159 at 1162.

[442] Lord Reid in *Overseas Tankship (UK) Ltd v Miller Steamship Co Pty (The Wagon Mound (No 2))* [1966] 2 All ER 709 at 719.

Anglo knew of the general dangers of lead poisoning

332 There can be no doubt that Anglo knew of the general risks of lead from the very outset of its involvement with the Mine.

332.1 It does not dispute that the toxic effects of lead on the human body have been known, in detail, for thousands of years.[443]

332.2 It does not deny the range of historical documents, studies, and reports reflecting detailed knowledge of the pathways of lead exposure, the long-term effects of lead on the body, and the dangers posed by lead dust and fumes in the smelting process.[444]

332.3 It also does not deny that once lead is deposited in the soil and environment, it poses a long-term danger.[445]

333 Despite Anglo's admitted knowledge of the extreme dangers of lead dust and fumes within the Mine compound, it seeks to argue that the harms to the wider community were not reasonably foreseeable. On its version; "*there were no reports of widespread lead exposure*" in the surrounding communities and the risks of environmental lead exposure only became fully apparent from the 1970s at the latest.[446] These arguments do not withstand scrutiny.

---

[443] FA p 001-70 para 138; Not denied AA p 001-3076 paras 1094 – 1096.

[444] FA pp 001-75 - 78 para 144 – 148; AA pp 001-3079 – 3080 paras 1109 – 1116.

[445] AA p 001-2707 para 103.

[446] AA p 001-2714 para 127.2; AA Section 3 pp 001-2898 – 2909.

Anglo knew of the danger to the community

334 As early as 1893, the Broken Hill report demonstrated that lead fumes and dust from lead smelting presented a danger to nearby communities.

334.1 Initial evidence suggests that the Mine had direct contact with Broken Hill, Australia and ought to have been aware of the report. This is a matter that will be explored further through discovery and the subpoena of local archives.[447]

334.2 In any event, regardless of whether Anglo had actual knowledge of its contents, the report amply demonstrates that the risks were already well understood, the tools to investigate the impact of lead pollution were widely available, and the harms were identifiable by applying a modicum of common sense.

335 The available evidence further demonstrates that the Mine and Anglo were indeed aware, or ought to have foreseen, that their operations posed a danger to local communities, well before the 1970s. The timeline bears repeating.

335.1 From as early as 1907, officials acknowledged that it was "*not desirable*" to locate residential areas close to the Mine as residents would be exposed to "*refuse, fumes and smoke from the furnaces of the mine plant, as well as water contaminated by the mining and metallurgical operations*".[448]

---

[447] FA p 001-74 para 141 – 142; RA p 001-7608 para 45.

[448] FA p 001-82-3 para 159; Annexure ZMX 64 p 001-1148 at 1150.

335.2 In 1924, there were already reports that "*[t]he fumes from the smelter cause discontent and trouble"* and were *"indeed most noxious",* which had already caused "*one or two deaths*".[449]

335.3 In 1947, Dr van Blommestein, Anglo's Chief Medical Officer, unequivocally warned of the dangers of uncontrolled lead fumes and dust and the harmful effects this would have on workers. It was no stretch of the imagination to conclude that the prevailing winds were carrying this dust and smoke to the nearby communities, given the scale of production and the dry and dusty environment.

335.4 Indeed, in the mid-1950s, there were further reports of "*dense smoke and pungent fumes*" blanketing the surrounding residential areas, which were "*most offensive and irritating*".[450]

335.5 Anglo further knew or ought reasonably to have known that these pungent fumes contained dangerous levels of lead. Reports throughout this period showed that many tons of lead were "*unaccounted for*" in the smelting process, which were being emitted from the sinter plant and smelter stacks.[451]

335.6 In 1959, there was evidence of lead poisoning in dogs in the area.[452]

---

[449] FA p 001-83 para 160. Annexure ZMX 65 p 001-1154 at 1158.

[450] FA p 001-88 para 174; Annexure ZMX 72 p 001-1173.

[451] See [177] above.

[452] Annexure ZMX 106 p 001-7971.

335.7 In 1960, Anglo knew that water polluted by the mine's operations had poisoned a neighbouring farmer's livestock and crops.[453]

335.8 By 1963, the municipality again recorded complaints of noxious fumes emanating from the Mine, noting that this nuisance was becoming more frequent.[454]

335.9 On their frequent trips to the Mine, Anglo's officials could not have failed to observe the noxious fumes that were emanating from the smelter and blanketing the surrounding community and causing lead poisoning in its residents.[455]

336 Despite this evidence of actual knowledge of the risks, Anglo contends that "*[i]t was only in or about the 1970s"* that scientific literature began to emerge on the risk of lead emissions to communities.[456] It is difficult to square this denial with the growing knowledge, documented in the academic literature from the 1940s through to the 1960s which confirmed the existence of lead poisoning in children and environmental pollution caused by lead mining and smelting. For example:

336.1 For example, a 1964 study by Moncrieff and others noted the variable levels at which poisoning appeared to occur and concluded that lead poisoning presented in variable ways.[457]

---

[453] Annexure ZMX 97 p 001-7908.

[454] FA p 001-90 para 178; Annexure ZMX 75 p 001-1194.

[455] FA p 001-89 para 175; Annexure ZMX73 p 001-1174.

[456] AA p 001-3085 para 1132.4.

[457] FA p 001-81 para 154.

336.2 In 1965, a speech by Prof Melvin at the US Department of Health, Education and Welfare sponsored a "Symposium on Environmental Lead Contamination" noted the existence of "*ample documents that local lead exposures from these sources [mining, smelting, inter alia] may be sufficiently intense to cause acute and chronic lead poisoning… to residents in the vicinity*".[458] This suggested that the research was already well-established by that time.

336.3 There was also emerging knowledge of the clinical and sub-clinical effects of lead poisoning on children.[459] For example, a 1943 study by R. K. Byers and E. E. Lord reported on 20 children, without acute encephalopathy, who had nevertheless been hospitalised with lead poisoning, and found that eight years later, despite complete recovery, all but one of the children had failed to make progress at school and/ or evidence of intellectual or emotional difficulties.

337 In any event, Anglo was not an armchair academic observer, wholly reliant on scientific literature for its understanding of the danger. It was one of the largest and most resourceful mining houses in the world at the time, with first-hand knowledge of the dangers in Kabwe, and ample means and opportunity to conduct its own investigations in the Kabwe District if it was in any doubt. If it was truly ignorant of the danger, it had no excuse.

---

[458] FA p 001-80 para 153; Annexure ZMX 61 p 001-1089; RA p 001-7619 para 82.

[459] FA p 001-81 para 154; Annexure ZMX 62 p 001-1097.

338 Moreover, by the early 1970s, Anglo did not merely know that lead emissions were *potentially* dangerous, as a theoretical possibility. It knew, thanks to the work of Dr Lawrence and Dr Clark, that lead pollution from the Mine was, in fact, poisoning and killing the children of Kabwe.

339 Of course, had Anglo shown any interest in investigating the obvious risk of harm presented by the operations of the Mine, it would have established these facts many years previously. So if Anglo was ignorant of the harm caused by the operations of the Mine, it would have been able to sustain that ignorance only by turning a blind eye to the risk of harm that the operations of the Mine self-evidently created.

Reasonable foresight and responsibility did not end at the fence line

340 Anglo would have it that reasonable foresight and responsibility stopped at the Mine's fence line and was confined to the dangers of occupational exposure. Anglo admits that it knew of the dangers of occupational lead exposure but,[460] it continues to deny all responsibility for those beyond the Mine compound.

341 The Broken Hill Commission report provides a complete answer to this line of defence. As early as 1892, the Commission report established through basic common sense investigations that lead mining and smelting operations were poisoning the residential community downwind of the Broken Hill New South Wales Mine. Anglo probably was aware of this report, but even if it was not, there

[460] AA p 001-3077 para 1101.

is no justifiable reason for it not similarly to have conducted the investigations conducted by the Broken Hill Commission.

342 Quite apart from the Broken Hill Commission report, there is no magic in the mine fence line that would justify Anglo's failure to contemplate harm to residents behind it. An argument to this effect was raised and rejected in *Margereson v JW Roberts*,[461] a case involving a factory that exposed children to asbestos dust in the 1930s and 40s.

342.1 The plaintiffs grew up in the Armley district of Leeds, which was home to a factory that manufactured products containing asbestos. Considerable quantities of asbestos dust escaped the factory and blanketed the surrounding neighbourhood. Children played in discarded piles of asbestos mattresses and even made "snowballs" from the fine, powdery dust.

342.2 The plaintiffs were exposed to this asbestos dust and subsequently developed the lung disease mesothelioma in adulthood, even though they had not set foot on the factory floor. Mesothelioma is an aggressive cancer of the lungs that can be caused by a single fibre of asbestos.

342.3 The occupational risks of asbestos exposure were already understood and documented. However, the broader risks of environmental exposure to asbestos were not yet well known when the plaintiffs were children.

---

[461] *Margereson v JW Roberts* [1996] Env LR 304 at 310.

342.4 On this basis, the defendant contended that it did not owe the plaintiffs any duty of care because they were not employees and, at the relevant time, the risk of injury beyond the confines of the factory walls was not reasonably foreseeable.

342.5 The central question, as framed by the lower court, was this:

> *"[D]id the factory wall pose such a barrier that risk of injury to persons on the further side of such arising from the emissions of asbestos dust amount at worst to no more than "a mere possibility which would never occur to the mind of a reasonable man"?*

342.6 The Court of Appeal agreed with the lower court's finding that –

> *"there is nothing in the law that circumscribes the duty of care by reference to the factory wall . . . if the evidence shows with respect to a person outside the factory that he or she was exposed to the knowledge of the Defendants, actual or constructive, to conditions in terms of dust emissions not materially different to those giving rise within the factory to a duty of care, then I can see no reason not to extend to that extramural neighbour a comparable duty of care."*

342.7 The Court further agreed that:

> *"[I]n the immediate vicinity of the premises factory conditions in terms of dust emission were at various points effectively replicated so as to give rise to like foresight of potential injury to those exposed for prolonged periods."*

343 Like the defendant in *Margereson,* Anglo knew that workers were being exposed to dangerous levels of lead dust and fumes, were falling ill, and that these conditions persisted through the decades. It also knew that these emissions were not confined to the plant buildings or the Mine compound. Its doctors were seeing death rates of children visiting the Mine clinic of an order that immediately prompted Dr Lawrence to suspect lead poisoning and to wonder why no-one had previously investigated blood lead levels in the children attending the Mine clinic.

344 In addition to the many reports of fumes blanketing the town, the various warnings of occupational dangers over the years acknowledged that fumes were not confined to indoor spaces. For example:

344.1 From as early as 1947, Dr van Blommestein warned of the dangers of lead dust and fumes "*both inside and outside the plant*".[462]

344.2 A year later, Mr Hardy observed that "*prevailing winds carry away the dust and fume in a direction past the main building*".[463]

344.3 Dr Clark further observed "*lead particles from the effluent of the Imperial Smelter Furnace and Sinter Plant stacks creating a looping or fumigating plume*" that visibly dispersed lead throughout the neighbouring townships.[464]

344.4 Anglo could hardly suggest that the admitted dangers posed by lead fumes and dust somehow disappeared as soon as these particles crossed the Mine's boundary, nor could it suggest that the danger was far-fetched or fanciful.

345 The reasonable foreseeability of harm is not only a function of proximity, but it is also a function of the duration and intensity of anticipated exposure.

---

[462] Van Blommestein October 1947 letter ZMX 67 p 001-1164.

[463] Id p 1078.

[464] Clark thesis ZMX 3 p 001-390.

346 These were central considerations in *CSR v Young*,[465] a New South Wales Court of Appeal judgment dealing with asbestos exposure in the Australian town of Wittenoom in the 1950s.

346.1 Like Kabwe, Wittenoon was a "mine town" developed by the local asbestos mine.

346.2 The plaintiff was exposed to asbestos dust as a child as a result of tailings from the mine, which were dumped in the town and used, among other things, to construct roads.

346.3 The defendants sought to argue that, by the standards of the day, there was precious little scientific evidence that low-level exposure to asbestos fibres could cause diseases. It was further argued that the harm was not foreseeable because levels of asbestos dust in the town's air were below the occupational limits prescribed for asbestos mines and mills at the time.

346.4 The majority rejected this argument, holding that a reasonable person would also have appreciated that residents of the town faced prolonged exposure and the potential for more concentrated exposure:

> "*The foreseeable risk could not be put aside on the ground, for example, that the concentration was much less than that recognised as dangerous to workers at the mines and in the mills, because in some circumstances there could be prolonged exposure to low concentrations of asbestos fibres such as from the dust generated by vehicles, pedestrian movement and wind, and in other circumstances there could be highly concentrated exposure albeit for relatively short periods. It takes little imagination to see the concentrated exposure from children*

[465] *CSR Ltd v Young* 1998 16 NSWCCR 56 2260.

> *playing in tailings, as they did and Mrs Olson must have done although for a relatively short period.*"[466]

347 This reasoning applies with equal force to the conditions in Kabwe. A reasonable person in Anglo's position must have foreseen that the prodigious quantities of lead being emitted into the surrounding area would pose a long-term danger to children growing up in this environment. Anglo admits that it knew that lead is a "cumulative poison" that increases in danger through constant and repeated exposure. It further admits knowing that this pollution would remain in the environment over many decades. On that basis alone, the long-term dangers were reasonably foreseeable.

Reasonable foreseeability and evolving standards

348 Anglo further argues that evolving standards on lead exposure meant that it could not have foreseen that lower levels of lead in the blood would be harmful. It seeks to rely on the fact that, before 1970, (which as Dr Beck points out, applied since before the mid-1960s) the US CDC defined the reference value for lead poisoning at a BLL of 60 µg/dL, while in the UK a target BLL of 35 µg/dL was set in 1977.[467]

349 This argument is both legally and factually ill-conceived:

349.1 At the level of law, the argument is still born. As explained above, foreseeability is determined by the genus of the harm not by the particularities or mechanism of the specific injury suffered by individual

---

[466] Id at p 18.

[467] AA p 001-2903 s-645; Beck p 001-3539 para 643.4.2

plaintiffs. It suffices that Anglo knew or ought reasonably to have known that exposure to lead fumes and dust was harmful to the human body and could cause a broad spectrum of injuries. The precise levels of lead in the blood required to trigger an injury go to the mechanics and particularities of individual harm, which need not be foreseeable.

349.2 At the level of fact, Anglo knew, from as early as 1970, that children in Kabwe were registering BLLs far in excess of the reference values that were applicable at the time. Even by the lower thresholds of the day, it would have known that it had a catastrophe on its hands. Moreover, it would have established the true facts much earlier, if it had not turned a blind eye to the obvious risk of lead poisoning harm caused to Kabwe residents by the mine and smelter operations. The issue was so obvious that Dr Lawrence *"could not understand why no-one else had raised the issue or carried out an investigation"*[468] before he did within a few months of arriving at the Mine.

349.3 In any event, despite turning a blind eye, Anglo knew that local children had died from lead poisoning.

350 *Margereson* again offers useful guidance on what is required for harm to be foreseeable. A factory operating in the 1930s and 1940s could not have reasonably foreseen that exposure to asbestos could cause the specific disease of mesothelioma, nor was it yet known that breathing in a single asbestos fibre was sufficient to induce injury. But that was held to be irrelevant to foreseeability.

---

[468] Affidavit of Dr Lawrence, p 001-2636, para 17.

It was reasonably foreseeable that exposure to asbestos dust could cause a spectrum of pulmonary injuries and that was sufficient to establish foreseeability. As the lower court observed, "*[o]nce it is established that personal injury … is reasonably to be foreseen the fact that the particular form in fact resulting was unforeseeable is irrelevant*".[469] The Court of Appeal agreed.[470]

351 Similarly, in *CSR v Young*,[471] the New South Wales Court of Appeal rejected the defendant's appeals to the lack of general knowledge of the environmental risks posed by asbestos and the absence of any agreed standards for safe levels of asbestos in the air. The majority concluded that *"[f]oreseeability does not mean foresight of the particular course of events causing the harm. Nor does it suppose foresight of the particular harm which occurred, but only of some harm of a like kind."*[472] The known fact that asbestos dust was harmful was enough.

352 The reasoning in these cases applies with equal, if not greater force to victims of lead poisoning in Kabwe. Our knowledge of the dangers posed by asbestos is comparatively recent, as opposed to the dangers of lead, which have been known for thousands of years. Knowledge of this danger may have grown in detail and specificity, but reasonable foresight of harm does not require intimate scientific knowledge of the biomechanics of lead injury or precise measurements of levels of lead in the blood.

---

[469] Margereson *v J W Roberts Ltd.* [1996] P.I.Q.R. P154 p 180.

[470] *Margereson v J W Roberts Ltd.* [1996] EWCA Civ 1316 p 308.

[471] *CSR Ltd v Young* (n 466374).

[472] Id at p 19, citing *Mt Isa Mines Ltd* v *Pusey* (1970) 125 CLR 383 at 402.

Anglo breached its duty of care

353 The standard of care expected of a reasonable, well-resourced company in Anglo's position has been pleaded in detail in the founding papers and the draft particulars of claim.[473] Its duties and negligent breaches can be summarised as five primary heads of negligence:

353.1 The failure to investigate and monitor;

353.2 The failure to prevent;

353.3 The failure to cease and relocate;

353.4 The failure to remediate; and

353.5 The failure to warn.

<u>The failure to investigate and monitor</u>

354 Over the course of its almost 50-year involvement in the Mine's affairs, Anglo had a duty to conduct the necessary investigations on the impact of lead pollution on the surrounding communities by taking common sense measures, such as long-term sampling of air, water, soil and vegetation and monitoring the health impacts on the local communities living in Kabwe.

355 Anglo does not deny that it failed to conduct these investigations. Instead, it provides a bald denial of any duty "*to conduct monitoring and evaluation" and "to*

[473] FA p 001-98 para 197, p 001-103 para 211; Draft PoC Annexure ZMX1 p 001-172 para 45, p 001-176 para 47.

take steps to monitor the health impacts of lead pollution on the surrounding community".[474] This denial is premised on its persistent refrain that knowledge of the risk posed by lead to surrounding communities was only known by the 1970s. For the reasons set out above, this allegation is unsustainable.

356 There were at least three critical failures to investigate over the period of Anglo's involvement in the Mine.

357 First, Anglo failed to conduct any investigations at all before investing in the Kabwe Mine and implementing new smelting processes.

357.1 From the outset of its involvement in the Mine, had Anglo applied even the most rudimentary investigative methods, which were readily available already in the 1890s, it would have identified the scale of the problem of lead contamination and the impact on the surrounding communities, decades before the 1970s. Yet, on Anglo's own version, it made no concerted efforts to do so. The evidence suggests that Anglo turned a blind eye.

357.2 When Anglo subsequently decided to make substantial capital investments into the Mine in 1937, rescuing it from closure, there was likewise no investigation into whether continuing mining and smelting operations at Kabwe would be safe to the growing local population. Again and again, investments were made to improve the economic viability of

[474] AA p 001-3099 para 1178.

the Mine without any attempt to understand the impact that continued mining and smelting was having on the surrounding environment.

357.3 In the decades that followed, the numerous overhauls of the smelting process and equipment that are outlined above would have given Anglo ample opportunity to study the consequences of lead pollution.

357.4 This is illustrated by the creation of the project team in 1957 to study smelting technology at other plants around the world, resulting in the installation of the Imperial Smelting Furnace in 1962.[475] While the project team travelled far and wide in its investigations, there is no evidence to suggest that it conducted the most rudimentary assessment of the impact of expanded smelting works on the Kabwe community.[476]

358 Second, Anglo failed to investigate whether lead exposure was affecting more than just its employees. While Anglo and the Mine conducted regular medical testing of its employees and regular air sampling within the Mine premises, on Anglo's version no one thought to conduct such testing beyond the fence line, even though workers, their families, and other residents lived a short distance away, in developed townships and staff quarters downwind of the smelter. As set out above, it is fanciful to consider that the admitted dangers posed by lead fumes and dust somehow disappeared as soon as these particles crossed the Mine's boundary.

---

[475] Barlin Report FA Annexure ZMX 11 p 001-664.

[476] Anglo does not deny that its project team would have been aware of the risks posed by the ISF. Instead, it insists that the ISF was "state of the art technology then which is still in use today". This does not answer the nub of the Applicant's argument, which is that Anglo was, or ought to have been aware of, the devastating environmental impact of the ISF in Avonmouth. AA para 1124 001-3082.

359 Third, Anglo failed to investigate and monitor the risk to children.

359.1 As the examples of Dr Lawrence and Dr Clark illustrate, there was more than enough evidence to prompt a reasonable person to conduct investigations into the possibility that the Mine was causing large scale lead poisoning to children in the communities downwind of the Mine. It took Dr Lawrence less than three months in Kabwe before he decided that it was necessary to investigate this issue.[477]

359.2 Even after Dr Lawrence's investigation revealed shocking levels of lead poisoning, there is no evidence that Anglo and the Mine took steps to put in place a formal, ongoing testing and monitoring programme in the surrounding communities. A reasonable person, in Anglo's position, would, at the very least, have conducted such testing to assess whether the piecemeal interventions in the early 1970s were reducing the harm to children and whether more was required.

The failure to prevent

360 Throughout the relevant period, Anglo failed to implement adequate lead pollution control measures to prevent lead pollution from escaping from the operations at the Mine, as seen in the contemporaneous evidence of copious emissions of lead dust and fume.

361 Anglo offers two responses to this.

---

[477] RA p 001-7605 para 33.2.

361.1 First, it alleges that the Applicants "*have failed to set out the prevailing standards that the Mine was required to comply with*";[478] and

361.2 Second, it argues that the emission control technology installed at the Mine was "*state of the art*" for the time.[479]

362 The absence of legislated standards at the time is no basis to absolve Anglo of liability. The Applicants' case is based in tort. So long as the trial court is satisfied that Anglo knew or ought reasonably to have foreseen the harm and that Anglo failed to take reasonable steps to investigate, prevent and address the lead pollution, that is sufficient.

363 Anglo's recitation of the technology deployed at the Mine over the years fails to address how this technology was actually used and whether it was adequate to the task. As Professors Harrison and Betterton note, although Anglo and the Mine eventually put in place some emission controls that were *capable* of reducing emissions, the evidence is clear that they did not actually achieve high levels of emissions control, due to deficiencies in design and operation.

364 The *prima facie* case of this negligence is evident from the timeline, which reflects the many deficiencies in the technology and its operation:

---

[478] AA p 001-29 para 665.

[479] AA p 001-2718 para 138.

364.1 It is common cause that there were no emission controls on the open blast furnaces, which were in use between 1925 and at least 1945.[480]

364.2 The limited emission controls that were installed on the Newnam Hearth plant, which came into operation in 1946, were primarily aimed at recapturing valuable lead rather than protecting workers and the community.[481]

364.3 The absence of adequate controls was evident from contemporaneous accounts of "*enormous*" quantities of lead fumes and dust being vented directly into the atmosphere,[482] monthly reports of significant "stack losses", and frequent equipment breakdowns and malfunctions.[483]

364.4 When Dr van Blommestein raised the alarm in 1947 the RBHDC Board, with Anglo's knowledge and evident approval, chose to put off the implementation of proper emission controls to save costs.[484]

364.5 The Dwight Lloyd plant, introduced in 1953, also proved to be ineffective in containing lead emissions, with records showing that copious amounts of lead continued to be emitted as smoke, dust and fume.[485]

---

[480] AA p 001-2706 paras 99 – 101. AA p 001-2710 para 112, Anglo states that the Newnam Hearth Plant was "*the first time that the lead recovery process at the Mine had an emissions control system*".

[481] Betterton 2020 p 001-1628.

[482] Hardy report FA Annexure ZMX 59 p 001-1078.

[483] Betterton 2022 p 001-9613 paras 11.1.5 – 11.1.11; Harrison 2022 pp 001-9537 - 9538 paras 7.42 – 7.43.

[484] See [171] above.

[485] See [173] and [177] above. Harrison 2022 p 001-9537 para 7.42.

364.6 After the Dwight Lloyd plant was decommissioned in 1957, the Mine returned to using the heavily polluting Newnam Hearth plant without implementing any further emission controls.[486]

364.7 The ISF plant, installed in 1962, was far from clean, well-functioning technology. Equipment failures were common, lead poisoning within the plant was still commonplace, there were increasing reports of noxious fumes in surrounding community, and lead-bearing emissions and effluent continued to pour into the environment.[487]

364.8 Throughout this period, there were frequent problems with the Mine's much vaunted electrostatic precipitator, baghouse failures, and breakdowns of the flue chain leading to ventilation to atmosphere, all of which contributed to substantial fugitive lead losses venting into the atmosphere.[488]

364.9 All of this speaks to a pattern of neglect and dysfunction, memorably described in 1970 as the "Broken Hill Attitude".[489] The picture painted by that internal memorandum is not of a Mine using state-of-the-art technologies diligently and effectively to manage lead emissions and environmental pollution.

364.10 Anglo accuses ZCCM of negligence in failing to control lead emissions after 1974, but there were no material technological changes. A 1985

---

[486] FA p 001-89 para 176; Not denied AA p 001-2717 para 136, p 001-3092 paras 1164 – 1165.

[487] See [185184] – [189185] above.

[488] Baghouse failure and flue chain – RA p 001-7634 para 126.2; Precipitator issue – Harrison 2022 p 001-9537 para 7.42; RA para 126.3 001-7634.

[489] Annexure ZMX 96 p 001-7898.

ZCCM report[490] indicated that the "*current metallurgical practice is basically the same as described in detail in published papers by Mr B Barlin in 1972 and 1975*".[491] The various alleged operational failures post-1974 were, in essence, a continuation of the negligent operation of the Mine under Anglo's watch.[492]

365 Anglo attempts to sidestep these failures by contending that it did not have any effective say over the Mine's operations and emissions controls. The evidence canvassed above says otherwise. In any event, Anglo has conceded that this question of control is a matter for trial, that cannot be resolved at this stage.

The failure to cease and relocate

366 While the Applicants contend that the lead-related injuries could have been substantially avoided by taking reasonable precautions and making appropriate modifications to the Mine, this is not the sole basis of Anglo's alleged negligence.[493] The Applicants contend that, as a matter of principle, so long as Anglo could not have operated the Mine without causing reasonably foreseeable injuries and suffering on this scale, it should not have operated at all or it ought to have relocated the polluting operations. The Applicants have pleaded this duty to cease and relocate operations in detail in the founding affidavit and draft particulars of claim.[494]

---

[490] Annexure ZMX113 p 001-8096.

[491] Betterton, para 11.2.3; RA p 001-7637 para 133.2.

[492] RA 001-7600 para 25.3.

[493] RA p 001-7630 para 116.

[494] FA p 001-98- 99 para 197.7, 197.9. 197.10, 197.11; p 001-103 para 211.5; Draft PoC ZMX1 p 001-172 - 174 para 45, p 001-176 para 47 .5.

367 Even if Anglo's interventions to address lead pollution at the Mine were the best it could have done at the time (which is denied), the evidence reveals that, despite these interventions, significant lead was still being lost to the atmosphere.

368 Anglo knew, or ought to have known, that its piecemeal attempts to manage lead pollution from the Mine were not working, and that the pollution was affecting the residents in the surrounding community. Facing this reality, a reasonable mining company in Anglo's position, possessing foresight of the dire consequences of lead pollution emitted by lead smelting operations, would have ceased mining operations altogether until such time as they could be resumed without risking lives.

369 A reasonable mining company would also not have developed townships and housing in close proximity to the Mine. Anglo knew or ought reasonably to have known that the area around the Mine site was being polluted with lead from their operations. Nevertheless, over the course of the 20th century, Anglo assisted in constructing accommodation for workers and their families, in close proximity to the Mine site, placing people in homes situated on contaminated ground and at great risk of ingesting and inhaling lead-contaminated dust and airborne emissions from the smelter stacks.

370 At the very least, a reasonable company would have relocated the communities far away from the Mine, out of harm's way. Anglo suggests that it did just this when the Mine relocated its workers from Kasanda to Chowa in the early 1970s. However, this intervention only compounds the difficulties for Anglo. There is no

evidence that Anglo and the Mine took steps to assist the other residents of these lead polluted townships, who were simply described as "squatters".[495] Moreover, there is no suggestion that any efforts were made to determine whether the new area was safe, particularly as Anglo accepts that Chowa is also a lead pollution hotspot.

371 Alternatively, at the very least, a mining company in Anglo's position would have relocated the smelters and mine dumps elsewhere, away from residential communities. Anglo had numerous opportunities to do so, when it oversaw the design and installation of new smelting equipment at the Mine, including the ISF plant that operated until 1994.

The failure to remediate

372 The Applicants have squarely pleaded that Anglo had a duty throughout the period of its involvement to clean up lead pollution in the surrounding communities, such as removing and replacing contaminated topsoil.

373 Anglo flatly denies that it had a duty to remediate while it was involved in the Mine's operations.[496] But, in the same breath, it accepts that remediation is necessary and effective in preventing lead-related harm and accuses ZCCM of negligence in failing to remediate the environment.[497]

---

[495] Id p 001-1198 para 6.

[496] AA p 001-3100 para 1178.

[497] AA p 001-2834 – 2835 para 467, citing the 2006 Site Rehabilitation Plan with approval.

374 In this context, Anglo's criticism of ZCCM for failing to remediate only reflects poorly on its own conduct.

374.1 Anglo says that ZCCM "*chose commercial gain above its obligations to rehabilitate and remediate.*"[498]

374.2 Yet this is precisely what Anglo and the Mine management did in 1970.

374.3 The need for remediation was raised by Dr Lane in 1970. His recommendation was to "*[s]crape the top layer of ground from the whole township area and replace it with unpolluted earth or laterite*".

374.4 However, this was refused on the basis that it was "*impracticable*", too costly, and would "*lead to potential panic*".[499]

375 Anglo would have it that the duty to clean up 90 years of accumulated lead pollution only arose after it left Kabwe. This cannot be so. Given that the danger to the Kabwe community was foreseen or reasonably foreseeable, and given Anglo's admission that remediation would have been a reasonable measure, there can be no excuse for its failure to take appropriate action before 1974.

376 Furthermore, Anglo itself presents international examples of effective remediation carried out before the closure of mining and smelting operations. It suggests that "*where common-sense remediation actions such as soil clean-up*

---

[498] AA p 001-2678 para 16.

[499] Annexure ZMX 107 p 001-7972.

were appropriately implemented, BLLs fell relatively rapidly and consistently - even while the smelters continued to operate" (Emphasis added).[500]

377 It is also difficult to square Anglo's attitude in these proceedings with its own Human Rights Policy,[501] which acknowledges the duty to remediate and undertakes that "*[w]here we have caused or contributed to adverse human rights impacts we will contribute to their remediation as appropriate*".[502] This is merely a modern articulation of the duty that Anglo has professed since the 1950s: to care for and support the communities in which it operates.

The failure to warn

378 Anglo also denies that it had a responsibility to warn residents of Kabwe of the dangers of lead pollution from the Mine and it further denies that it had a duty to educate residents on measures to prevent and mitigate their exposure to lead pollution.[503]

379 It is unsurprising, then, that it has not pointed to a single instance in which Anglo or the Mine's management warned residents of the dangers of lead pollution.

380 Instead, there is clear evidence that the Mine, with Anglo's knowledge, intentionally avoided informing the surrounding community about the risk of lead pollution from the Mine. This is evident in the series of correspondence from the

---

[500] AA p 001-2834 para 466.

[501] Annexure ZMX5 p 001-509.

[502] FA p 001-28 para 39.

[503] FA p 001-100 paras 197.13 and 197.14; AA p 001-3101 paras 1187-8.

1960s, acknowledging contamination of the Routledge farm. Most telling are the comments relating to the potential for further claims, with a clear intention to avoid informing those who may be affected:

> *"It may well be that we will have no option but to purchase the property to obviate litigation. What concerns us far more is that lower down the river there are three farms who to date have not complained about pollution. If word gets out that we contemplate a steep settlement with Routledge they may well decide to investigate their water and soil.* (Emphasis added)."[504]

381 Ten years later, the Mine's modus operandi remained the same, when a decision was taken not remediate surrounding communities so as to avoid "*panic*".[505]

Summary

382 In summary, there is already more than ample evidence of Anglo's negligence that establishes a *prima facie* case, worthy of trial. Evidence of Anglo's knowledge of the harm and the details of its negligence are certain to be bolstered ahead of trial, once the Applicants are able to obtain discovery and subpoena documentary evidence from private archives.

---

[504] Annexure ZMX72 p 001-7909.

[505] Annexure ZMX 107 p 001-7972.

E. ACTIONABLE HARM

383 A further triable issue is whether the class members have suffered actionable injury arising from Anglo's negligence – that is, harm that warrants an award of damages in tort. Zambian law, following English law, recognises that "*[n]egligence alone does not give a cause of action, damage alone does not give a cause of action; the two must co-exist*".[506]

384 The Applicants have pleaded three sets of actionable injuries and harm:[507]

384.1 First, the class members have suffered and are at risk of developing a range of "*sequelae*" injuries due to exposure to lead, including brain damage, organ damage, neurodevelopmental problems, gastrointestinal symptoms, among a range of others;[508]

384.2 Second, the class members have suffered injuries *per se* where they have elevated BLLs requiring medical monitoring, including venous blood lead monitoring and intervention;[509] and

384.3 Third, the sub-class of girl children and the class of women of child-bearing age, who have been pregnant or are capable of falling pregnant, have suffered further harms due to the risk of lead-related injuries in pregnancy.[510]

---

[506] *Michael Chiluya Sata v Zambian Bottlers* (2003) ZR 1, citing Lord Reading CJ in *Suffolk Rivers Catchment Board v Kent* 1941 AC 74.

[507] FA p 001-109 paras 227 – 236 p 001-118 - 119 paras 254 - 255; Draft POC p 001-184 - 187 paras 54 - 56.

[508] See the table of injuries related to different BLLs at FA p 001-38 - 140 para 63 (Table 2).

[509] FA p 001-110 para 234.

[510] FA p 001-119 para 255.

The relevant principles

385 There is no precise definition of actionable personal injury in Zambian or English law.[511] It is a "*question of fact in each case*" whether the threshold of actionability has been reached and "*in borderline cases it is a question of degree*".[512]

386 In *Dryden v Johnson Matthey Plc*,[513] the UK Supreme Court recently affirmed the factual nature of this inquiry[514] and helpfully outlined the relevant principles.

386.1 The case concerned claimants who suffered platinum salt sensitisation, a condition caused by exposure to chlorinated platinum salts. Due to this exposure the claimants had developed certain antibodies, which caused no immediate harm or discomfort, but left them at risk of an allergic reaction if exposed to platinum salts in future.

386.2 The Supreme Court concluded that this was an actionable injury, as the claimants suffered "*a change in their physiological make up which means that further exposure now carries with it the risk of an allergic reaction, and for that reason they must change their everyday lives to avoid that exposure.*"[515]

---

[511] *Dryden v Johnson Matthey Plc* [2018] UKSC 18 at para 12; Hermer 2020 p 001-2298 – 2300 paras 34 – 38; Mwenye 2020 001-1710 para 6.29.

[512] *Cartledge v E Jopling & Sons Ltd* [1963] AC 758 at 779.

[513] *Dryden* (n 511570).

[514] Id at para 48.

[515] Id at para 47.

387 In reaching this conclusion, Lady Black, writing for a unanimous court, distilled several relevant principles from cases dating back more than 150 years:

387.1 First, the primary question is whether there has been a bodily change that has left a person "*worse off*" in respect of "*health or capability*".[516]

387.2 Second, there is no bright line separating injuries that are actionable from those that are not, but the injury must be more than *de minimis*.[517]

387.3 Third, actionable injuries can be asymptomatic, meaning that it is "*hidden and currently symptomless*" and the individual is unaware that they suffer from it.[518]

388 Lady Black was careful to distinguish the facts in *Dryden* from those in the House of Lord judgment *Rothwell*.[519] The distinction offers useful guidance.

388.1 *Rothwell* concerned claimants who developed pleural plaques, caused by exposure to asbestos. Such plaques are benign, cause no symptoms or discomfort, nor do they increase the susceptibility of developing other illnesses or conditions. The presence of these plaques plays a purely evidential role, indicating that a person had been exposed to asbestos. They were indicative of a risk of suffering other injuries from asbestos, but did not increase that risk, nor did they require any medical intervention or

---

[516] Id at paras 24 and 27, citing *Fair v London & North-Western Railway Co* (1869) 21 LT 326, 327; *Rothwell v Chemical and Insulating Co Ltd* [2008] AC 281 at para 7; *Cartledge* at p 778.

[517] Id at paras 15 and 25, citing *Rothwell* id at paras 8, 39 and 87.

[518] *Dryden* id at para 27, citing *Cartledge* (n 512) at 778.

[519] *Rothwell* (n 516516).

change in behaviour. The existence of these plaques was thus held to be insufficient to establish actionable injury.[520]

388.2 By contrast, platinum salt sensitisation was not a benign change in the body. Instead, it was a change that left individuals worse off, as they were required to alter their work and lives.[521]

389 Anglo seeks to suggest that *Dryden* articulated entirely novel principles that would require a South African court to develop Zambian tort law.[522] This is incorrect:

389.1 *Dryden* did not involve the development of a new common law rule, but instead involved the application of settled principles, established in a long line of cases, to the particular facts.

389.2 The existence of actionable injuries remains a factual inquiry, to be decided in each case. The trial court in this matter would be called on to make a factual determination, not to devise new law.

389.3 As Mr Mwenye explains, the reasoning in *Dryden* would nevertheless be regarded as highly persuasive by the Zambian courts, bound as they are by English common law principles.[523]

---

[520] Id at paras 10 – 11.

[521] *Dryden* (n 511570) para 47.

[522] AA p 001-2922 para 700, p 001-3034 para 950 – 951.

[523] Mwenye 2020 p 001-1711 – 1712 para 6.34 – 6.35.

First category: Sequelae injuries

390 There can be no genuine dispute that a person suffering from one or more of the *sequelae* injuries associated with lead exposure – ranging from encephalopathy to neurodevelopmental disabilities – has suffered actionable harm. As noted above, it is the Applicants' experts' opinion that, on balance, a child with a BLL as low as of 5µg/dL will have suffered a cognitive impairment to which lead has materially contributed.[524]

391 Anglo instead quibbles over whether specific injuries can be linked to lead exposure in individual cases. However, that is a dispute over factual causation, not a dispute over actionable injury. We address it below.[525] For present purposes we merely point out that the Applicants' experts, including Professor Dargan, Professor Lanphear and Professor Bellinger, have addressed the issue in detail and the divergence between experts is self-evidently a matter for trial.

392 Anglo further takes issue with any claim for damages based on the risk of future injuries.

393 The parties are agreed that a *mere* risk of developing an injury, without more, is not actionable. However, where an actionable injury has been sustained, then a claimant is entitled to claim damages for injuries already sustained and the risk of further injuries arising in future. Anglo's own English law expert, Mr Gibson, explains the principle as follows:

---

[524] RA p 001-7689 paras 262-263

[525] See [478]ff below.

> *"[W]here some actionable injury has been caused, such that a cause of action has crystallised, the victim can recover damages not only for the injuries already accrued but also for the risk of it worsening in the future or new injuries arising."*[526] *(Emphasis added)*

394 In our law, this would be described as a manifestation of the "once-and-for-all" rule, originally derived from English law, which requires that a plaintiff must claim in one action all damages, including damages already sustained and all future losses, flowing from one cause of action.[527]

395 This entails that where class members have sustained an actionable injury, they will be entitled to claim for all future losses they are likely to suffer. For example, where the evidence establishes that a child has suffered developmental difficulties from lead exposure – which is unquestionably actionable – they would also be entitled to seek damages for the risk of future harms eventuating due to lead poisoning.

Second category: Elevated BLLs

396 The Applicants contend that an elevated blood lead level, requiring medical intervention, blood lead monitoring and changes to everyday life, is an actionable injury *per se*, independent of whether an individual displays any further discernible symptoms or injuries from lead exposure.

---

[526] Mr Gibson QC p 001-3965 para 82, citing *Rothwell* (n 516516) at paras 14 and 67.

[527] *Evins v Shield Insurance Co Ltd* 1980 (2) SA 814 (A) at 835C – D, in which Corbett J acknowledged the English law roots of this principle.

397 Professor Dargan has summarised the medical interventions and further actions that are required based on different BLLs, drawing on his extensive clinical experience and the latest 2021 WHO guidelines.[528] In summary:

397.1 Those with BLLs of less than 5 µg/dL require further blood lead testing every 6 to 12 months, particularly where there is "*continuing concern of possible exposure to lead*", a concern that would apply to any child living in Kabwe.[529]

397.2 Those who suffer from BLLs of 5 µg/dL and over require environmental intervention and remediation, nutritional intervention and regular blood lead testing every 1 to 3 months;[530]

397.3 Those with BLLs in the range of 20 µg/dL and above blood lead testing every 1 to 2 months;[531] and

397.4 Those who register BLLs of 45 µg/dL and over require chelation therapy and further medical monitoring, including monthly blood testing (for 45 µg/dL – 65 µg/dL) and fortnightly testing (for 65 µg/dL and above).[532]

398 Individuals whose BLLs are elevated have suffered a clear physiological change, leaving them worse off: a poison has entered their bloodstream and is being

---

[528] Dargan 2020 pp 001-1834 – 1840 para 8.4; Dargan 2022 pp 001-9264 – 9290 para 14; WHO 2021 Guidelines ZMX 125 p 001-8324 – 8326 (summary table), p 006-290 (blood lead testing).

[529] Annexure AA142 WHO 2021 Guidelines p 006-290.

[530] Dargan 2022 p 001-9265 para 14.1.1, p 001-9282 para 14.4.1.2.1; WHO 2021 Guidelines p 006-236. p 006-290.

[531] Dargan 2020 p 001-1837 para 8.4.4.1.

[532] Dargan 2020 affidavit p 001-1837 – 1838; Dargan 2022 affidavit pp 001-9271 para 14.3; WHO Guidelines 2021 - 006-290.

absorbed by their organs and bone. This is no benign or *de minimis* change in physiology without consequences.

399 The interventions required to address these elevated blood lead levels further compound the harm, putting this well beyond the threshold of actionability.

400 Blood testing: As Professor Dargan explains, using a needle to draw blood from the veins can be a distressing experience, particularly for young children.[533] The pain of the initial needle puncture, the discomfort as blood is pulled into the syringe, and subsequent bruising are not *de minimis*. If blood was drawn from a child without consent, it would be a clear-cut case of assault and child abuse. The fact that many children in Kabwe would need to undergo such blood testing on a regular basis, with the disruption this may cause to their lives, meets the standard for actionable injury.

401 Environmental interventions: The need for interventions to reduce further exposure to lead is a further dimension of the actionable harm. For example, a Kabwe child with an elevated BLL would have to be restrained from playing outdoors with her friends, an adjustment to her life for the worse. The need to remediate the home environment, through the removal of topsoil and other measures to limit exposure to lead contaminated dust, compounds these changes. Where lead contamination is so severe that a family is forced to leave their home and relocate elsewhere, the actionable harm would escalate further.

---

[533] Dargan 2022 p 001-9283 para 14.4.1.4.

402 Chelation therapy: There can be no dispute that chelation therapy is a serious medical intervention. Professor Dargan explains that for severe cases, this requires in-patient care and the intravenous injection of chelating agents. In less severe cases, the chelating agent may be taken orally, but it is also not without risks. Since chelating agents only bind to lead in the blood plasma those who have had chronic exposure to lead will require multiple courses of treatment over an extended period of time to address the build-up of lead in the bones. After each chelation treatment, lead is remobilised from the bones into the blood, causing an initial resurgence in BLL, which in cases of chronic exposure will need to be addressed by a further course of treatment. In addition, chelation agents also bind other metals, meaning that essential elements are depleted, posing no small measure of risk to the patient.[534]

403 Anglo nevertheless persists in contending that there is no actionable injury in children whose BLLs are below 45 µg/dL (the level at which chelation therapy is required) and that this Court, at certification stage, must finally determine, that they are not entitled to pursue an action.[535]

404 Anglo's extreme position is at odds with its own English law expert, who accepts that this question of whether elevated BLLs give rise to actionable injury ultimately "*turns on questions of fact and degree*".[536] Such factual inquiries can only be resolved at trial.

---

[534] Dargan 2020 p 001-1835 – 1836 para 8.4.3; Dargan 2022 p 9271 – 9281 para 14.3.

[535] AA p 001-2949 para 771.

[536] Mr Gibson QC p 001-3982 para 130.

405 Nonetheless the flaws in Anglo's position are already clear.

406 First, Anglo contends that any harms arising from elevated BLLs are "speculative" until one of the four sequelae injuries, that Anglo accepts, arises, such as lead encephalopathy.[537] This is unsustainable. Irrespective of whether a child has developed acute clinical injuries, she will have suffered a degree of significant impairment, which constitutes actionable harm, and the medical and other interventions required to address elevated BLLs, such as chelation therapy, regular blood testing and exposure-reduction, are plainly not speculative.

407 Second, Anglo contends that levels of lead in the blood are "transient" and fluctuating, with the result that an elevated level of lead in the blood could not be an injury.[538] This argument ignores the clear evidence linking high BLLs to irreparable cognitive impairment that will remain even after lead in the bloodstream is absorbed into the bones and the BLL drops. In any event, the extent of the Kabwe environmental disaster has resulted in a situation where high lead levels in Kabwe are not "transient":

407.1 Numerous studies have shown consistently high BLLs among all age groups in Kabwe. This is not a passing phenomenon, as the source of lead exposure has remained constant for decades.

407.2 Moreover, as Professor Dargan observes, children who have suffered chronic exposure to lead, over months or even years, will have developed

---

[537] AA p 001-2925 para 712.

[538] AA p 001-2925 - 2926 paras 710 - 714.

substantial deposits of lead in their bones. Their bones act as a "reservoir" of lead, continuing to release lead into their bloodstreams over many years, if not decades. Their BLLs will therefore remain elevated, even with chelation treatment and if their exposure to lead were to cease completely.[539] This situation is made even more serious by the fact that, as Anglo's own expert Dr Beck notes, the rate of decline of blood lead in those with prior exposure is slower than in those who have only had a brief exposure to lead.[540]

408 As discussed above, Anglo's extreme position on actionable injury is put in perspective by comparison with the Flint lead poisoning claims. On the basis of Anglo's position, virtually of none of the child victims of lead poisoning in Flint, Michigan would have had a claim. It is also wholly inconsistent with the South African reporting regime which dictates that a BLL of 5 µg/dL must lead to a confirmed diagnosis of lead poisoning and a report of the case to the Department of Health.

Third category: Injuries in pregnancy

409 Children and young women who have been exposed to lead are at risk of developing serious injuries in pregnancy, including *inter alia*:[541]

409.1 Hypertension and pre-eclampsia;

---

[539] Dargan 2020 p 001-1810 para 8.2.2; Dargan 2022 p 001-9116 para 11.1.5.

[540] Dargan 2020 p 001-1810 para 8.2.2; Dargan 2022 p 001-9116 para 11.1.5. (referring to Dr Beck, para 6.2).;

[541] Dargan 2020 p 001-1839 – 1850 paras 9 - 10.

409.2 Pre-term delivery and reduced birth weight;

409.3 Spontaneous abortion and pregnancy loss;

409.4 Increased risk of giving birth to children with congenital abnormalities and adversely affected neurodevelopment;

409.5 Remobilisation of lead stored in bone into the bloodstream, creating further risk of harm.

410 In his expert affidavits, Professor Dargan has outlined the medical and environmental interventions that are required before, during and after a woman falls pregnant to address these risks.

410.1 Based on the WHO 2021 guideline for clinical management of exposure to lead, pregnant women and women of child-bearing age should undergo regular venous blood lead monitoring and other clinical monitoring from a BLL of 5 µg/dL.[542]

410.2 Medical monitoring and nutritional interventions are also recommended from a BLL of 5 µg/dL.[543]

410.3 Chelation therapy is also recommended, before a woman falls pregnant, for those blood lead levels of 45 µg/dL and over with BLLs Professor Dargan also considers that it would be appropriate to delay conception to give chelation therapy to a women with such BLL, in addition to taking steps to decrease lead exposure and ensure appropriate nutritional

[542] Dargan 2022 p 001-9288 - 9289 para 14.5.1.3.1; WHO 2021 Guidelines p 006-290 para 8.6.

[543] Dargan 2020 p 001-1847 para 9.3.1.

interventions, as chelation therapy has the potential to cause birth defects if given during the first trimester of pregnancy.[544]

410.4 In the context of Kabwe, where recent studies have found that a substantial proportion of adult women have BLLs exceeding 5 µg/dL, Professor Dargan recommends heightened precautions.

410.4.1 BLLs should be taken in all pregnant women so that necessary lead-related interventions, such as regular venous blood lead monitoring or nutritional, can be instituted as early as possible.[545]

410.4.2 He further recommends that any woman of child-bearing age who is thinking of conceiving should have their BLLs tested, if not already known, to identify appropriate interventions to address the risks to them and their unborn children.[546]

411 Anglo argues that this class has suffered no actionable harm, as they only face future harm or risk of harm and that harm or risk of harm, even if actionable, would only arise when they fall pregnant.[547] This argument is incorrect for three reasons.

412 First, the class definition encompasses women who a) have been pregnant and b) those who will be pregnant in future, and have suffered injury as a result of

---

[544] Id. Dargan, 2022 para 14.5.1.3.2.1

[545] Dargan 2022 p 001-9288 - 9289 para 14.5.1.3.1.

[546] Dargan 2022 p 001-9289 para 14.5.1.3.2.

[547] AA p 001-2928 paras 721 - 723

exposure to lead. The class is therefore not confined to those who may fall pregnant.

413 Second, as explained above, a claimant is entitled to seek damages for future risk of injuries which have not yet occurred where they have already suffered some actionable harm.[548] Many of the affected class will previously have suffered other actionable injuries – such as elevated BLLs or sequelae injuries – which would entitle them, as of right, to claim for future injuries that are likely to eventuate over their lives.

414 For women of child-bearing age, the future risk of injury in pregnancy is a matter that ought to be assessed now. The potential for future pregnancies, and the risk of resulting complications, is hardly a remote or speculative matter. Using available demographic data, Prof Thompson estimates that 97.7% of girls and women in Kabwe will have at least one birth between the ages of 15 and 49.[549]

415 Third, women of child-bearing age who have been exposed to lead require blood lead screening and are forced to make consequential choices and changes to their lives now, before they fall pregnant. Professor Dargan opines that all women in Kabwe who are thinking of conceiving should undergo blood lead testing before falling pregnant. He further recommends that any women with BLLs of 45 µg/dL should postpone falling pregnant until they have undergone chelation therapy to reduce the levels of lead in their bodies.[550] As explained

---

[548] See [393393] above.

[549] Thompson p 001-1681 para 32.

[550] Dargan 2022 p 001-9289 para 14.5.1.3.

above, due to their nature and effects, undergoing blood lead screening or chelation therapy entail actionable harm.

416 A condition that leads a woman to consider foregoing or delay pregnancy, a decision that has profound significance for any life, is actionable harm. In the language of *Dryden*, this is a bodily change that requires a woman to "*change their everyday lives*" to avoid exposure to further harm.

417 Both sides' experts agree that the actionability threshold is likely to be met where a woman is required to take action before becoming pregnant. Anglo's expert, Mr Gibson, acknowledges that "*if the Claimant has had to take steps in order to reduce these clinical risks [of lead in pregnancy], prior to attempting to conceive, this is likely to be a relevant consideration pointing towards actionability*".[551]

418 Whether the threshold is indeed met will, of course, depend on the facts and evidence that emerge at trial. Anglo's suggestion that the certification court ought to decide this issue here and now, erasing the claims of potentially thousands of women, is again without foundation.

[551] Gibson p 001-3983 paras 133 – 134.

F. ANGLO'S NEGLIGENCE CAUSED THE HARM

419 The Applicants will demonstrate that Anglo's negligent conduct factually caused the actionable harms suffered by the class members. The case against Anglo is two-fold:

419.1 There is a *prima facie* case that Anglo's negligence was the "but for" cause of the present-day levels of lead pollution in Kabwe and the resulting harms.

419.2 Even if "but for" causation is not established at trial, Anglo will be held liable as its negligence materially contributed to the harms.

420 We first address the relevant principles on factual causation before addressing the evidence.

The relevant principles

421 Ordinarily, factual causation requires proof that "but for" the negligent conduct, the harm would not have occurred.[552]

422 However, English law has long recognised an important exception to the standard "but for" test in cases of "cumulative causation". Such cases involve more than one act or actor which cumulatively brought about an injury, where it cannot be determined on a balance of probabilities that any one was the "but for" cause.[553]

---

[552] *Sienkiewicz v Grief* [2011] 2 AC 229 at paras 16 – 17.

[553] Hermer 2020 p 001-2296 paras 29 – 31; Gibson p 001-3951ff at para 42ff.

423 The parties' respective English law experts are agreed that in such cases of cumulative causation, it is not necessary to prove a defendant's breach of duty "*as the sole, or even the main, cause*" provided that "*it made a 'material contribution' to the damage*".[554]

424 Divisible injuries are a prominent example of cases in which cumulative causation applies. Such injuries typically arise where the damage is caused and progressively worsened by an accumulation of events, such as cumulative exposure to dust causing silicosis or long-term exposure to loud noise causing deafness. By contrast, an indivisible injury typically arises from a single event, such as mesothelioma. In cases of indivisible injury, the accumulation of exposure does not worsen the severity of the injury.[555]

425 There is broad agreement that the injuries arising from exposure to lead are, in general, best classified as divisible, dose-related injuries.[556] Lead is, after all, a cumulative poison that builds up in the body over time.

426 The approach to cumulative causation involving divisible, dose-related injuries of this nature was explained by Lord Philips in *Sienkiewicz v Grief*,[557] drawing on the 1956 House of Lords judgment in *Bonnington Castings Ltd v Wardlaw:*[558]

> *"It is a basic principle of the law of tort that the claimant will only have a cause of action if he can prove, on balance of probabilities, that the*

---

[554] Gibson p 001-3951 at para 42.

[555] *Sienkiewicz* (n 552) at paras 12 - 14; Hermer p 001-2296 para 30; Gibson p 001-3659 para 64.

[556] See Hermer id; AA p 001-2685 para 43 ("*the sequelae injuries that may follow from high lead exposure are dose-related divisible diseases*").

[557] *Sienkiewicz* (n 552) at paras 16 – 17.

[558] *Bonnington Castings Ltd v Wardlaw* [1956] AC 613.

> *defendants tortious conduct caused the damage in respect of which compensation is claimed. He must show that, but for the defendants tortious conduct he would not have suffered the damage. This broad test of balance of probabilities means that in some cases a defendant will be held liable for damage which he did not, in fact, cause. Equally there will be cases where the defendant escapes liability, notwithstanding that he has caused the damage, because the claimant is unable to discharge the burden of proving causation.*
>
> *There is an important exception to the but for test. Where disease is caused by the cumulative effect of the inhalation of dust, part of which is attributable to breach of duty on the part of the defendant and part of which involves no breach of duty, the defendant will be liable on the ground that his breach of duty has made a material contribution to the disease: Bonnington Castings Ltd v Wardlaw [1956] AC 613 . The disease in that case was pneumoconiosis. That disease is divisible. The severity of the disease depends upon the quantity of silica inhaled. The defendant did not, however, argue that, if held liable, this should only be to the extent that the dust for which it was responsible had contributed to the plaintiff's symptoms. It was held liable for 100% of the disease. There have, however, been a series of cases at first instance and in the Court of Appeal in which it has been recognised that where there has been a number of exposures of a claimant to bodily insults that have cumulatively caused a divisible disease, responsibility should be apportioned so that an individual defendant is liable for no more than his share of the disease. This apportionment may necessarily be a rough and ready exercise…."*[559]
> (Emphasis added)

427 As to what is required to establish a "*material contribution*", *Bonnington Castings Ltd*,[560] offers helpful guidance.

427.1 There the claimant contracted *pneumoconiosis* from inhaling dust containing silica in the workplace. That dust was generated by two sources. The main source of dust was a set of pneumatic hammers which were operated correctly and in respect of which the employer did not

---

[559] There is some debate as to whether the "material contribution" test is truly an exception to the "but for" test, as opposed to a modification of this test: see *Williams v Bermuda Hospitals Board* [2016] AC 888.

[560] *Bonnington Castings* (n 558).

breach any duty. The secondary source was a set of swing grinders, which were operated improperly in breach of the employer's duties.

427.2 Lord Reid held that it was not possible to determine which of the two sources was the more probable source of dust and the claimant's disease. All that could be established was that dust was caused by both sources and that the negligent source made a material contribution. On that basis, the employer was held liable for all damages.

427.3 As to the threshold for a "material contribution", Lord Reid concluded:

> *What is a material contribution must be a question of degree. A contribution which comes within the exception de minimis non curat lex is not material, but I think that any contribution which does not fall within that exception must be material. I do not see how there can be something too large to come within the de minimis principle, but yet too small to be material."*[561]

428 Therefore, any contribution to injury which is not *de minimis* – trivial or of no significance – is a material contribution, that attracts liability.

429 Where a material contribution to actionable harm is established, the extent of Anglo's liability will ultimately be apportioned according to its relative contribution to the harm.[562] This process of apportionment does not require any precise scientific measurement, but is instead a "*rough and ready*" exercise, shaped by considerations of fairness and justice.[563]

---

[561] Id p 618 – 619.

[562] Hermer p 001-2297 para 33.

[563] *Sienkiewicz* (n 552) at para 17, discussed further at [441] – [443] below.

Anglo was the "but for" cause of lead pollution and harm

430 The existing evidence provides more than a *prima facie* case of "but for" causation, involving two causal pathways.[564]

431 First, the duty to prevent: if the trial court accepts that Anglo ought to have ensured (but failed to ensure)that safe systems were imposed at the Mine prior to 1974, Anglo would be liable for all exposure and resulting injuries flowing from its negligence. If the court concludes that, as a matter of fact, this would have resulted in those safe practices continuing even after 1974, Anglo would also be liable for harm arising from emissions occurring after 1974.[565]

432 Second, the duty to cease or relocate and remediate: if the trial court accepts that Anglo had a duty to cease or relocate mining operations, as emissions could not be safely controlled, then its negligence would also be the sole cause of the resulting harm.

432.1 A reasonable company in Anglo's position, aware of the dangers, would have advised and instructed the Mine to cease smelting on site to relocate its smelting operations and mine dumps to a safe location away from the town if one could be identified and to remediate the polluted area it left behind. It would also not have invested heavily to rescue the Mine from failure, as it did in 1937, and would not have supervised the design and

---

[564] Hermer p 001-2297 para 33.

[565] FA p 001-27 para 34; p 001-108 para 226.

installation of new smelting equipment to increase lead production, as it did in 1947, 1953 and 1962.

432.2 But for this negligent conduct, smelting and dumping operations would have either ceased entirely at the Kabwe site or would have been reduced to such an extent that the danger was practically eliminated. There would have been no lead emissions to contend with in 1974, and no environmental damage still causing harm to the present plaintiffs. Anglo would accordingly be wholly liable for the resulting harm.[566]

433 But even if the Applicants fall short of proving "but for" causation at trial, they need only prove, on a balance of probabilities, that Anglo's negligence materially contributed to the present-day levels of lead contamination in the Kabwe environment to establish liability. We now turn to address this material contribution.

Anglo's negligence materially contributed to lead pollution in Kabwe

434 The expert opinions of Professors Betterton, Harrison and Taylor have all addressed Anglo's significant contribution to the existing levels of lead contamination in Kabwe. In sum, their opinions reflect that:

434.1 Lead pollution from Anglo's period of effective control, from 1925 to 1974, is a significant contributor to existing levels of lead contamination;

---

[566] Hermer p 001-2297 para 33.

434.2 The pre-1925 and post-1974 periods would likely have contributed far smaller proportions of contamination;

434.3 Contamination from the Mine has likely affected the entire Kabwe District;

434.4 Natural lead mineralisation is not a significant source of contamination;

434.5 Other anthropogenic sources are also of limited significance, relative to the substantial emissions from the period of the Mine's operations.

Lead pollution from 1925 – 1974 remains in the Kabwe environment

435 Anglo readily concedes that "*once an area becomes contaminated with lead it will persist for many decades or even centuries*".[567] As a consequence, Anglo cannot deny that the lead contamination arising before 1974 is still in the Kabwe environment, presenting an ongoing source of danger.

436 Anglo also does not dispute that the critical period from 1925 to 1974 accounted for over 66% of the Mine's lifetime production of lead, amounting to approximately 528,000 long tons of lead.[568]

437 As Prof Betterton notes: "*given the fact that Anglo produced about half a million long tons of lead whilst it operated the facility over a period of nearly 50-years, it*

[567] AA p 001-2707 para 103.

[568] FA p 001-105 – 106 paras 221 – 222; Annexure ZMX 79 p 001-1206; Not denied: AA p 001-2708 para 107 (1925 – 1929 = 2,4% of lead production); AA p 001-2709 para 109 (1937 – 1945 = 1% of lead production) AA p 001- 2711 para 117 (1946 – 1962 = 29% of total lead production); AA p 001-2718 para 139 (1963 – 1974 = 33% of total lead production); p 001-3108 para 1202; Sharma p 001-3318 ("*65.5.% of the lead produced at the Plant was processed between 1925 and 1974*").

is inconceivable that they did not materially contribute to lead contamination and exposure in Kabwe".[569]

438 The percentage of total lead production remains a useful, albeit inexact, shorthand for Anglo's contribution to the contamination of the Kabwe District.[570] This is particularly so given that reports from the time reflect that countless tons of lead were being emitted over the decades from the smelting process.[571]

439 Prof Harrison has provided further analysis of Anglo's contribution in his "*mass balance*" calculations.[572] In simple terms, he uses these calculations to estimate whether emissions between 1925 and 1974 have had a major influence upon current soil lead levels in Kabwe, specifically the area downwind of the smelter site. In conducting these calculations, Prof Harrison has compared emission rates, airborne concentrations and soil lead concentrations and concludes that "*the emissions reported by the plant management during the 1950s and 1960s could easily account for a large proportion of the measured soil reservoir of lead*".[573]

440 In response, Anglo seeks to suggest that the absence of detailed emissions data over the lifetime of the Mine and gaps in the historical record would somehow

---

[569] Betterton 2022 p 001-9612 para 11.1.1.

[570] Harrison 2022 p 001-9533 para 7.34.

[571] Harrison 2022 p 001-9537 para 7.42 – 7.43.

[572] Harrison 2022 p 001-9522 Appendix 1, explained at p 001-9535 para 7.39 – 7.40.

[573] Harrison 2022 p 001-9539 para 7.43.

preclude the trial court from determining causal responsibility and apportioning liability to Anglo. On this basis, it suggests that there can be no arguable case.[574]

441 As explained above, under English and Zambian law, the fact that damage is caused by multiple contributing causes of different actors does not absolve an actor from liability, as long as its negligent conduct made a material contribution to the damage. To the extent that the damage caused is divisible, each actor will be liable for a pro-rata share of damages. A common sense approach is required to such apportionment. This is particularly so when dealing with historical liability, where evidence may be difficult to come by. The attribution of causal responsibility and the resulting apportionment of liability in these cases are, of necessity, a *"rough and ready exercise".*[575]

442 Two English cases demonstrate the common sense nature of this exercise.

442.1 In *Holtby v Brigham Cowan (Hull) Ltd*[576] the plaintiff developed asbestosis after 40 years of exposure to asbestos dust at different sites operated by different employers. On the question of apportionment of responsibility, the Court of Appeal acknowledged that "*[t]he question of quantification may be difficult and the court only has to do the best it can using its common sense*".[577] He added that "*[c]ases of this sort, where the disease manifests itself many years after the exposure, present great problems, because much of the detail is inevitably lost.*" However, he concluded that

---

[574] AA p 001-2913 para 675, 678.

[575] *Sienkiewicz v Grief* (n 552) para 17.

[576] *Holtby v Brigham Cowan (Hull) Ltd* [2000] ICR 1086.

[577] Id at para 20.

despite these complexities "*the court must do the best it can to achieve justice, not only to the claimant but the defendant, and among defendants.*"

442.2 *Thompson v Smiths Shiprepairers*,[578] which was cited with approval in *Holtby*, addressed a case of cumulative causation involving deafness arising from continuous exposure to loud noise in a ship repair business, over many years, involving successive employers. Mustill J held that while scientific evidence did not allow for any precise apportionment, justice and common sense dictated a fair apportionment: "*[w]hat justice does demand, to my mind, is that the court should make the best estimate which it can, in the light of the evidence, making the fullest allowances in favour of the plaintiffs for the uncertainties known to be involved in any apportionment.*"[579]

443 Therefore, the trial court need not be overawed by the apparent complexity of the task. Any gaps in the historical record and the difficulties of precise calculation will not stand in the way of the trial court making a just and fair assessment of Anglo's liability.

<u>The post-1974 emissions do not diminish Anglo's material contribution</u>

444 Anglo's attempts to blame the post-1974 period for all lead contamination in Kabwe ring hollow. The Clark thesis, based on investigations conducted between 1971 and 1974, demonstrates that the Kabwe soil and air were already

---

[578] *Thompson v Smiths Shiprepairers* [1984] 1 QB 405.

[579] Id at 443G.

heavily contaminated before 1974, and that blood-lead levels of residents of the worst affected areas of the town reflected this.

445 Anglo accepts that the findings from Clark's research coincide with the end of the relevant period, yet overlooks what Clark's thesis incontrovertibly proves: that the atmospheric lead emissions from the Mine at that point in time, before 1974, were the primary source of lead pollution and that the elevated levels of lead pollution in these communities correlated with dangerously high BLLs.

446 As Prof Harrison notes, there is also remarkable consistency in the levels of lead contamination between 1974 and today: "*blood lead concentrations measured in recent years, long after closure of the mine, are similar to those measured during the operation of the mine.*" He compares Clark's figures with the BLLs reported by Yabe et al (2012 - 2017 figures)[580] and Bose-O'Reilly et al (2015 figures),[581] which reflect remarkable continuity of harm, concluding that "*[t]he reported blood lead levels far exceed those in normal, less contaminated environments and are clearly liable to be linked to local levels of contamination of soil and surface dusts and inadvertent ingestion by local people*".[582]

447 Despite this evidence, Anglo attempts to argue that ZCCM's operations of the Mine after 1974 somehow contributed all lead contamination in the Kabwe environment, making ZCCM "100%" liable for the contamination.[583]

---

[580] See the Yabe et al studies at Annexure ZMX 18 – ZMX20 pp 001-752 – 797.

[581] Annexure ZMX124 p 001-8313.

[582] Harrison 2022 p 001-9527 para 7.22.

[583] AA p 001-2685 para 43.

448 This is despite Anglo's admission that the period from 1974 to the Mine's closure in 1994 accounted for just 22% of the total lead production over the lifetime of the mine.[584]

449 Anglo suggests that there was a significant deterioration in the operation of pollution controls after 1974 that accounted for increased pollution. This contention is concentrated on two allegations:

449.1 ZCCM's alleged suboptimal operation of the Waelz Kiln process; and

449.2 ZCCM's operation of the sinter plant without emission control, following the breakdown of the electrostatic precipitator.

450 Any criticisms of the operation of the plant in this period should, however, be considered in the context of the "*Broken Hill Attitude*" that prevailed before 1974, the fact that the lead smelting process remained essentially unchanged, and the continuous stream of reports on uncontrolled emissions, equipment breakdowns, and inadequate controls in the decades preceding 1974. All of this strongly indicates that ZCCM's alleged negligence was the continuation of a pattern established under Anglo's watch.

451 In respect of the Waelz Kiln process, Anglo argues that ZCCM "*did not operate the Waelz Kilns in the way that they were designed*" as it fed the kilns with material that contained over 7.5% lead content, while it was designed to take 5% lead content.[585]

---

[584] Annexure ZMX 79 p 001-1206; Admitted AA p 001-2730 para 176.

[585] AA pp 001-2752 paras 225-6; Response at RA p 001-7777 para 542.

451.1 However, Anglo had already factored that into its planning of the kilns. In 1970, Barlin described how the design of Waelz kilns, led by Anglo, already contemplated that the leach residues which would be fed into these kilns would have a lead content of over 7.5%.[586] Thus, the alleged deficiencies and resulting pollution were defects in Anglo's initial planning.

451.2 In any event, lead production declined steeply during this period, as reflected in the production figures already cited.[587]

452 The evidence suggests that the electrostatic precipitator initially failed in 1985, it was refurbished in 1986, before failing again in 1989 when the bottom of the precipitator collapsed.[588]

452.1 Problems with the precipitator were already common under Anglo's watch, when levels of lead production were far higher.[589]

452.2 The annual average lead production during the decade when the electrostatic precipitator was underperforming (1985-1994) was about 5,300 long tons.[590]

---

[586] Barlin p 001-705 FA Annexure ZMX 11; RA p 001-7647 para 152

[587] FA p 001-105 – 106 paras 221 – 222; Annexure ZMX 79 p 001-1206.

[588] Betterton 2022 11.10.

[589] See Harrison 2022 p 001-9537 para 7.42: "*The monthly reports list frequent problems with the Cottrell electrostatic precipitator, which lead me to the conclusion that it was not operating effectively for much of the time.*"

[590] Betterton 2022 p 001-9624 para 11.2.16.

452.3 In comparison, during the preceding decade (1965-1974) the annual average lead production was about 24,000 long tons, more than four times greater.[591]

452.4 Moreover, Prof Betterton considers that the collapse of the bottom of the electrostatic precipitator in around 1986 meant that dust escaped from a much lower altitude than via the stack. As Prof Betterton explains, *"[t]his would have had the effect of allowing the already high emissions to escape from near ground level thus restricting atmospheric transport and deposition to the immediate vicinity of the Kabwe plant rather than making it widespread across the Kabwe district*."

453 Anglo's contention that there was a significant increase in the concentration of lead in the air after 1974 must be treated with great circumspection.[592] As Prof Harrison explains:[593]

453.1 The reported lead in air concentration of 160 µg/m^3 in 1984 may, in fact, be representative of lead in air during the period of plant operation by Anglo, as this was the period before the precipitator failed. This corresponds with an earlier reading in 1973/74, which gave a lead in air measurement of 145 µg/m^3 in Kasanda.[594]

---

[591] Id.

[592] AA p 001-2732 para 179, claiming a "ten-fold" increase of concentrations of lead in air between 1974 and 1984.

[593] Harrison 2022 p 001-9534 paras 7.36 – 7.37.

[594] Id para 7.36.

453.2 There is good reason to believe that Clark's figure of an average lead in air concentration of 9.7µg/m3 in 1974 was a substantial underestimation, due to deficiencies in the air sampling methods and equipment that he used.[595]

453.3 Harrison's calculations of the likely emissions pre-1974, based on reported "stack losses" suggests that the true emissions were far higher than Clark's sampling results suggest.[596]

454 In sum, even if the trial court were to find some deterioration after 1974, these emissions would still be dwarfed by the five decades of lead emissions that preceded this period.

The pre-1925 period

455 Anglo's attempt to blame the present conditions in Kabwe on the pre-1925 period also does not diminish its contribution to the harm. Professors Betterton and Harrison acknowledge that uncontrolled releases from the four blast furnaces and sintering hearths are likely to have emitted large amounts of lead fume and dust.[597] However, the modest level of lead production in this period – 12% of the Mine's lifetime total[598] – combined with the relatively limited range of dispersal from the low stacks (resulting in lead being deposited mainly in the

[595] Id para 7.37.

[596] Id p 001-9538 para 7.42.

[597] Betterton 2020 p 001-1625.

[598] Annexure ZMX 79 p 001-1206.

immediate vicinity of the mine),[599] meant that the majority of the lead pollution was attributable to the post-1925 period.[600]

The geographical distribution of lead contamination

456 While areas closest to the Mine, including Kasanda, Makululu and Chowa, are among the most affected by lead contamination, it is not confined to these areas.

457 As previously noted, Professor Betterton has conducted a detailed modelling exercise which demonstrates that windborne emissions from the Mine and smelter were capable of reaching the entire Kabwe District, depending on the direction of the prevailing winds at different times of the year.[601] This broadly accords with ZCCM's own modelling of emissions dispersal in 1995.[602]

458 This conclusion is supported by further studies, which have shown widespread contamination and resulting lead poisoning across the Kabwe District. For example:

458.1 Yamada et al (2020) plotted the simulated geographic distribution of BLLs for children aged 16 months and showed that BLLs exceeded 5 µg/dL throughout most of the Kabwe District.[603]

[599] RA p 001-7663 para 189.

[600] Harrison 2022 p 001-9544 para 8(h).

[601] RA p 001-7640 paras 142 – 148; Betterton 2022 p 001-9605 para 9.

[602] Betterton 2022 id para 10, Annexure AA54 p 001-4734, Figure 5.1. p 001-4879.

[603] Annexure ZMX114 p 001-8130.

458.2 Nakata et al (2021), found elevated blood lead levels in children under the age of 18 living in Kang'omba (approximately 15km south of Kabwe central) and in Hamududu (approximately 30km south of Kabwe central).[604]

458.3 Prof Betterton concludes that this "*constitutes direct, observational evidence that populations far removed from the mining operations in Kabwe have been exposed to lead from the mine".*[605]

458.4 The Applicants' experts Professors Harrison, Thompson and Taylor confirm, in reliance on the WMC study from 2006, that community BLLs are strongly correlated with surface soil lead levels as opposed to deeper lead levels which would indicate naturally occurring lead as opposed to lead emanating from the operations of the mine. This is so, including at locations at a distance from the former lead works.[606]

459 The rival modelling exercises conducted by Anglo's experts and the Applicants' experts have led to a flurry of further affidavits and expert reports. Anglo's Mr Sharma disputes the accuracy of the modelling, with Professors Betterton and Harrison filing further affidavits in defence.[607]

---

[604] Annexure ZMX115 p 001-8141.

[605] Betterton 2022 p 001-9603 para 8.4.

[606] The increased surface soil lead levels as compared to the natural occurring lead levels are illustrated by the Kříbek map reproduced below paragraph 56.4 above.

[607] See Anglo FA in Strike Out p 006-82 para 190ff ; Sharma AA 141 006-178; Betterton SR2 p 006-514ff; Harrison SR4 p 006-557ff.

460 Such technical disputes between experts could hardly be resolved at the certification stage and are again a matter for trial. The existence of such disputes is sufficient demonstration of a trial-worthy issue.

461 The process of trial preparation will also afford the opportunity for further soil sampling and modelling exercises, if necessary, which will provide the trial court with the means to resolve these factual disputes.

Naturally occurring lead

462 While the Kabwe District is an area of naturally occurring lead, the Applicants' experts confirm that natural sources would not account for current levels of contamination, which are far more than what one would expect from the natural erosion of an orebody.[608]

463 Two significant considerations demonstrate this point.

463.1 First, Prof Taylor observes that natural lead sources would result in concentrated contamination around outcroppings of the ore bodies, but this is not the case in the Kabwe District, where exposure and contamination are widespread.[609]

463.2 Second, soil lead sampling, such as the 2019 study by Kříbek, shows that lead is most concentrated in the surface soil and concentrations decline at

[608] FA p 001-105 para 219 – 220.

[609] Taylor 2020 p 001-1739; Taylor 2022 p 001-9564 - 9567 para 7.5

depth.[610] Prof Taylor confirms that this is all indicative of the input of a surface pollutant, not the result of natural mineralisation.[611]

Other sources of lead pollution

464 As to the other anthropogenic sources of lead pollution, such as historical use of lead petrol and lead paint, the experts have demonstrated that this could not account for the extreme levels of lead pollution seen in the Kabwe District.[612]

465 Previous assessments have reached the same conclusion. For example, the 2006 ZCCM Copperbelt Environment Project Project Synthesis report concluded that "*the Kabwe mine site was historically, and probably continues to be, the first-order control of the district-wide Pb distribution*."[613]

466 Prof Taylor has also addressed the potential contribution made by artisanal mining and small-scale smelting operations at Mine site, concluding that given the consistently high BLLs between 1974 and the present day, "*informal mining operations appear to have not influenced lead exposures in general across the Kabwe community.*"[614]

---

[610] Kříbek Annexure ZMX14 p 001-709, addressed above at [56].

[611] Taylor 2022 p 001-9567 para 7.6 - 7.7

[612] RA p 001-7683 paras 240 – 247. Taylor 2020 p 001-1765 para 7.5; Harrison 2022 p 001-9525 - 9526 paras 7.19 - 7.20.

[613] Annexure AA94 p 001-6501 at 6514 para 2.2.

[614] Taylor 2020 p 001-1747 – 1748.

The link between lead pollution and elevated blood lead levels

467 The well-known pathways of lead exposure, which primarily occur through ingestion and inhalation, have already been addressed and are described in further detail by Prof Dargan.[615]

468 Lead in the soil acts as a reservoir of contamination, which is continuously remobilised as dust, particularly in the dry conditions is Kabwe.[616] Prof Taylor notes that this remobilisation is cyclical. Once remobilised, dust is then re-deposited into the surface soil, which may later get remobilised again. Critically, Prof Taylor explains that the remobilised particles are typically finer with greater surface areas and tend to be higher in concentrations of trace contaminants.[617]

469 This finer particulate is more easily transported than soil and as such, there is a shift in importance of dust exposure sources as compared with soil sources with distance from the primary point source.[618]

470 This is significant when considering the communities further away from the Mine site. For these populations, Prof Taylor explains that it is soil-derived dust that increases their exposure and that "*places with lower soil Pb concentrations might still experience marked exposure from lead-rich dust*".[619]

---

[615] Dargan 2020 p 001-1806 para 8.1.1

[616] RA p 001-7676 para 219; Taylor 2022 p 001-9579 para 12.6.

[617] Taylor 2022 id p 001-9577 para 12.

[618] Id p 001-9578 para 12.3.

[619] Id p 001-9581 para 12.10.

471 Anglo's experts, Mr Sharma and Dr Beck, have sought to dispute these pathways of exposure, alleging that there is no reliable connection between soil lead levels and BLLs. Mr Sharma refers to instances in which there are similar mean BLLs found in townships with significantly different mean soil lead levels. He also points to the converse scenario, in which materially different mean BLLs are found in townships with similar mean soil lead levels. This, he suggests, reflects that there are "*other sources and exposure mechanisms*" of lead poisoning.[620]

472 This was met with further detailed responses from Professors Harrison, Thompson and Taylor, who all demonstrate that the available data shows there is indeed a strong correlation between lead pollution in the soil and elevated BLLs, a conclusion that is supported by previous studies in Kabwe.[621] Professor Thompson, a statistician, also points out that there are several issues with Dr Beck and Mr Sharma's interpretations, in particular that Dr Beck's analysis is based on a mathematically flawed representation of the data.[622]

473 Notably, Anglo does not appear to press its arguments about soil lead concentrations and levels of lead poisoning with any vigour, given its attempt to blame ZCCM for the ongoing disaster.

---

[620] Sharma p 001-3273. See also Beck p 001-3559 para 5.4.1.3.

[621] RA p 001-7668 paras 200 – 214.

[622] Thompson 2022 p 001-9667 paras 12-20.

The link between lead and injury

474 The scientific evidence on the connection between lead exposure and injuries has already been outlined in detail above.

475 Anglo turns its face against the science, by denying and downplaying the link between lead and harm. We address three of its primary points of dispute:

475.1 Sequelae injuries from lead exposure;

475.2 Low-level lead exposure and injuries;

475.3 Proving causation in individual cases.

476 At the outset, we note the inconsistency in Anglo's position. Anglo repeatedly accuses ZCCM of downplaying the severity of the danger, which it characterises as a commonly adopted tactic by polluters.[623] Yet Anglo deploys the same tactic in this litigation.

477 Anglo goes as far as to bring an application to strike out the further evidence of Professors Bellinger and Lanphear, two of the leading international experts on childhood lead poisoning, whose affidavits comprehensively rebut Anglo's position. We will address whatever remains of Anglo's strike out application after it has filed its heads of argument in that application.

---

[623] AA p 001-2751 para 221.1.

Sequelae injuries

478 Anglo invites this Court to reject the conclusions of public health bodies such as the WHO, clinical studies, and medical experts on the link between lead and a range of severe injuries.

479 According to Anglo's expert, Dr Banner, public health organisations such as the WHO and the CDC are simply biased towards a *"maximally protective view of the population"*.[624]

480 On this contrarian foundation, Anglo argues that lead exposure causes only four rare injuries: lead encephalopathy; anaemia without iron deficiency; lead colic; and peripheral neuropathy, to the exclusion of all others.[625]

481 The Applicants' experts – Professors Dargan, Bellinger and Lanphear – have delivered a withering critique of Anglo's arguments and Dr Banner's questionable views.[626]

481.1 They discuss in detail the weight and strength of the available evidence for each of the sequelae injuries pleaded by the Applicants, based on numerous peer-reviewed studies demonstrating the causal link between lead and these injuries.[627]

---

[624] Banner, p 001-3714 para 7.13.

[625] AA p 001-2687 para 47; p 001-2932, para 733.

[626] RA p 001-7686 – 7688 paras 249 – 256; Dargan 2022 p 001-9113 - 9227 para 11; Bellinger p 001-9357 para 29; Lanphear pp 001-9455 – 9462 paras 8 – 21.

[627] See, in particular, Dargan 2022 id; Dargan 2020 p 001-1810 – 1834 para 8.3, pp 001-1840 - 1848 para 9.2.

481.2 They underscore the rigorous methods used by the WHO and other public health organisations in developing their evidence-based recommendations.[628]

481.3 Professors Dargan and Bellinger also provide a detailed discussion of the studies that Dr Banner relies on. In doing so, they show that Dr Banner has in fact misstated many of the findings of the studies cited in his affidavit or has overlooked countervailing evidence.[629]

Low-level lead injury

482 We have already addressed the international consensus, supported by expert evidence, that there is no safe level of lead in the blood.[630] This is now further reinforced by the evidence of Professors Bellinger and Lanphear.[631]

483 Anglo offers two primary counters, in arguing that so-called "low-level" lead exposure is not harmful.

484 First, Anglo argues, by reference to Dr Beck, that the CDC reference value of 5 µg/dL (recently changed to 3.5 µg/dL) does not mean that such levels are unsafe for an individual, as this is purely a statistical measure.[632] Anglo argues

---

[628] See Dargan p 001-9188 para 11.26; Lanphear p 001-9461 para 18.

[629]Dargan 2022 p 001-9113 - 9227 para 11; Bellinger p 001-9357 para 29.

[630] See Chapter III above. FA p 001-37 para 62; RA p001-7686 paras 250-251; Annexure ZMX125, p001-8318 (Executive summary of WHO guideline for clinical management of exposure to lead) at p001-8322: "*Exposure to lead, even at very low levels, has been associated with a range of negative health effects, and no level without deleterious effects has been identified*."

[631] RA p 001-7689 – 7690 paras 262 – 263; Bellinger pp 001-9340 – 001-9451; Lanphear pp 001-9452 – 001-9514.

[632] AA p 001-2948 para 768.

that "*a child with a BLL of above 5 µg/dL does not necessarily have an unsafe BLL*".[633]

484.1 This argument reflects a deliberate attempt to sow confusion. Anglo starts from the correct premise – that reference values are statistical measures, not health measures – but then distorts this premise to arrive at the wrong conclusion that BLLs above or below this reference value are not unsafe.

484.2 Anglo again intentionally ignores the fact that the CDC, much like the WHO, has been unequivocal in stating that there is no safe level of lead in the blood.

484.3 Thus, reference values are <u>not</u> intended to reflect "safe" or "harmful" levels of lead, precisely because there is no such "safe" level.

484.4 Instead, as Professors Bellinger and Lanphear explain, the purpose of the CDC's reference value is to identify children who are the most highly exposed to lead – in the 97.5th percentile of BLLs among US children – and thus to prioritize them for medical and environmental follow-up and interventions.[634]

484.5 Thus the reference value is intended to guide interventions, using limited resources, by determining which category of children are most in need. This does not mean that a child with a BLL below this reference level is safe.

---

[633] Id para 769.

[634] Bellinger p 001-9346 para 11; Lanphear p 001-9461 para 18.

484.6 Consistent with this approach, as pointed out above, in South Africa a BLL of 5 µg/dL must lead to a confirmed diagnosis of lead poisoning. This does not mean that a child with a BLL below 5 µg/dL cannot be diagnosed with lead poisoning if s/he presents clinically with symptoms of lead poisoning.

485 Second, Dr Banner advances the further argument that the causal link between lead and neurodevelopmental harm at low BLLs is in doubt because studies have found irreversible effects, involving persistent or permanent changes in brain structure. This attempt to equate causation with reversibility is baseless.[635] Prof Dargan explains that it is common for significant toxicological exposures to cause irreversible effects. On Dr Banner's logic one could argue that lung cancer was not caused by smoking because lung cancer cannot be reversed by stopping smoking.[636]

486 The harms associated with low BLLs must also be seen in the specific context of Kabwe, a matter that Anglo fails to engage with in any meaningful way.

486.1 Although studies have shown elevated BLLs among all age groups in Kabwe, due to their physical characteristics and behaviour, the BLLs of small children tend to peak around age two and decline thereafter, despite ongoing remobilisation of lead from the bones.[637]

486.2 In the context of Kabwe, this means that an older child in their late teens, with a comparatively low current BLL who has lived in a highly

---

[635] Banner p 001-3682, para 4.5.1, p 001-3685, para 4.5.1.13.

[636] Dargan 2022 p 001-9182 para 11.22.

[637] Dargan 2022 p 001-9229 para 12.1.3-5.

contaminated environment for most or all of their life, is likely to have had a higher BLL as a small child. The thirteenth Applicant is a case in point, as she had a high childhood BLL compared with a lower current BLL.[638]

486.3 Professor Bellinger explains that it is therefore reasonable to assume that an older child or adult who has lived in in the same area since birth had a considerably higher blood lead concentration in early childhood and that the present BLLs of children in the same area provide the best available estimate for an individual's historic BLL.[639]

486.4 The implication of this is that an older child in Kabwe, with lower current BLLs, is likely to have suffered injuries from lead exposure in earlier childhood, when their BLLs were higher. In addition, such older children or adults are also at risk of future harm as a result of lead stored in the bone since early childhood being released into the blood.

Causation in individual cases

487 Anglo seeks to cast doubt on whether it is possible to determine whether lead has caused specific injuries in individual cases. It goes as far as to baldly deny that any of the Applicants have suffered harm,[640] without having medically examined them, despite the detailed clinical reports prepared by Professors Dargan and Adnams.

---

[638] PID13 p001-2094 – p001-2095, para 7.4.

[639] Bellinger p 001-9356 para 28.

[640] AA p 001-3115 para 1237: "*I deny that the Applicants have suffered harm from lead exposure*"; AA p 001-3117 para 1246: "*it would be difficult to describe these children as lead 'poisoned*'".

488 Anglo's primary argument is that epidemiological studies, based on population-wide trends, cannot be relied on in proving lead-related injury in individual cases.[641]

489 Professors Dargan, Bellinger and Lanphear, counter this by explaining how population-based data is a highly effective tool in proving individual harm, in addition to the range of other diagnostic information, and often provides the best available evidence against which individual harm can be assessed.[642]

490 Prof Bellinger explains that epidemiological evidence is used regularly in civil litigation to provide the plausible basis for alleged injuries, such as from exposure to deteriorated lead paint. In conjunction with other information, such as a medical examination and BLL history, it can be concluded whether it is more likely than not that lead was a material cause of an individual's injury.[643] This is reflected in Professors Dargan and Adnams' clinical assessments of the Applicants.

491 It is not necessary at this stage for this Court to come to a conclusion as to which of the experts' opinions are to be preferred, but we submit that it has been demonstrated that the opinions expressed by Professors Dargan, Adnams, Lanphear and Bellinger are clinically and scientifically sound.[644] Moreover,

---

[641] AA p 001-2929-001-2931 para 726-730.

[642] RA p 001-7694 – 7697 paras 276 – 284. Dargan 2022 p 001-9196 para 12.29; Bellinger pp 001-9353 – 9354 para 001-9353; Lanphear p 001-9462 para 21.

[643] Bellinger id.

[644] See for example: Banner, p001-3678 (misstated Cohen)- see Dargan, p001-9120 -001-9121, para 11.4.4; Dargan, p001-9123, para 11.5 (abdominal pain from lead poisoning is clinically distinct from

Professors Dargan and Adnams have clinically assessed the Applicants, whereas Anglo's experts have not done so.

492 It suffices to say that the Applicants have established more than a prima facie case of the link between lead and the injuries suffered by the prospective class members. There is equally a prima facie basis to reject much of Anglo's expert evidence as being advanced "*without logical reason*".[645] These matters are all trial-worthy.

G. LEGAL CAUSATION: ZCCM'S CONDUCT HAS NOT BROKEN THE CAUSAL CHAIN

493 Anglo contends that even though it may have factually caused children to suffer lead poisoning in Kabwe, it should be absolved of any liability due to the ZCCM's actions after 1974. It argues that the harm of lead pollution was both too remote as to be reasonably foreseeable and that ZCCM's conduct amounted to a *novus actus interveniens* (a new intervening act).[646]

494 It bears repeating that the post-1974 events would have little significance if the trial court agrees with the Applicants' contention that a reasonable company in

---

abdominal pain arising from intestinal parasites) contra Banner, p001-3679, para 4.3.3.3; Banner at p001-3679, para 4.3.3.4 (diagnosis of lead colic requires demonstration of BLL > 80 microg/dL vs Dargan, p001-9123 et seq, para11.6 to p001-9126, para11.6.2.5 arw Dargan, p001-1813, para 8.3.5.1; Banner, p001-3679, para 4.3.4.3 (asserts peripheral neuropathy is extremely rare in children with reference to Feldman, 1977 study whereas Dargan, p011-9126-9127, para11.7.1 points out that Feldman study confirmed significant nerve conduction velocity abnormalities in 10 of the 26 children that comprised the studied cohort with a mean BLL concentration was 32.6 microg/dL; Dargan conclusion on adverse effect of lead poisoning on peripheral nerve conduction studies in children, p001-9127, para 11.7.3.

[645] *Michael and Another v Linksfield Park Clinic (Pty) Ltd and Another* 2001 (3) SA 1188 (SCA) at paras 36 – 40.

[646] AA p 001-2889 - 2897 paras 595 to 624.

Anglo's position would have put in place a safe system of work prior to 1974 or, if that were not possible, it would have advised and instructed the Mine to cease and/or relocate and remediate, to protect the surrounding communities. If the trial court agrees that Anglo had such a duty, then complaints about ZCCM's actions after 1974 are of little significance.

495 In any event, ZCCM's alleged actions and inaction cannot absolve Anglo of liability for its many other culpable acts during the period of its involvement.

The harm to the Kabwe community was not remote

496 The test for determining remoteness is whether the damage would have been foreseen by a reasonable person.[647] We have already addressed this question of foreseeability in detail above.

497 It bears repeating that "*foreseeability is not as to the particulars but the genus*" of the harm.[648] A wrongdoer can therefore "*only escape liability if the damage can be regarded as differing in kind from what was foreseeable*".[649] Moreover, the "*precise concatenation of events need not be anticipated if the harm is within the general range of what is reasonably foreseeable*".[650]

---

[647] See also *Overseas Tankship (UK) Ltd v Morts Dock & Engineering Co (The Wagon Mound)* [1961] AC 388 (*Wagon Mound No. 1*); *The Wagon Mound (No. 2)* [1967] 1 AC 617, at 643:.

[648] Lord Hoffmann in Jolley (n 440) at 1091D.

[649] *Hughes v Lord Advocate* [1963] AC 837 at 845.

[650] *Stewart v West African Terminals Ltd* [1964] 2 Lloyd's Rep. 371 at 375.

498 Here the "*type*" of damage that would need to be foreseeable would be personal injuries from lead exposure.[651]

499 Whether or not a reasonable person in Anglo's position would have foreseen the precise sequence of events after 1974 is neither here nor there. The genus of the harm of lead poisoning was reasonably foreseeable in 1974, if not the precise nature of that harm or the mechanism of injury.

There was no new intervening act

500 Anglo relies on two broad sets of events which, it contends, broke the chain of causation: ZCCM's allegedly negligent operation of the Mine between 1974 and 1994, and ZCCM's failure to adequately remediate the Mine and its surrounds after 1994.

501 As Anglo's expert, Mr Gibson, notes, there is no single test for determining whether an intervening act constitutes a *novus actus* in English law. Instead, courts follow a "common sense" approach which takes into consideration the reasonableness and foreseeability of the intervening act. In essence, the aim is to ascertain whether the intervening act was so unreasonable or unforeseeable that the consequence which followed it can no longer be laid at the door of the wrongdoer.[652]

---

[651] Hermer 2022 p 001-9711 para 30.

[652] Gibson p 001-3971 para 99.

502 Notably, an intervening act does not sever the chain of causation merely because it is culpable. Even criminal conduct may not amount to a novus actus in circumstances where it was foreseeable.[653]

503 Under English law intervening omissions are generally less likely to constitute a *novus actus interveniens*. This is so even where the intervening act consists of a negligent failure to prevent damage caused by the defendant's wrong, as was the case in *Muirhead v Industrial Tank Specialities Ltd.*[654]

504 On the basis of these principles, ZCCM's conduct between 1974 and 1994 could not be said to constitute a wholly independent cause of the damage.

504.1 We repeat that the Kabwe environment was already substantially contaminated by 1974 and it is that contamination which persists today. The further emissions under ZCCM's watch, which involved little over 22% of lead production, could hardly have displaced the existing contamination or absolved Anglo of liability.

504.2 The potential deterioration in the operation of the ISF and sinter plant after 1984 was not an unforeseeable new event. The lackadaisical attitude to maintenance and safety was already a prominent feature of the Mine's operations throughout the period of Anglo's involvement, as best demonstrated by the 1970 memo on the "Broken Hill Attitude". Anglo's further accusation that ZCCM placed profits over safety is also ironic, in

---

[653] Id p 001-3972 para 101.2.

[654] *Muirhead v Industrial Tank Specialities Ltd* [1986] Q.B. 507 at 533.

circumstances where Anglo was repeatedly party to decisions to postpone or avoid solutions to lead pollution in favour of saving money.

504.3 It also bears repeating that Anglo remained a shareholder of ZCCM throughout this period, with directors on the ZCCM Board, and continued providing technical advice. Anglo's attempt to characterise ZCCM's actions as a *novus actus*, in circumstances where Anglo remained a participant in those actions, had the means to obtain information on ZCCM's conduct, and presumably reaped profits from its investments, is a remarkable stretch of this doctrine.

504.4 Even if Anglo is correct (which is not admitted), and its directors on the ZCCM board were not specifically informed about environmental issues and remediation efforts in Kabwe, Anglo had ample opportunity to raise pertinent questions and to obtain the necessary information after 1974. As an active shareholder, with direct knowledge of the environmental disaster that it had left behind in Kabwe, Anglo was best placed to ask the right questions, to obtain any information it required, and to demand action.[655]

505 ZCCM's alleged omissions to fully remediate the Mine and surrounds after 1994 could also not excuse Anglo's breaches:

505.1 ZCCM's failure to clean up Anglo's mess does not break the chain of causation in any meaningful sense. Anglo's conduct created a source of danger, which it failed to address.

---

[655] RA p 001-7660 para 181.

505.2 As already noted, ZCCM's alleged difficulties in conducting remediation work were hardly a new intervening event. They mirrored Anglo's own inaction in addressing the problems of lead pollution. It was not until 1970 that Anglo made any attempt to address the problem of lead pollution. Even then, it decided against incurring the costs of topsoil replacement which, Anglo now contends, is a reasonable intervention.

506 Anglo repeatedly blames the "*hurried and ill-advised*"[656] privatisation of ZCCM for the unsuccessful remediation efforts, yet contemporaneous documents suggest that Anglo was instrumental in guiding the privatisation process and was one of its primary beneficiaries.

507 Reports prepared in the early 2000s by Rights & Accountability in Development ("RAID"), together with other NGOs, complicate Anglo's attempts to distance itself from ZCCM's privatisation. These reports suggest four aspects of Anglo's involvement that the Applicants anticipate exploring fully in discovery and through the subpoena of documents:[657]

507.1 First, they highlight Anglo's ongoing involvement in ZCCM as an active minority shareholder, through its subsidiary Zambia Copper Investments (ZCI).[658]

507.2 Second, they suggest Anglo's intimate involvement in ZCCM's privatisation efforts in the 1990s, including the fact that any decision on

---

[656] AA p 001-2850 para 510.

[657] RA p 001-7658 - 7660 paras 178 – 180; Annexure ZMX 122 p 001-8184.

[658] Annexure ZMX122 p 001-8195.

the sale of ZCCM assets had to be approved by both A and B directors, which included senior Anglo executives. It is explicitly noted that "*privatisation could not proceed*" without Anglo's agreement.[659]

507.3 Third, this reflected Anglo's effective veto power over the sale of ZCCM's assets.

507.4 Fourth, the reports give further insight into the consequences of these privatisation efforts, which hollowed out ZCCM and stripped its core assets.[660]

508 In these circumstances, Anglo cannot seek to cast ZCCM's post-1974 conduct as an unforeseeable, new intervening event, entirely divorced from its own conduct before or after 1974.

Conclusion

509 In summary, Anglo's attempt to shift all blame to ZCCM, and to absolve itself of responsibility, suffers from fatal difficulties:

509.1 This fails to account for the fact that the Kabwe environment was already heavily contaminated with lead before 1974, resulting in substantial lead poisoning.

---

[659] Id.

[660] Id p 001-8217.

509.2 Anglo clearly knew of the harm that would follow if it failed to remediate the Mine and the surrounding area, yet it failed to do so adequately before 1974.

509.3 There was no reason for Anglo to believe that deficiencies that it passed on would not be continued and no reason for Anglo to believe that ZCCM would clean up the extensive environmental pollution caused by Anglo, in circumstances where Anglo had itself failed to conduct necessary remediation work.

509.4 Anglo also remained involved in ZCCM's activities after 1974 and cannot seek to deny all knowledge of ZCCM's actions, let alone claim that its actions were not foreseeable.

509.5 Consequently, the actions and omissions of ZCCM after 1974 have not broken the chain of causation.

H. INDEPENDENCE OF THE EXPERTS

510 As is clear from the preceding discussion in this chapter, the many disputes over the medical, environmental and technical issues are matters for expert evidence, which will be ventilated at trial.

511 The Applicants' experts are all eminent academics and public sector workers, whose credentials and credibility are unimpeachable.

512 The same cannot be said for the Respondent's experts, Dr Banner, Dr Beck and Mr Sharma.

513 The Applicants have presented initial evidence which raises serious questions as to the objectivity of these experts and the value of their opinion evidence.[661] This evidence is but a flavour of the lines of cross-examination that will be pursued at trial. For example:

513.1 Dr Sharma and Dr Beck work for the consulting firm Gradient Corporation ("Gradient"), as President and Principal respectively. Gradient is known in the US amongst lawyers and others working in the field of public health as a "product defence" firm. Its activities and work on behalf of corporations and the questionable tactics it employs to defend them from legal liability have been written about extensively.[662] It has also frequently undertaken work in defence of the lead industry.[663]

---

[661] RA pp 001-7714 - 7728 paras 337 – 382; AA in Strike Out pp 006-359 - 376 paras 115 – 149.

[662] RA pp 001-7715 – 7717 paras 340 – 346; AA in Strike Out pp 006-361 paras 124 – 129.

[663] AA in Strike Out pp 006-361 para 125 – 126.

513.2 A survey of Dr Beck's work as an industry-funded scientist suggests that she has consistently understated the health and environmental harm of chemicals and other pollutants (including lead); coached defence lawyers and their clients to avoid legal liability for that harm; and given expert evidence to ensure that they do.[664] Her work and appointments have been the subject of extensive public criticism[665], including alleged past failures to fully disclose her relationship with corporate interests.[666]

513.3 Dr Banner has testified on behalf of the lead industry[667] and expresses views that stray far from the mainstream science on the harms of lead poisoning. His opinion that chelation therapy is only required once a patient reaches a BLL of 80 µg/dL contradicts guidance issued by the AAP, the WHO and the US CDC.[668] It even contradicts the outdated 1995 Treatment Guidelines for Lead Exposure in Children - Committee on Drugs, which Dr Banner helped author and relies on in his expert report for Anglo.[669] In addition, his views on levels of lead toxicity are at odds with the treatment guidelines for children at the hospitals in which he works.[670]

514 Whilst the evidence of these experts must be assessed on its merits, their objectivity is an important consideration. The trial will afford the Applicants the opportunity to cross-examine these experts in detail on their industry ties and

---

[664] RA p 001-7718 para 350.

[665] RA p 001-7718 para 351.

[666] RA p 001-7720 para 357.

[667] RA p 001-7724 para 370; AA in Strike Out p 006-369 paras 130 – 131.

[668] RA p 001-7721 para 360 and 362.

[669] RA p 001-7721 para 361.

[670] RA p 001-7725 para 372.

their contrarian positions to mainstream scientific thinking. The experts will also have an opportunity to respond. Nevertheless, it is necessary that this court be made aware of the significant concerns surrounding these experts, which will be addressed at trial, and should be wary of denying the Applicants the opportunity to cross examine the experts on their controversial views. Anglo cannot ask this Court to accept its experts' evidence, on face value, and to refuse certification on the strength of their untested opinions, in circumstances where they have very serious questions to answer.

VII THE EXISTENCE OF COMMON ISSUES

515 Commonality requires that there are "*issues of fact, or law, or both fact and law, that are common to all members of the class and can appropriately be determined in one action*."[671] This does not require that the class members' causes of action be identical.[672]

516 In *Nkala*,[673] this Court approved of the Canadian Supreme Court's approach to commonality in *Vivendi*,[674] which is founded on flexibility and common sense. Three key insights emerge:

516.1 First, commonality must be approached purposively. The "*underlying question*" is whether the proposed class action will help to avoid the duplication of fact-finding or legal analysis and a multiplicity of individual actions.[675]

516.2 Second, common issues do not require identical answers. Instead *"the common question may require nuanced and varied answers based on the situations of individual members".*[676]

516.3 Third, the common questions need not be determinative of the case, nor do they need to predominate over the issues that cannot be answered for

---

[671] *CRC Trust* (n 23) at para 44. See also *Mukkadam* (n 23) para 17: "*The commonality must be of a nature that the determination of the issue may be achieved by deciding a single ground common to all claims.*"

[672] Ibid.

[673] *Nkala* (n 22) para 94 – 97.

[674] *Vivendi Canada Inc v Michell Dell' Aniello* [2014] SCR 1.

[675] Ibid at para 41, citing *Western Canadian Shopping Centres Inc. v. Dutton* [2001] 2 SCR 534 at para 39 ("Dutton").

[676] *Vivendi* ibid at para 46.

the entire class.[677] It is sufficient that determination of the common issues "allows *the claims to move forward without duplication of the judicial analysis"*.[678]

517 This Court held that the flexible approach in *Vivendi* accords with our class action jurisprudence, as "*it ensures that the interests of justice predominate*".[679] This Court's approach was adopted in the recent judgment of the Western Cape High Court in *Stellenbosch Law Clinic*.[680]

518 As Chapter VI has already demonstrated, the prospective class members' claims turn on a range of common issues of fact and law that can be conveniently decided at the first opt-out stage. These issues include:

518.1 The applicable law;

518.2 The precise role played by Anglo in relation to the Mine and its operations from 1925 to 1974;

518.3 Anglo's role after 1974;

518.4 The existence of a duty of care owed by Anglo by virtue of its *de facto* role in the Mine operations;

518.5 What Anglo knew and ought reasonably to have known of the harms of lead pollution and when;

---

[677] Ibid at para 41, citing *Dutton* at para 39.

[678] Ibid at para 42.

[679] *Nkala* (n 22) at para 97.

[680] *Stellenbosch University* (n 331) at para 59.

518.6 What measures Anglo ought reasonably to have taken to prevent lead poisoning of local residents;

518.7 Whether Anglo was negligent in failing to take those measures, timeously or at all;

518.8 The threshold for actionable harm, including whether specific BLLs, requiring medical monitoring and intervention, give rise to actionable injuries *per se*, without further proof of harm arising from lead exposure.

518.9 Common issues of factual and legal causation, including:

518.9.1 the correct test for factual causation ("but for" or "material contribution");

518.9.2 the Mine's contribution to lead pollution in the Kabwe District, including during the different periods of it operations;

518.9.3 the link between lead pollution and elevated BLLs;

518.9.4 the link between elevated BLLs and different categories of *sequelae* injuries;

518.9.5 the causative role, if any, in the extent of lead emissions when the mine was operated by ZCCM, of negligence on the part of Anglo prior to 1974;

518.9.6 whether ZCCM's conduct after 1974 broke the chain of causation between Anglo's negligence and resulting harm.

519 These issues will crystallise once the parties have filed their pleadings after certification. Nevertheless, each of the anticipated common issues raises weighty questions of fact and law that would arise again and again if the prospective class members were to bring individual claims against Anglo.

520 The fact that Anglo has already seen fit to introduce voluminous evidence on these issues, running to thousands of pages, with no less than seven experts, further underlines why class action proceedings of this nature are the only realistic and appropriate method of determining these disputes. No individual litigant could be expected to match Anglo's resources in one-on-one litigation.

521 Furthermore, the prospect of litigating and re-litigating these issues in each individual case would not be proportionate or cost-effective for the litigants or for the court system.

522 Therefore, there can be no question that a class action would help to avoid the duplication of judicial efforts to resolve these issues. The resolution of any and all of these common issues would also help the class members claims to move forward. Neither would it be feasible for the Applicants' lawyers to obtain instructions and particularise and file claims on behalf of all the members of a class of this magnitude at this stage.

523 Anglo does not genuinely deny that there are significant common issues. Instead, its response is one of confession and avoidance.

524 First, Anglo suggests that there are only two "*arguably common issues*", a) the existence of a duty of care and b) negligence.[681]

524.1 This is plainly incorrect, as it ignores the further common issues of actionable harm, factual causation, and legal causation, among others, which Anglo itself has raised on the papers.

524.2 Moreover, Anglo's defence that ZCCM's negligence broke the chain of causation between any negligence and harm would be a common issue raised in response to any future claim by Kabwe residents.

524.3 In any event, even if the issues Anglo identifies were the only common issues, they raise a myriad of further common questions of law and fact that would need to be resolved in each individual claim.

524.4 For example, the duty of care depends on the 50 years of documentary evidence reflecting Anglo's *de facto* control of key Mine operations and its interventions on issues of lead pollution, and the application of the UK Supreme Court decisions in *Vedanta* and *Okpabi* to this evidence

524.5 Similarly, the question of negligence turns on common questions of the state of knowledge of the harms of lead poisoning over the last century, Anglo's actual knowledge at the different periods of its involvement, and the standard of care required of a reasonable person in its position.

---

[681] AA p 001-3047 para 969.

524.6 The daunting prospect of a series of individual cases litigating and relitigating these same questions, on the same evidence, is the clearest demonstration why a class action is in the interests of justice.

525 Second, Anglo contends that even though there "*might appear*" to be common issues, these issues are not common. This is so, Anglo contends, because the issues may lead to different answers. For example, it contends that the common issue of the duty of care may result in different answers, depending on whether the class members live in proximity to the Mine.[682]

525.1 *Nkala* directly answers Anglo's argument: *"[t]he commonality requirement does not mean that an identical answer is necessary for all the members of the class, or even that the answer must benefit each of them to the same extent."*[683] Thus, commonality depends on the existence of common questions, not common answers.

525.2 Even if a more stringent test were applied, requiring that the answer to the common questions "*resolve an issue that is central to the validity of each one of the claims in one stroke*",[684] the common issues raised in this case would pass that test.

525.3 For example, whether Anglo exercised a *de facto* role in relevant aspects of the Mine operations, giving rise to a duty of care, is a question common

---

[682] AA p 001-3049 para 973.

[683] Nkala (n 22) paras 94 – 95, citing *Vivendi* at para 46.

[684] *Wal-Mart Stores, Inc, Petitioner v Betty Dukes et al* 131 S Ct 2541 at 2551, cited in *CRC Trust* (n 23) at para 44.

to all class members in Kabwe, regardless of whether they reside in the central villages or the outer reaches of the Kabwe District.

525.4 While there could be nuances, for example as to whether harm was foreseeable to individuals living at the edge of the district, in comparison with people living close to the Mine, there is no reason why these issues cannot be resolved efficiently in the context of this class action. If Anglo's argument were taken to its logical conclusion, there would never be a collective class action save in claims for individuals suffering precisely the same damage in exactly the same manner, time and place.

526 Third, Anglo argues that the individual issues of causation, harm and quantum that will need to be determined for each class member or sub-classes would far outweigh the common issues. There are three key responses to this:

526.1 First, the same argument was raised and dismissed by this Court in Nkala.

526.1.1 In that case, Anglo also sought to argue that "*even if there are questions of fact and law which are common to claims of all the mineworkers, it is still necessary to ask if these outweigh the non-common issues of fact or law to warrant a certification of the proposed class action.*"[685]

526.1.2 This Court rejected this argument holding that "*once it has been established that there are sufficient common issues whose determination would advance the cases of all individual*

[685] Nkala (n 22) para 109.

mineworkers, then there is no need for the court to engage in the exercise of examining whether these common issues outweigh the non-common ones."[686]

526.2 Second, while, in theory, the Court could be asked to adjudicate on the medical evaluation of each and every case, this never happens in reality. The reality, understandably, is that if the Court rules in favour of the class on common issues and (through the claims of the representative plaintiffs) lays down the principles for evaluation of liability and quantum in individual cases, these principles will then be applied in the assessment of the individual class members claims, usually via an agreed settlement scheme. To the extent that there remain disputes over individual or sub-classes' claims, this can be addressed through the various mechanisms provided under the Uniform Rules, including rules 10(5), 33(4) and 37A, for the separation of issues and the management of further hearings.

526.3 Third, there is a further failing in Anglo's reasoning, which was exposed by this Court in *Nkala*: Anglo has not offered any practical alternative to a class action which would be best suited for receiving and adjudicating the copious quantities of common evidence that, Anglo must accept, would arise in every individual claim raise by residents of Kabwe.[687]

527 The individual issues of causation and quantum that concern Anglo would arise in any case, regardless of whether the claim is pursued as a series of individual

---

[686] Id para 110.

[687] Id para 113.

cases or as a class action. The advantage that a class action offers is that the courts would not need to be further burdened by litigating over and over again a series of other issues that are common to the class.

VIII SUITABILITY OF THE CLASS REPRESENTATIVES

528 This chapter and the next address the Applicants' ability to litigate the class action to finality. We begin with the suitability of the class representatives before turning to the adequacy of the lawyers and the funding arrangements in Chapter IX.

529 Suitability turns on two primary considerations:

529.1 Whether the proposed class representatives have the capacity to conduct the litigation on behalf of the class; and

529.2 Whether their interests are in conflict with those whom they wish to represent.[688]

A. OVERVIEW OF THE CLASS REPRESENTATIVES

530 The twelve Applicants are the proposed class representatives.[689] They meet all of the criteria specified in the class definitions.[690]

531 The evidence of these class representatives, supplemented with further evidence from other witnesses where necessary, will provide a basis for the trial court to resolve the common issues at the first stage.

---

[688] *CRC Trust* (n 23) paras 46 - 48.

[689] The Sixth Applicant has withdrawn as a class representative. The Applicant continues to be a member of the proposed class and the withdrawal as class representative is without prejudice to the merits of their individual claim. See RA p 001-7709 para 323.

[690] FA p 001-129 paras 285; Annexure ZMX 82 p 001-1332.

532 Ten of the twelve class representatives are children, represented and assisted in these proceedings by a parent or guardian. This is no impediment to their suitability or capacity to act as class representatives.

533 Section 14 of the Children's Act 38 of 2005, read with section 28(2) of the Constitution and applicable international instruments, guarantees that "*every child has the right to bring, and to be assisted in bringing, a matter to a court, provided that matter falls within the jurisdiction of that court*".[691]

534 Section 10 of the Children's Act further affords the right to "*every child that is of such an age, maturity and stage of development … to … participate in an appropriate way*". It also adds that "*views expressed by the child must be given due consideration*".

535 The child's right to participate in judicial proceedings can either occur through direct participation "*or through a representative or an appropriate body, in a manner consistent with … procedural rules*".[692] Section 14 thus provides an opportunity to realise the right contained in section 10, as it links a child's right to participation with his or her right of access to a court.[693] The Children's Act

---

[691] See also section 34 Constitution of the Republic of South Africa, 1996. This section deals with the right of everyone "to have any dispute that can be resolved by the application of law decided in a fair public hearing before a court or, where appropriate, another independent and impartial tribunal or forum". See Davel "General principles" in *Commentary on the Children's* Act (eds Davel & Skelton) (2007) 2-19.

[692] See Article 12(2) United Nations Convention on the Rights of the Child, 1989 (CRC).

[693] See section 28(1)(h) Constitution.

places a corresponding duty on parents and guardians to represent children and to assist them.[694]

536 To achieve the objectives of section 14 read with sections 10 and 18(3)(b), the Applicants' attorney, Ms Mbuyisa, confirms that the following measures have been put in place:[695]

536.1 First, all of the class representatives under the age of 18 are represented or assisted in bringing these proceedings by a parent or guardian. Their parents and guardians have been advised on, and accept their special responsibilities to participate in these proceedings and to give instructions in the best interests of the class and in the best interests of the children.

536.2 Second, where the children are of such an age, maturity and stage of development as to be able to participate and express their views, they too have been consulted and advised fully on the nature of these proceedings, their rights, and their responsibilities.

536.3 Third, the proposed class representatives, represented by their parents and guardians where necessary, are all readily contactable to obtain instructions and give advice.

536.4 All of the steps taken are in the best interest of the minor children involved in this litigation as is required by section 28 of the Constitution.

---

[694] Section 18(3)(b) Children's Act

[695] FA 001-129 – 130 paras 287 – 290.

537 Anglo does not dispute these principles, nor does it meaningfully dispute the propriety of these arrangements. It merely questions whether the funding arrangements have made sufficient provision for child participation. We address this in the next chapter,[696] but it suffices to say that these principles have been observed.[697]

B. ANGLO'S OBJECTIONS TO THE CLASS REPRESENATIVES

538 Anglo does not dispute that the class representatives are committed to litigating this class action, nor does it meaningfully dispute that they have the time, inclination, and means to act as representatives of the classes in these proceedings.

539 Instead, Anglo raises three objections relating to the "typicality" of the class representatives and a fourth complaint of an alleged conflict of interest:

539.1 First, Anglo contends that the Applicants' BLLs "*are not representative of the BLL distribution in Kabwe district generally*";[698]

539.2 Second, Anglo claims that while all of the Applicants currently suffer from "*maladies"* caused by lead, the proposed class would, it alleges, include individuals who do not currently suffer from any lead-induced harm;[699]

---

[696] See [587] – [589].

[697] FA pp 001-129 – 130 paras 288 – 289; RA p 001-7809 para 651.

[698] AA p 001-2964 paras 808-820.

[699] AA p 001-2968 paras 823-824.

539.3 Third, Anglo alleges that the Applicants are also atypical of the classes, because they all live in Kasanda, Makululu and Chowa, and do not include class members drawn from the wider Kabwe District;

539.4 Fourth, Anglo alleges that there is a conflict of interest between proposed class members because some have suffered more serious and urgent injuries than others.

Typicality

540 Anglo's complaints about the class representatives not being typical of the proposed classes – due to their BLLs, injuries and place of residence – fall to be dismissed because typicality is not a requirement for certification under South African law.

541 In *CRC Trust*, the SCA explained this point as follows, with reference section 38(c) of the Constitution:

> *"In some jurisdictions, such as the United States, it is an express requirement that the representative plaintiff has a claim that is typical of the claims of the class. In Canada and Australia, whilst there is no express requirement of typicality, Professor Mulheron suggests that the jurisprudence of those countries, in regard to commonality, makes that a requirement. That question does not arise in South Africa, because s 38(c) of the Constitution expressly contemplates a class action being pursued by 'anyone acting as a member of, or in the interest of, a…class'. Accordingly, while the appellants include individuals who may be typical of the class they are seeking to represent, the other appellants may permissibly act in the interest of the class. There is no reason to differentiate in that regard between class actions based on infringement of rights protected under the Bill of Rights and other class actions."*[700]

[700] *CRC Trust* (n 23) at para 46.

542 This Court applied this passage in *Nkala,*[701] in rejecting the respondents' argument that the class representatives were atypical, as they did not include workers from all of the respondents' mines, who were exposed to different conditions.

543 Similarly, in *De Bruyn*,[702] this Court held that it was immaterial that the class representative was not a member of one of the proposed classes as it suffices "*that the class representative can act in the interests of the class*."

544 In any event, Anglo's suggestion that the class representatives are atypical is inaccurate:

544.1 The Applicants' BLLs range from 10 µg/dl to 114 µg/dl;[703]

544.2 It is also incorrect to allege that the classes include those who have suffered no injury, as this is a requirement of the class definition.

545 The questions whether low-level lead exposure causes harm and the further question whether causal links can be drawn between elevated BLLs and specific injuries is ultimately a question to be resolved through expert evidence, such as the evidence already presented by Profs Dargan, Adnams, Lanphear and Bellinger.

---

[701] *Nkala* (n 22) at para 137.

[702] *De Bruyn* (n 397).

[703] See table at AA p 001-2964.

546 To the extent that any further evidence from individual residents of Kabwe is required to resolve these questions, that can be addressed by calling additional witnesses. As this Court held in *Nkala*, the litigants in class action proceedings are not confined to the testimony of the class representatives and are free to call any further witnesses that may be necessary to prove their case at trial.[704]

547 This reasoning applies with equal force to Anglo's complaint about the lack of class representatives from other parts of the Kabwe District. The questions of how far lead contamination spread from the Mine and the danger this poses in outlying areas of the District will primarily be a matter for expert evidence at trial. To the extent that any individual evidence from affected residents of Kabwe may be needed, the Applicants can call further witnesses.

Alleged conflicts of interest

548 Anglo suggests that there is an intractable conflict between those class members who have existing injuries and those who may develop injuries in the future, because the former will have an interest in directing 'limited resources' towards immediate payments, whereas the interests of the latter will have an interest in contingent future payments.[705]

549 There is no conflict over damages for future injury. This is because all class members who succeed in establishing actionable injury will be required to claim damages for all future risk of injuries now, due to the restrictions imposed by the

---

[704] *Nkala* (n 22) para 135.

[705] AA p 001-2968 - 2969 para 823-826.

once-and-for-all rule. Therefore, all class members will have an active interest in obtaining damages for future losses.

550 It also remains unclear how a multinational mining giant such as Anglo could contend that a court-ordered remedy would provide only "limited resources" to compensate class members.

551 The fact that some class members may have more pressing needs than others is hardly a conflict of interest that would disqualify certification. If that were so, no class action would ever be certified.

552 As this Court acknowledged in *Nkala*, there will always be some tensions between the needs and interests of class members. However, "*this is no bar to certification of the class action nor is it a bar to the appointment of the applicants who bring the certification application as representatives of the class*". This Court noted that "*trade-offs are inevitable*" so long as the "*the benefits of increased access to justice and judicial economy outweigh the inevitable trade-offs involved in aggregate litigation.*"

553 In this case, Anglo presents a false dichotomy between the "slow justice" of this class action and some unnamed alternative for securing "fast justice". In truth, the real choice facing class members is justice through this class action or no justice at all.

554 In the extremely unlikely, hypothetical event that any class members have the means and desire to pursue their own claims, their interests will be fully protected

by the two-stage process. They may choose to opt-out of the first-stage determination of common issues or they may elect not to opt-in to the second-stage determination of individual issues, in favour of pursuing independent claims.

555 Moreover, any damages award, settlement, or method of allocation of damages would have to be approved by the trial court, which would ensure that no class members' interests are improperly overlooked or excluded in the process.

IX THE LAWYERS AND THE FUNDING ARRANGEMENTS

556 We now turn to address the suitability of the funding arrangements and the lawyers in bringing this class action. This chapter addresses four topics:

556.1 An overview of the funding arrangements and the legal team;

556.2 The relevant legal principles in assessing suitability;

556.3 The suitability of these arrangements, responding to general complaints raised by Anglo;

556.4 Responses to Anglo's specific complaints regarding the individual funding documents and arrangements.

A. OVERVIEW OF THE ARRANGEMENTS

557 The Applicants are represented by Mbuyisa Moleele (MM), with London law firm Leigh Day (LD) acting as consultants, in addition to a large team of counsel.[706]

558 Ms Mbuyisa, the founding partner of MM and the founder of the Haki Legal Clinic, has extensive experience on large group actions and class actions of this nature. She has worked closely with LD for more than 20 years, first on the Cape plc litigation on behalf of 7,500 South African asbestos miners[707] and then on the *Chakalane/Qubeka* silicosis litigation, on behalf of former gold miners who contracted silicosis.[708]

---

[706] FA p 001-130 – 134 paras 291 – 301.

[707] *Lubbe v Cape Plc* [2000] 1 WLR 1545 (HL).

[708] *Blom & Others v Anglo American / Chakalane & Others v Anglo American, Qubeka & Others v Anglo Gold*.

559 In light of the breadth and complexity of the proposed class action litigation, a multi-jurisdictional team of legal representatives, with extensive experience in litigation on this scale, is the only effective way to prosecute such litigation. Anglo's team is similarly comprised, as it has retained the London-based Freshfields Bruckhaus Deringer (Freshfields), in addition to a large team from Webber Wentzel.[709]

560 The estimated costs to trial are substantial, standing at approximately £4.76 million.[710] These costs could never be covered by the Applicants and prospective class members, the majority of whom are indigent.[711] Nor would it be feasible for these costs to be covered by the legal team.[712] This has required third-party litigation funding and contingency fee arrangements to make this litigation possible.

561 The Applicants have made full and detailed disclosure of the funding arrangements, which is among the most extensive of any certification application filed in South Africa to date.[713] These funding arrangements have three key parts.

---

[709] Anglo's extension application p 004-32 para 69.

[710] Summary budget p 003-326 (£4,76 million, excluding the ATE premium).

[711] FA p 001-138 para 310.1; Not denied AA p 001-3135 para 1324 – 1326. FA p 001-141 para 314.4; Not denied AA p 001-3137 paras 1327 - 1329

[712] FA p 001-134 para 304; Not denied AA p 001-3134 paras 1319 – 1320.

[713] The funding arrangements are explained in:

- FA p 001-135 - 137 paras 305 – 308;
- Mr Hanna's first affidavit pp 001-2340 – 2347;
- Mr Hanna's second affidavit pp 001-2587 – 2623;
- Applicants' AA in Rule 30A application pp 003-287 - 003-300 paras 32 - 96;

562 First, the Applicants' attorneys have secured third-party funding for this litigation from Kabwe Finance Limited (KFL), a member of the Augusta Group, the UK's largest litigation funder by number of cases funded.[714]

562.1 The terms of this funding are set out in the Claim Funding Agreement concluded between Mbuyisa Moleele, Leigh Day and KFL, which has been fully disclosed to this Court.[715]

562.2 KFL has committed to funding a portion of the costs, for a proposed return of 25% of any award or settlement (Funder's Return) plus all budgeted costs recovered from Anglo.[716]

562.3 The Litigation Funding Agreement is clear that the funder will have no control over the litigation.[717]

562.4 KFL has further disclosed the source of its funds, which are Luxembourg-based investment vehicles managed on behalf of institutional investors by Bybrook Capital LLP.[718]

562.5 Mr Robert Hanna, managing director of Augusta Ventures Limited (AVL) further confirms that KFL has sufficient committed capital to fund this

---

- RA pp 001-7748 - 7760 paras 458 – 488;
- Mr Hanna's third affidavit pp 001-9717 – 001-9730.

[714] FA p 001-135 para 306; Mr Hanna's affidavit p 001-2341 para 6.

[715] Claim Funding Agreement: Annexure ZMX 84 pp 001-1345ff; amended version at RHH 3-1 pp 001-9733ff; the "track-change" version, detailing the amendments, appears at RHH 3-3 pp 001-9809ff. For ease of navigation, all references to the agreements will refer to the "track-change" versions.

[716] Claim Funding Agreement: p 001-9823 clause 9.4.

[717] Claim Funding Agreement: p 001-9810 Recital E; p 001-9820 clause 4.6.

[718] Mr Hanna's first affidavit p 001-2345 paras 30 – 34.

litigation[719] and emphasises that no Augusta company has ever failed to meet a contractual obligation to provide funding, in over 200 cases funded to date, to which it has committed over £266 million in capital.[720]

562.6 Mr Hanna further explains that AVL is a member of the Association of Litigation Funders ("ALF"), the independent body that regulates litigation funders in England and Wales, and is bound by its Code.[721] In the Claim Funding Agreement, KFL has bound itself to comply diligently with the Code.[722]

563 Second, KFL has secured After-The-Event (ATE) insurance coverage from an international insurer, IGI, with an indemnity of £2 million. This insurance coverage will protect the Applicants and the class members in the event of an adverse costs order.[723] The policy schedule has been specifically amended to reflect that the class members (on behalf of the class) are the insured, alongside KFL.[724]

564 Third, the Applicants have concluded contingency fee agreements with their attorneys and counsel, reflected in the amended "Client Funding Agreements".[725] The lawyers will be paid 62% of their ordinary fees and

---

[719] Mr Hanna's first affidavit p 001-2344 paras 24 – 29.

[720] Id at para 23.

[721] ALF Code: RRH-2 pp 001-2351 – 2355.

[722] Claim Funding Agreement: p 001-9820 clause 4.5.4.

[723] Mr Hanna's first affidavit p 001-2344 paras 35 – 37; ATE Insurance Policy RHH 6 pp 001-2392 – 2419; updated policy schedule at RHH 3-5 p 001-9867.

[724] Mr Hanna's third affidavit p 001-9722 para 19;

[725] Reply p 001-7751 - 7753 paras 470 – 473; Client Funding Agreement: example at ZMX 153 p 001-8977; compare with original at ZMX 83 p 001-1333.

disbursements by the third-party funder, with the balance of 38% to be paid by the third-party funder in the event of success. This is not a true "success fee", as contemplated in the Contingency Fees Act, as the lawyers are charging reduced rates.[726] Instead, the 38% is merely a deferred portion of the fees, contingent on success.[727]

565 The Applicants seek this Court's approval of these funding arrangements, subject to the trial court's ultimate power to approve and oversee any final settlement and / or award, contingency fee payments, and the distribution of funds to the class members and the funder.

566 The various agreements have undergone amendments for purposes of clarity and to address issues raised by Anglo in its answering papers. The litigation funder, KFL, has repeatedly expressed its willingness to negotiate further amendments to these arrangements if required by the court. Mr Hanna of Augusta emphasises that "*[i]t was for this reason that we included clause 4.4 of the Claim Funding Agreement, which expressly contemplates amendments to the agreement if required by the court."*[728] He confirms that *"[i]f there are any aspects of the agreement which are unsatisfactory to the court, MM, Leigh Day and KFL have committed to negotiate appropriate amendments, in good faith, to address any concerns.*"[729]

---

[726] Section 2(b) read with 2(2) of the Contingency Fees Act 66 of 1997.

[727] Reply p 001-7751 para 470.

[728] Mr Hanna's affidavit p 001-9719 para 8. Claim Funding Agreement: p 001-9819 clause 4.4.

[729] Id.

B. THE LEGAL PRINCIPLES

567 In *Children's Resource Centre*,[730] the SCA acknowledged that the suitability of the funding arrangements is a consideration in certification. It highlighted two relevant questions: a) whether there are sufficient financial resources to fund the litigation and b) whether the funding arrangements give rise to any conflicts of interest.

568 *In De Bruyn*,[731] this Court provided further guidance on how to assess the suitability of third-party funding arrangements, drawing guidance from the Ontario Supreme Court.[732] Unterhalter J distilled four key factors:[733]

568.1 Are the funding arrangements necessary to provide access to justice?

568.2 Are the funding arrangements fair and reasonable, most especially, in securing the interests of the class members and the defendants?

568.3 Are the funders compensated on a reasonable basis?

568.4 Do the funding arrangements preserve the independence of the legal representatives and the ability of the class representatives to carry out their duties?

569 These considerations remain in service of the overarching question at the certification stage: do these arrangements advance the interests of justice?

---

[730] *Children's Resource Centre* (n X) at para 48.

[731] De Bruyn (n 397) at para 82.

[732] *Houle v St Jude Medical Inc* 2018 ONSC 6352 at para 33.

[733] *De Bruyn* (n 397) at para 82 and 85 – 86.

C. THE SUITABILITY OF THE ARRANGEMENTS

The funding arrangements are necessary to provide access to justice

570 The necessity of third-party funding for access to justice is not in dispute. Anglo does not once suggest that the Applicants could afford litigation on this scale out of their own pockets, nor does it suggest that the costs of such litigation could be carried by the lawyers.

571 Nevertheless, Anglo insinuates that commercial third-party funding, of the kind proposed here, is inherently improper. The potential for profit, Anglo suggests, is inimical to justice.

572 Anglo's stance is out of step with our courts' acceptance that commercial third-party funding arrangements play a vital role in promoting access to justice, provided that appropriate protections are in place.

573 In *Price Waterhouse Coopers*,[734] the SCA explicitly rejected the view that such commercial arrangements are contrary to public policy. The SCA held that third-party funding advances the section 34 constitutional right of access to court and the constitutional principles underpinning freedom of contract.[735]

---

[734] *Price Waterhouse Coopers Inc and Others v National Potato Co-Operative* Ltd 2004 (6) SA 66 (SCA) at para 46 (*PWC*).

[735] Id at paras 43 – 44.

574 In *Goldfields v Motley Rice*,[736] the full court of this division recognised that third-party funding arrangements assume particular significance in cases such as this, where the litigants are indigent and unable to afford legal representation.

574.1 The court held that the "*positive impact of litigation funding agreements that no one can deny is that such agreements promote access to justice*".[737] It stressed that the "*importance is elevated a step higher where the funded litigant is one who, because of poverty and lack of resources, would otherwise not have been able to litigate or access justice.*"[738]

574.2 The constitutional rights of access to court and equal protection of the law are afforded to "'e*veryone' and not to some, and in particular, not only those who can afford it*."[739] It added that equal protection of the law would "*be meaningless unless everyone, including the poor and indigent, can access justice.*"[740]

574.3 It is "*clearly better*", the full court concluded, that "*people should be able to take their disputes to court in this way rather than not at all, even if they are poor*" and that "*[n]o one should fail to access justice or fail in the case simply because of poverty.*"[741]

---

[736] *Gold Fields Limited and Others v Motley Rice LLC, In re: Nkala v Harmony Gold Mining Company Limited and Others* 2015 (4) SA 299 (GJ).

[737] Id at para 55.

[738] Id.

[739] Id at para 59.

[740] Id.

[741] Id at para 61.

575 In *PWC*, the SCA further acknowledged that our legal system is sufficiently robust to ensure proper oversight over commercial third-party funding arrangements.[742] The class action procedure provides further safeguards, including scrutiny of funding arrangements at the certification stage and the oversight exercised by the trial court over any settlement and its distribution.

576 These safeguards are reinforced by the fact that Augusta and KFL are subject to the ALF Code. Augusta's standing as the largest litigation funder of its kind in the United Kingdom means that it would face significant risk to its reputation and future business if it were to renege on commitments to the Applicants or otherwise breach the Code.[743]

No impermissible funder control

577 The funding arrangements have been structured to prevent improper interference in the litigation, to ensure that the independence of the lawyers is fully preserved, and that the Applicants and their attorneys, MM, retain control over the conduct of the litigation.

578 Nevertheless, Anglo persists with the unsubstantiated allegation that the third-party funders are given impermissible control over the case. It claims that "*[t]he arrangements, viewed as a whole, afford the funders – including the ostensible "funder" Kabwe Finance Limited ("KFL"), the Augusta group more generally and*

---

[742] *PWC* (n 734) at paras 39, 46.

[743] Mr Hanna's first affidavit p 001-2344 para 23.

the Luxembourg funds, the latter being the actual funders – inordinate control over the litigation."[744]

579 These allegations are conclusively answered by the terms of the relevant agreements governing the relationship between the parties.

579.1 The Litigation Funding Agreement is clear: *"[n]either the Funder nor Leigh Day will exercise control over the Case, which will be conducted by MM acting justly and reasonably in the interests of the Class Members*".[745] It is repeated in clause 4.6 that *"MM will have care and conduct and control over the conduct of the Proceedings*".[746]

579.2 This is confirmed by Ms Mbuyisa in her founding affidavit, where she states that "*Mbuyisa Moleele will act as the attorneys for the Client and will have control of the conduct of the litigation*"[747] and that "*KFL, AVL and other members of the Augusta Group will have no control over the litigation, but will be entitled to be regularly updated by Mbuyisa Moleele and Leigh Day*".[748]

579.3 It is further confirmed by Mr Hanna in his affidavit, where he emphasises that Augusta and, by extension KFL, are bound by the ALF Code which prohibits third-party funders from "*taking steps that cause or are likely to cause the funded party's counsel to act in breach of their professional*

---

[744] AA p 001-2976 para 841.

[745] Claim Funding Agreement: p 001-9810 Recital E.

[746] Id at p 001-9820 clause 4.6.

[747] FA p 001-135 para 306.1

[748] Id at para 306.4.

duties" and "*seeking to influence the funded party's counsel to cede control or conduct of the dispute*".[749]

580 What is more, the Applicants are represented by highly experienced attorneys and a team of independent advocates, including three senior counsel.

581 In the interlocutory judgment, this Court outlined these facts and concluded that "*[t]he insinuation that the [Applicants'] legal team would somehow be party to an elaborate ruse, in which control is handed over to a funder, in breach of the clear terms of all funding agreements and commitments made under oath, is unfounded.*"[750] This conclusion remains as true then as it is now.

The Applicants' role and alleged power imbalances

582 Anglo further argues that there is an inherent power imbalance between the funders and the Applicants, which would deprive them of effective control over the case and lead to conflicts of interest.[751]

583 It is patronising to suggest, as Anglo does, that indigent litigants are inherently incapable of exercising agency in complex litigation. Nor could it be suggested that their lawyers will abandon their professional responsibilities to represent their clients' interests adequately.

---

[749] Mr Hanna's affidavit p 001-2343 para 20.

[750] Interlocutory judgment pp 084-26 - 27 para 49.

[751] AA p 001-2978 paras 844 – 846.

584 As is detailed above, the Applicants' attorneys MM, have an extensive track-record in representing indigent litigants, including in the silicosis litigation.[752] They are supported by lawyers from LD, who have consistently represented marginalised communities harmed by the actions of powerful multinational companies in large and complex class and group actions such as the present matter.[753]

585 Lawyers from MM and LD, with decades of combined experience in assisting disempowered clients, have made numerous trips to Kabwe over four and a half years to forge links with the communities and to take instructions from the clients.[754]

586 Ms Mbuyisa further confirms that the class representatives have been apprised in detail of the funding agreements and the duties and importance of acting as class representative. The attorneys are also in regular contact with the class representatives to provide advice and to take instructions.[755]

587 Anglo further contends that there are insufficient safeguards in place to ensure that the children are able to participate meaningfully in funding decisions.

588 Ms Mbuyisa has addressed this issue, explaining that the children's guardians and parents have been advised fully on these proceedings, their rights, and

---

[752] FA pp 001-130 - 131 para 291 – 296.

[753] See FA p 001-132 - 133 para 298, which sets out some of the many mass tort claims that have been litigated by LD.

[754] FA p 001-130 para 293; RA p 001-7756 para 480.

[755] FA p 001-130 para 290; RA p 001-7756 para 481.

responsibilities. She further confirms that where the children are of such an age, maturity and stage of development as to be able to participate and express their views, they too will have been consulted and advised fully on their rights and responsibilities, including the details of the funding arrangements.[756]

589 The irony in Anglo's arguments is that its professed concern for the best interests of the children is presented as a reason to deny these children access to justice through this class action. It does not make any attempt to suggest that the children have any prospect of getting to court if certification is refused. Nor can it. So invocation of the best interests of the children must be rejected as a cynical attempt to avoid the prospect of liability for harm that it has caused to these children.

The role of Leigh Day

590 Anglo repeatedly alleges that LD's role as a consultant to MM is improper. These allegations are baseless.

591 Due to its small size and limited resources, MM has retained LD as a consultant, due to its unquestionable expertise and experience in international class action litigation. Ms Mbuyisa's long history of successful work with LD on complex, multi-jurisdictional litigation speaks to the value of LD's role.

[756] FA pp 001-129 – 130 paras 288 – 289.

592 The terms of this arrangement are clearly specified In the Consultancy Agreement between the two firms and its recordals.[757] MM has care and conduct of the class action, is the primary point of contact for clients, and performs the bulk of the attorney-client work, the court work and evidence gathering and discovery. LD's roles include participating in formulating strategy, assisting MM with taking instructions and collecting evidence, assisting with obtaining expert evidence, and the like.

593 Ms Mbuyisa has further explained that without LD's involvement in the substantive legal work on the case, it is highly unlikely that a third-party funder would have been willing to fund the case. Pursuing a case of such complexity and magnitude would therefore not have been possible without LD's involvement.[758]

594 Anglo seeks to suggest that there is something improper in LD's fees, as reflected in the case budget. The main reason that LD's fees are around three times as high as the rest of the legal team is that LD charges in pound sterling (albeit at reduced rates).[759]

595 Anglo's opposition to LD's involvement smacks of inconsistency. Anglo has seen fit to retain its own London-based lawyers, Freshfields, who are presumably charging their full commercial rates in pounds. Anglo has evidently seen the

---

[757] AA in Application to Compel, Annexure ZM3 p 003-317ff.

[758] RA p 001-775 para 479.

[759] Id.

value of a multi-jurisdictional team, but would have it that the Applicants should be deprived of similar resources and expertise.

D. OBJECTIONS TO SPECIFIC FUNDING DOCUMENTS

596 We now turn to address Anglo's specific objections to features of the individual funding documents. Most involve quibbles over the wording of particular provisions or intentional misreadings, which have been clarified and addressed through amendments to these documents filed with the replying affidavit. We address the remaining complaints in turn.

The Claim Funding Agreement[760] and the Facility Agreement

The status of KFL

597 Anglo denounces KFL as a mere "shell" without its own operating guidelines.[761] The fact that KFL is a special purpose vehicle was explained in Mr Hanna's first affidavit.[762] KFL is an entity within the Augusta Group, and is operated by AVL pursuant to the December 2020 Consultancy Agreement.[763] Augusta stakes its ample reputation on KFL fulfilling its obligations.[764]

---

[760] Claim Funding Agreement: Annexure ZMX 84 pp 001-1345ff; amended version at RHH 3-3 pp 001-9809ff.

[761] AA p 001-2983 para 856.1.3 – 856.1.4.

[762] Mr Hanna's first affidavit p 001-2341 para 9.

[763] December 2020 Consultancy Agreement: RHH 2-1 p 001-2590.

[764] Mr Hanna's first affidavit p 001-2344 para 23.

The reasonableness of the proposed funder's return

598 Anglo contends that the proposed funder's return – 25% of the award in the event of a successful outcome, together with 100% of the recovered costs – is excessive and unreasonable.[765]

599 In *De Bruyn*,[766] Unterhalter J explained that at the certification stage, the certification court is not asked to determine the appropriate funders' return. That task is left to the trial court, which will determine the reasonableness of the funders' return in the event of a final judgment in the Applicants' favour or a settlement.

599.1 All that is required at the certification stage is an "*ex ante*" – before the event – assessment of the reasonableness of the proposed return. This is a preliminary assessment, which is not intended to be determinative.[767]

599.2 Unterhalter J further acknowledged that the reasonableness of the funder's return is a product of many factors, including "*the costs incurred by the funder, the risks assumed, and the outcome achieved*".[768] He cautioned that many of these factors "*are not known at the stage of certification*" and accordingly "*[t]he certification should not usurp the role of the trial court*".[769]

---

[765] AA p 001-2974 para 834.

[766] *De Bruyn* (n 397) at para 89.

[767] Id at para 94.

[768] Id at para 89.

[769] Id.

600 In this case, the 25% return is manifestly reasonable when considering three key factors: the costs, the risks, and the returns in comparable matters.

601 First, the costs to the funder are estimated to be substantial, reflected in the budget summary as £4,76 million (excluding the ATE insurance premium). The time value of money is also significant consideration. As Mr Hanna explains: "*the return must also reflect the estimated timeline to any recovery, which in a case of this nature could easily exceed 5 years from the point capital is deployed.*"[770] The commitment of capital over such a long period necessarily involves a substantial opportunity cost – the cost of alternative investments foregone – which have been factored into the return.

602 Second, the proposed return reflects the considerable risks undertaken in such complex litigation. Litigation of this scale and complexity, involving novel legal issues and complex historical evidence, poses substantial risks and uncertainties. Mr Hanna explains the calculation of risk that informed this calculation: "*Although we consider the class members' case to be meritorious, there remains a very real scenario where the funder suffers a total loss".* He adds that "*[r]isk to the funder from this potential variability around cost is also compounded by significant uncertainty around the ultimate quantum of damages in this case.*"[771]

---

[770] Mr Hanna's Third Affidavit p 001-9727 para 39.

[771] Id p 001-9727 para 38.

603 Third, the proposed 25% return is consistent with trends in third-party funding arrangements, both locally and abroad.

603.1 In South Africa, where third-party funding arrangements are still in a relatively nascent state, reported judgments reflect proposed returns ranging from 25% (*De Bruyn*)[772] up to 50% (*National Potato Board*).[773]

603.2 In England, Mr Hanna reports that a 25% return is consistent with the returns routinely approved in the English courts for "standard" High Court cases, taking over 36 months, which have none of the complexity or risk of a class action on this scale.[774]

603.3 The proposed return is also in step with funders' returns in class action litigation in Australia, for which data is readily available.[775] A 2019 study, analysing data from 85% of all judicially approved settlement agreements in funded cases in Australia, found that the median return was 25%.[776]

604 Fourth, a 25% return is consistent with the cap placed on contingency fee arrangements under the Contingency Fees Act. The CFA only applies to lawyers, and does not apply to third-party funders.[777] Nevertheless, the 25% limit represents a benchmark for third-party litigation funding arrangements.[778]

---

[772] *De Bruyn* (n 397).

[773] *PWC* (n 734).

[774] Mr Hanna's third affidavit p 001-9728 para 41.

[775] Id para 44.

[776] Prof V Morabito "*An Evidence Based Approach to Class Action Reform in Australia:* Common Fund Orders, Funding Fees and Reimbursement Payments" (2019) Annexure RHH 3-6 p 001-9873.

[777] See *Ronald Bobroff & Partners Inc v De La Guerre; South African Association of Personal Injury Lawyers v Minister of Justice and Constitutional Development* 2014 (3) SA 134 (CC) at para 10.

[778] *De Bruyn* (n 397) at para 88.

We emphasise, though, that the CFA limits serve a different purpose: they seek to ensure that lawyers' independence and objectivity is not compromised by the prospect of substantial returns. This purpose applies with less force to a third-party litigation funder, which is not involved in litigation decision-making and where there is less risk of any conflicts of interest.

605 Anglo continues to contend that this return is unreasonable, as it suggests that a 25% return could potentially involve a return many times larger than the funder's invested capital.[779] The total value of the return will necessarily depend on the quantum of the final damages award or settlement amount. This is why the final approval of the funder's return is best left to the trial court, once the litigation has concluded, allowing for a final determination of reasonableness. The type of speculative guessing, with which Anglo is concerned, is premature.

Sufficiency of the funding and the availability period

606 Anglo further argues that the level of the funding is insufficient, although it has never substantiated this allegation, nor has it offered its own estimate of the funding that it believes is necessary.

607 The £4,76 million in committed funding is, without doubt, one of the largest budgets for a class action in South Africa to date.[780] This budget was informed

[779] AA p 001-3022 para 929.

[780] Summary budget p 003-326.

by the Applicants' attorneys experience in the silicosis litigation and was further refined by an independent costs assessor.[781]

608 Clause 8 of the Claim Funding Agreement specifically provides for variations to this budget, should the existing budget prove to be insufficient.[782] This provision has already been used to increase the litigation budget from a total of £4.5 million to over £4,76 million, following a reassessment of the potential costs.[783] Discussions over budget increases have been necessitated by Anglo's voluminous and misconceived interlocutory applications that were not initially budgeted for, such as the compelling application and the recent strike out application.

609 Anglo alleges that the funder's discretion to permit budget overruns somehow gives it a degree of impermissible control over the litigation, but that complaint is without substance.[784]

610 In his first affidavit, Mr Hanna explained the commercial logic for the funder to retain some control over potential cost overruns, as it would not make commercial sense to provide a blank cheque. Nevertheless, the funder has good reason to be reasonable in considering any requests for a budget increase.[785] Furthermore, if the funder were to refuse a budget increase that would not be the end of the matter, as the unbudgeted legal expenses would simply be treated as

---

[781] Mr Hanna's first affidavit p 001-2344 - 2345 paras 27 – 29.

[782] Amended Claim Funding Agreement, Clause 8 p 001-9754.

[783] Applicants' AA in Rule 35(12) p 003-295 para 71.

[784] AA p 001-3025 para 938.

[785] Mr Hanna's first affidavit p 001-2344 - 2345 paras 27 – 28.

"additional fees", which would be recoverable by the lawyers through a costs award in the event of success.[786]

611 Anglo next complains that the funding will only be available until March 2024. This is in reference to the definition of the "availability period" under the Facility Agreement concluded between KFL and the lenders. However, the agreement expressly contemplates that this period may be extended. The definition of the "*availability period*" provides that the funding will be available for 48 months from the date that the agreement was concluded *or "such other later date as the parties agree from time to time.*"[787]

612 Mr Hanna explains that it is standard in loan documentation of this nature to specify a reasonable availability period to create some certainty for the lender. In respect of the extension of this availability period, "*the lenders are incentivised to be pragmatic about such matters in order to protect the sunk investment.*"[788]

The funder's rights to information

613 Anglo cavils at the fact that the funder is entitled to information about the case, including monthly reports and sight of pleadings and submissions. It alleges that these information rights are impermissible and "*geared at" giving the funder "factual control of the litigation*".[789]

---

[786] Id at para 29. See the definition of "additional fees" in Amended Claim Funding Agreement p 001-9810 clause 1.1.

[787] Amended Facility Agreement Annexure RHH3-4 p 001-9840.

[788] Mr Hanna's third affidavit pp 001-9729 – 9730 para 50.

[789] AA p 001-3015 - 3016 para 913.

614 A right to obtain information on the progress of the case is hardly a right of control. The agreements are explicit that the funder enjoys no such control, which would be in direct breach of the ALF Code.[790]

615 Such information rights are a standard feature of litigation funding arrangements and ATE insurance contracts. It would not be commercially sensible for any funder to provide substantial funding with no information on the progress of the case or potential risks.

616 The courts in England and Wales expect responsible funders to conduct such monitoring and due diligence.[791] In *Excalibur Ventures v Texas Keystone*,[792] the Court of Appeal addressed the degree of due diligence expected of responsible litigation funders.

616.1 Having noted that "*litigation funding is an accepted and judicially sanctioned activity perceived to be in the public interest*", Tomlinson LJ held that a "*rigorous analysis of law, facts and witnesses, consideration of proportionality and review at appropriate intervals is what is to be expected of a responsible funder*".[793]

616.2 Tomlinson LJ added that "*rather than interfering with the due administration of justice, if anything such activities promote the due administration of justice*."

---

[790] See paragraphs 579 - 581 above.

[791] Mr Hanna's third affidavit p 001-9724 paras 28 – 30.

[792] *Excalibur Ventures v Texas Keystone* [2016] EWCA Civ 1144.

[793] Id at para 31.

616.3 He held further that "*on-going review of the progress of litigation through the medium of lawyers independent of those conducting the litigation*" is "*not just prudent but often essential*". He concluded that "*[w]hen conducted responsibly, as by the members of the [Association of Litigation Funders] I am sure it would be, there is no danger of such review being characterised as champertous*."[794]

617 The ALF Code, which is binding on the funder, further emphasises that such ongoing due diligence is permitted. While emphasising that funders may not improperly interfere with the conduct and control of the case (clauses 9.2 and 9.3), clause 18 emphasises that:

> "*Nothing in this Code shall be construed to prohibit a Funder from conducting appropriate due diligence, both before offering funding and during the course of the litigation procedures that are being funded, including but not limited to analysis of the law, facts, witnesses and costs relating to a claim, and including regularly reviewing the progress of the litigation.*"[795] (Emphasis added)

618 Mr Hanna further explains that the funder's entitlement to view documents prior to filing is a necessary part of its ongoing risk assessments, giving the funder "*visibility over whether a course of action is being committed to which could have significant implications for costs, or which substantially alters the fundamentals of the case"*.[796] This is not intended to interfere in the conduct of the case.

---

[794] Id at para 31.

[795] ALF Code: RHH-2 pp 001-2355.

[796] Mr Hanna's third affidavit p 001-9725 para 30.

Settlement

619 Anglo next complains that MM is obliged to "consult" with the class representatives, LD and the funder if it proposes to make a settlement offer, or if one has been received. MM is also duty-bound to accept or make offers which counsel consider to be reasonable.[797] This is alleged to give the funders impermissible control, to the disadvantage of the class representatives.

620 The procedure for making or accepting settlement proposals is addressed in detail in clause 10 of the Claim Funding Agreement.[798] This makes clear that the counsel team's advice is determinative as to whether a settlement offer is reasonable and should be made or accepted. There is an in-built safeguard for the class members, who can refer the matter to an independent senior counsel, in terms of clause 10.6 to 10.12 read with Schedule 2 of the Claim Funding Agreement.

621 The procedures for making or accepting settlement offers are the following:

621.1 In respect of offers of settlement from the Applicants:

621.1.1 MM, in consultation with LD, will keep the opportunities for settlement under review and will notify the class representatives and KFL if it considers that it is appropriate to make a settlement offer.[799]

---

[797] AA p 001-3017 para 917.

[798] Amended Claim Funding Agreement p 001-9824 clause 10.

[799] Id clause 10.1 p 001-9824ff.

621.1.2 MM Attorneys will make an offer only if forms the view, in consultation with the class representatives and LD, that it is reasonable to make an offer and counsel agrees, in writing, that that the offer is reasonable.[800]

621.2 In respect of acceptance of settlement offers made by Anglo:

621.2.1 MM must notify and consult the class representatives, LD and the funder if it receives a settlement proposal.[801]

621.2.2 MM will then instruct counsel to provide a written opinion on the reasonableness of the settlement proposal.[802] If counsel determine that the offer is reasonable, the offer will be accepted unless a dispute is raised.

621.3 In respect of the dispute resolution mechanism:

621.3.1 Clause 10.6 provides that "each of the Class Representatives (acting by majority), the funder, MM and Leigh Day shall be entitled to raise a dispute as to whether an offer to settle should be treated as a reasonable offer", which dispute would include disputes over the amount or timing of an offer.[803]

621.3.2 Where a dispute is raised, the dispute will be referred to an independent senior counsel to determine the reasonableness of

---

[800] Id clause 10.2.

[801] Id clause 10.3.1.

[802] Id clause 10.3.2.

[803] Id clause 10.6 p 001-9824 – 9825.

the settlement proposal, in terms of clause 10.7[804] read with Schedule 2.[805]

622 Anglo alleges that this mechanism means that *"KFL and the Luxembourg Fund enjoy significant power over whether and when the classes may settle"*. However, KFL only has the primary right to be "consulted", which is not a right to dictate the outcome. A duty to consult, it has been held, "*requires no more than that the views of interested persons be obtained*".[806]

623 Beyond the consultation right, the only remedy of KFL is to refer a dispute on the reasonableness of an offer to an independent senior counsel who will then decide the dispute on an urgent basis and, in the process, determine whether the offer can be made or accepted.

624 It is standard practice in litigation funding contracts to give the legal representatives or counsel the power to determine what is a "reasonable" settlement.[807] This is to resolve the "moral hazard" when a claimant is fully funded and insured, in which claimants "*may be incentivised to take potentially unreasonable risks (such as turning down a generous settlement offer) because there is no cost or downside for them in doing so.*"[808]

---

[804] Id clause 10.7 p 001-9825.

[805] Id Schedule 2 ("termination dispute resolution") p 001-9834.

[806] *Electronic Media Network Limited and Others v e.tv (Pty) Limited and Others* [2017] ZACC 17; 2017 (9) BCLR 1108 (CC) at para 42.

[807] Mr Hanna's third affidavit p 001-9726 para 32.

[808] Id.

625 The balance is struck by leaving it to counsel to determine the reasonableness of settlement proposals, as counsel are duty-bound to be independent, to act in the class representatives' interests, and to provide objective advice. There is nothing offensive about giving the funder the right, in effect, to demand a second opinion from senior counsel on the reasonableness of settlement proposals through clause 10.6.

626 We add that there is a further significant check, that protects the rights of the class representatives: any settlement would need to be finally approved by the trial court, which will need to be satisfied that it sufficiently protects the interests of the class representatives and the broader class.

Termination rights

627 Anglo further objects to the funder's rights of termination of the Claim Funding Agreement, specified in clause 12.[809]

628 It takes issue with clause 12.2, which entitles the funder to terminate by giving 10 business days' notice if, in the funder's "*reasonable opinion*", a) there has been "*a material adverse change to the chances of obtaining the Funder's Return or a Successful Outcome*"; or b) "*the Funder reasonably believes that the case is no longer commercially viable*".[810]

[809] Amended Claim Funding Agreement p 001-9826 - 9827 clause 12.

[810] Id p 001- 9827 clause 12.2.

629 Anglo contends that these termination conditions are "*vague and undefined and may, in practice, confer a virtually unbounded discretion upon KFL's right to terminate the Claim Funding Agreement*."[811]

630 Anglo ignores the detailed dispute resolution mechanism set out in clause 12.4, read with Schedule 2, which provides that the class representatives, MM or LD may dispute the termination, after which it is referred to independent senior counsel to determine the validity of any termination decision.[812] This ensures objective control over any termination decision and precludes arbitrary withdrawal of funding.

631 The grounds for termination are defined with sufficient certainty:[813]

631.1 A "material adverse change" in this context is interpreted to mean a development which means the prospects of success are no longer above 50% (such that it is more likely that the class members will not obtain an award).[814]

631.2 In terms of "commercial viability", this depends on the interrelationship between the capital that has been expended, the cost estimate going forward, and the experts' assessment of the likely quantum at the time. It recognises that "*a commercial litigation funder cannot be committed to*

---

[811] AA p 001-3019 at para 919.8.3.

[812] Amended Claim Funding Agreement p 001-9827 clause 12.4: "*If any of the Class Representatives (acting by majority), MM, Leigh Day or the Funder dispute the termination of this Agreement pursuant to this Clause 12, the provisions of Schedule 2 (Dispute Resolution) shall apply.*" See further Schedule 2 p 001-9834.

[813] Mr Hanna's third affidavit p 001-9726 paras 33 – 35.

[814] Id at para 33.

finance a case even where it stands no prospect of recovering its investment and its cost of capital even if there is a "successful outcome"." However, Mr Hanna insists that "*termination on this ground would be highly exceptional, not least for reputational reasons.*"[815]

632 Both grounds for termination ultimately depend on an assessment of reasonable prospects of success and the estimated quantum of the award. And any such assessment would be subject to the final say of independent, objective senior counsel.

633 This proposed termination mechanism compares favourably with the type of safeguards that Unterhalter J proposed in *De Bruyn*.

633.1 There the funding agreement initially stipulated that the funder was entitled to terminate "*where they are of the view that the matter lacks reasonable prospects of success"*, leaving this decision entirely to the subjective assessment of the funder, without any objective controls.[816]

633.2 Unterhalter J acknowledged that there is nothing inherently impermissible in termination clauses premised on an assessment of prospects, as "*[n]o one would reasonably resist the proposition that if litigation reaches a point where it lacks reasonable prospects of success, the litigation should not be continued.*"[817]

---

[815] Id at para 34.

[816] De Bruyn (n 397) para 97.

[817] Id para 101.

633.3 Unterhalter J held that any termination decision must be subject to some objective safeguards, which could be achieved in at least two ways.

633.3.1 The termination decision could be subject to confirmation by the Applicants' counsel and attorneys that the matter lacked reasonable prospects of success;[818]

633.3.2 Alternatively, the funder could retain the discretion to terminate if it believes that the matter lacks reasonable prospects, but any such decision would be subject to final approval by the trial court, if it found that the funder's assessment of the prospects had a "proper foundation".[819]

633.4 Unterhalter J was not prescriptive as to which of the two options were to be preferred, nor did he suggest that these options represented a closed list.

634 The proposed dispute resolution mechanism in this case, involving independent senior counsel, has features of both mechanisms that were favoured in *De Bruyn*, together with further advantages.

634.1 First, it leaves the ultimate decision to an independent counsel, rather than leaving it in the hands of the funder or the Applicants' lawyers.

---

[818] Id at para 102.

[819] Id para 102.

634.2 Second, it has the added benefit of relieving the trial court of a complex assessment of the prospects of success of the litigation, in circumstances where the matter is still pending before the court.

MM's rights to terminate the Class Member Retainer

635 Anglo takes issue with clause 4.1.6 of the Claim Funding Agreement, which requires MM to seek the funder's prior written approval before terminating the Class Member Retainer in the event that the class members breach its terms.[820]

636 Anglo overlooks the fact that, under clause 4.1.6, KFL's approval *"cannot be unreasonably withheld"*.[821] A termination of the retainer would potentially have serious implications for the funder's sunk costs and would also seriously impact on the class members.[822] Anglo fails to explain why the additional safeguard of requiring the funder's approval for a termination would be to the prejudice of the class members.

AVL's role and its administration fee

637 Anglo further takes aim at the role of Augusta Ventures Limited (AVL) and the administration fee that it charges the funder.

---

[820] The Class Member Retainer is defined in the Amended Claim Funding Agreement as "*a client-attorney agreement between MM and the Class Members, which the Class Members will either execute directly or will be deemed to have acceded to pursuant to a Court approved opt-out regime; and pursuant to which the Class Members agree that the Funder is entitled to share in the proceeds in accordance with this Agreement.*"

[821] Amended Claim Funding Agreement p 001-9819 clause 4.1.6.

[822] Mr Hanna's third affidavit p 001-9725 para 31.

638 Anglo suggests that there is something improper in the fact that AVL is not registered with the UK Financial Conduct Authority, following the restructuring of the company in December 2020.[823] However, as Mr Hanna explains, AVL does not perform any "regulated activities" under the FCA regime, and no FCA registration is required.[824]

639 In respect of AVL's 6.5% administration fee, this fee is not borne by the class members. It is a fee charged to the funder's investors to cover operational costs and due diligence, pursuant to the commercial arrangements between AVL and the investors.[825]

Payment waterfall

640 Anglo has sought to make much of an alleged inconsistency between the Claim Funding Agreement and the Facility Agreement, which sets out the payment "waterfall" in the event that an award is received from Anglo. These alleged inconsistencies are a simple misreading of these documents, which have been addressed in Mr Hanna's affidavit.[826]

---

[823] AA p 001-3002 at para 881.2.

[824] Id p 001-9720 at paras 11 – 12.

[825] Amended Claim Funding Agreement p 001-9821 clause 7.2 – 7.3.

[826] Mr Hanna's third affidavit p 001-9720 – 9722 paras 15 – 17.

The ATE Insurance Policy

Sufficiency of indemnity cover

641 Anglo complains that the ATE insurance policy does not adequately protect its interests, in the event that this litigation is unsuccessful.

642 This Court addressed similar complaints in *De Bruyn*. Unterhalter J emphasised that class certification "*does not require that security for costs be provided by an applicant or those who fund her*".[827]

643 Instead, a defendant's interests are merely one of the many factors to be weighed in the balance in assessing the interests of justice. Moreover, Unterhalter J emphasised that "*[t]o the extent that adverse costs orders made in favour of the defendants are likely to be honoured, this counts in favour of certification.*"[828]

644 Indemnity cover of £2 million is more than sufficient to ensure that Anglo's interests, as a wealthy multinational company, are adequately protected.

645 Anglo makes the unsubstantiated claim that this limit falls short of its anticipated costs.[829] However:

---

[827] Id at para 109 (with reference to the Federal Court of Australia's judgment in *Petersen*)

[828] Id.

[829] AA p 001-3010 para 896.

645.1 Anglo has failed to offer any calculation of its estimated costs or any explanation as to how its estimated taxed legal costs could exceed the indemnity cover of approximately R40 million.

645.2 In any event, Anglo's taxed costs are likely to be substantially lower than the Applicants, as it shoulders none of the burdens involved in bringing and managing a class action of this size.

645.3 Moreover, Mr Hanna has explained that the limit of indemnity under the ATE policy remains under review and further insurance coverage will be sought if reasonably necessary.[830]

646 Anglo further alleges that it would have difficulty enforcing an adverse costs order against the funder and the insurer.[831] This complaint is equally unfounded.

646.1 KFL took out an insurance policy to meet any adverse costs. It would not have done so if it had the intention of evading any costs order.

646.2 Mr Hanna further emphasises that Augusta has never defaulted on a court order in any jurisdiction or reneged on any undertaking that claimants will be protected from adverse costs. To do so, he states, "*would be highly damaging to Augusta's reputation, and completely undermine our credibility before the courts in similar situations in our future investments*".[832]

---

[830] Mr Hanna's third affidavit p 001-9722 para 18.

[831] AA p 001-3011 para 897.

[832] Mr Hanna's third affidavit p 001-9722 para 20.

647 Anglo is therefore in a considerably better position than it would have been had the Applicants been litigating alone, without litigation funding. Augusta's reputation in the market and the ATE insurance policy stand as additional guarantees and safeguards.

Protection for the class representatives and class members

648 Anglo has further argued that the indemnity offered by the ATE insurance policy is deficient, as it does not specify the class representatives as beneficiaries. The complaint has no merit, but the ATE policy has now been amended to include the class representatives as the insured.[833]

Termination by the insurer

649 Anglo next objects to the insurer's rights to terminate the policy under clause 7.1.2, suggesting that this exposes Anglo to the risk of being unable to recover its costs.[834]

650 Clause 7.1.2 provides that the insurer may terminate the policy if the legal representatives advise that the matter does not have reasonable prospects of succeeding, but the litigation continues without the insurer's approval.[835]

651 Anglo ignores clause 7.2, read with the indemnity in clause 2.1, which provides that where the insurer terminates the policy, its effect is that the insurer will not

---

[833] Amended ATE Insurance Policy p 001-9867 (Schedule clause 2).

[834] AA p 001-3011 para 898.

[835] ATE Policy p 001-2411 clause 7.1.

pay for liability "*incurred after the date of cancellation*".[836] Anglo would accordingly be indemnified for all costs up to the point of termination.

652 It is exceptionally unlikely that the class representatives would decide to continue with the litigation, and that the funder would continue to advance funding, in circumstances where there are no reasonable prospects and no insurance cover. In any event, Mr Hanna confirms that if the litigation were to continue, the funder would use its best endeavours to obtain alternative insurance.[837]

Miscellaneous complaints

653 Anglo's further complaints regarding the pro forma policy schedule have been addressed through minor corrections, none of which are material to the contract.[838] The policy schedule now reflects that the insured are KFL and the class representatives and reflects that MM and LD are the class representatives' lawyers.[839]

Contingency fee arrangements

654 MM and counsel have concluded contingency fee agreements with the representative plaintiffs, as reflected in the amended Client Funding Agreements.[840]

---

[836] Id clause 7.2.

[837] Mr Hanna's third affidavit p 001-9723 para 23.

[838] Mr Hanna's third affidavit p 001-9723 – 9724 paras 24 – 26.

[839] Amended Policy Schedule p 001- 9867 – 9869.

[840] RA Annexures ZMX 153 p 001-8977 (class representative CFA) and ZMX 154 p 001-9036 (class member CFA).

655 As explained above, the lawyers are entitled to payment of 62% of their fees immediately, while 38% of these fees are deferred and are only payable on success.

656 Given the relative novelty of deferred fee arrangements, there was some initial uncertainty as to whether the "deferred fees" were contingency fees. Anglo, in its answer, insisted that this arrangement fell within the compass of the Contingency Fees Act and it insisted that contingency fee agreements were required that comply with the formalities under the Act.

657 This has now been rectified. The Client Funding Agreement has been amended[841] to ensure compliance with the Act, and the amended agreements have been signed, as is detailed in the replying affidavit.[842] Consequential amendments have also been made to the other funding documents to reflect these changes.[843]

658 The "deferred fees" must be understood in light of the two types of fee arrangements contemplated in the Contingency Fees Act:

658.1 The first, is a "no win, no fees" agreement, in which lawyers charge their normal fees or reduced rates in the event of success (sub-section 2(1)(a)).

---

[841] Id.

[842] RA p 001-7752 – 7753 para 472.

[843] RA p 001-7754 paras 474 – 476.

658.2 The second is an agreement in terms of which lawyers are entitled to charge fees *higher* than their "normal fee" – a true "success fee" - if the client is successful (sub-section 2(1)(b)).

659 It is only the second type of arrangement, the true "success fee", that is subject to the limitations found in section 2(2) of the Act: the higher fees charged on success may not exceed the normal fees of the legal practitioner by more than 100 per cent and, in the case of claims sounding in money, this fee may not exceed 25 per cent of the total amount of the award or settlement, excluding costs.[844]

660 The "deferred fees" in this case are a species of the sub-section 2(1)(a) "no win no fee" arrangement, as the Applicants' lawyers are charging reduced rates.[845] The deferred portion of the fees are only available on success.

661 Even though the limits set out in section 2(2) of the Contingency Fees Act do not necessarily apply, the CFAs reflect that the lawyers' deferred fees shall not exceed 25% of the total amount awarded to the client, or 100% of the lawyers' normal fees, whichever is the lesser.[846]

---

[844] *PWC* (n 734) at para 41.

[845] RA p 001-7751 para 470. See fees recorded in the Amended CFA ZMX 153 p 001-8981, recordals O – Q.

[846] Amended CFA id pp 001-8987 – 8988 clause 18.

662 Thus, even if it were held that the "deferred fees" constituted a true "success fee" under section 2(1)(b), there is compliance with the Act and a cap has been set on the amount.

E. SUMMARY

663 Returning to the considerations outlined in *De Bruyn*:[847]

663.1 The funding arrangements are necessary to provide access to justice. There is no dispute that without this funding, the Applicants would be unable to pursue this litigation.

663.2 The funding arrangements are fair and reasonable, securing the interests of the prospective class members and the defendants.

663.3 The proposed funder's return is reasonable, given the risks, costs, complexity and duration of this litigation.

663.4 The funding arrangements preserve the independence of the legal representatives and the ability of the class representative to carry out their duties.

664 Accordingly, the proposed funding arrangements are in the interests of justice and, we submit, ought to be approved in certifying this class action.

---

[847] *De Bruyn* (n 397) at para 82 and 85 – 86.

X THE DETERMINATION AND ALLOCATION OF DAMAGES

665 This class action complies with the further considerations, set out in *CRC Trust,*[848] related to the question of damages:

665.1 "*that the relief sought, or damages claimed, flow from the cause of action and are ascertainable and capable of determination*" (determination); and

665.2 "*that where the claim is for damages there is an appropriate procedure for allocating the damages to the members of the class*" (allocation).

666 These requirements have no direct parallel in other common law countries' class action jurisprudence.[849] They reflect the particular concerns in *CRC Trust* over quantifying miniscule claims by individual consumers who were overcharged for bread and the proposed creation of a trust that would not distribute damages directly to the class members.

667 In *De Bruyn*, Unterhalter J explained that these requirements are not intended to displace the trial court's final determination of liability and quantum. "*The role of the court considering certification*" he held, "*is not to determine damages but to gauge whether they are capable of determination and allocation*."[850] As a result, this is merely a preliminary assessment, as part of the broader interests of justice inquiry.

---

[848] *CRC Trust* (n 23) at para 26.

[849] See Unterhalter and Coutsoudis *"The Certification of Class Actions*" in *Class Action Litigation in South Africa* (Du Plessis et al eds.) (2017) at pp 28 – 30.

[850] *De Bruyn* (n 397) at para 285.

Determination

668 Anglo does not contest that the various heads of damages set out in the draft particulars of claim flow from the pleaded cause of action.[851]

669 These include past and future medical expenses; loss of earnings; the costs of remediating victims' homes and the local environment; and general damages for pain, suffering and loss of amenities of life, disablement and reduced life expectancy.

670 These heads of damages are typical of personal injury claims arising from environmental contamination. It could not be suggested that they are inherently incapable of determination.

671 In terms of the bifurcated, two-stage procedure proposed by the Applicants, damages will be determined at the second, opt-in stage of the proceedings. At that stage, if class members want their claims to be assessed, class members will be required to 'opt in', by notifying the Applicants' attorneys, in a manner directed by the trial court.

672 The primary objective at the second stage would be to establish a range of damages awards that apply to different sub-classes, potentially demarcated along the lines of varying BLLs, injuries and / or different age brackets. Should a

[851] FA p 001-125 paras 273; Not denied AA p 001-3129 paras 1295 – 1298. Draft PoC p 001-187 paras 59 – 60.

settlement eventuate, this would assist in determining the appropriate tariff payable to individual class members and the overall value of the settlement.

673 The recent settlement in the Flint lead poisoning case provides an example of what such an outcome could look like. As previously noted, the court approved a detailed "*compensation grid*" that provided thirty categories of compensation, based on different ages, blood lead levels, and injuries, and the required proof for each category.[852]

674 In the absence of settlement, the trial court would have multiple tools available (both in terms of the Uniform Rules and its inherent jurisdiction) to ensure that the determination of damages at the second-stage proceeds in a practical and sensible manner. For example, this could involve the following options, without intending to be prescriptive:

674.1 A joint hearing that lays down the general principles for determining liability and quantum and a range of damage awards for different sub-classes (class-wide hearing).

674.2 If disputes remain, a separate hearing of any issues that are particular to members of certain sub-classes, such as those suffering from BLLs within certain brackets or specific types of injuries (sub-class hearings).

---

[852] See Annexure ZMX 130 p 001-8544, See the judgment at ZMX 129 p 001-8363: *In Re Flint Water Cases* 5:16-cv-10444-JEL-EAS (E.D. Mich. Nov. 10, 2021).

674.3 If any further disputes remain over individual cases, individual hearings of the issues peculiar to individual claimants' damages claims (individual hearings).

675 It is impossible, at this stage, to pre-empt how this process will unfold, as this will depend on the issues in dispute on the pleadings and the parties' attitudes to settlement.

676 This is all consistent with this Court's reasoning in *Nkala*, which approved of a two-stage process to determining liability and held that the certification court cannot be expected to micro-manage these matters at this early stage, nor would it be appropriate to dictate to the trial court how it should conduct the trial.[853]

677 Anglo seeks to relitigate *Nkala*, contending that liability must be determined at the first-stage or not at all. "*[T]here is no such thing as liability in the abstract*", Anglo contends, and "*liability is what the first stage is all about*".[854]

678 These arguments have already been answered in *Nkala.* If the interests of justice call for a bifurcated approach, as they do in this case, then a Court should grant certification and allow the trial court to manage the process going forward. We address the suitability of this two stage process further in the next chapter.

---

[853] *Nkala* (n 22) at paras 85 – 88 ("*the common issues in the class action may not finally determine each mineworker's case")* and paras 116 – 125 (*"The bifurcated process"*)

[854] AA p 001-3129 paras 1295 – 1298.

Allocation

679 The Applicants seek the direct allocation of any damages award to the class members. They do not seek any indirect allocation of the kind that gave the SCA pause in *CRC Trust*.[855]

680 Without attempting to be exhaustive of the options, the Applicants have suggested one type of allocation mechanism that could be employed, subject to agreement with Anglo and the sanction of the trial court:[856]

680.1 Following the determination of appropriate brackets or sub-classes of claimants in respect of the quantum of damages to be paid, it is proposed that a further public notice process be employed to enable class members to claim their damages.

680.2 Those class members would be entitled, upon satisfying the criteria of the class definition, within a reasonable period of approximately two years or such other period as the trial court may determine, to claim their damages directly from a trust established to hold and disseminate these funds.

680.3 This trust would operate along the lines of the Q(h)ubeka Trust that was established following the 2016 settlement in the *Chakalane/Qubeka* silicosis litigation, undertaken by the Applicants' attorneys. That Trust assumed responsibility for arranging the medical evaluation of claimants and approving payments based on pre-determined tariffs.

---

[855] CRC Trust (n 23) at paras 80 – 87.

[856] FA p 001-127 – 128 paras 279 – 283.

681 Anglo contends that the allocation of damages to class members would prove to be more difficult in this case, as it alleges that the range of injuries suffered by the class members is broader than the silicosis litigation and the class members do not share a common thread, such as being mineworkers exposed to dust.

682 These alleged practical difficulties are more apparent than real. Unlike the mineworkers in the silicosis litigation, who are scattered across southern Africa, the prospective class members are all residing in the Kabwe District. This is likely to make communication, medical assessment and distribution far easier.

683 In any event, Anglo fails to offer any alternative proposal for allocation, nor does it suggest that these logistical complexities are so intractable that there is no solution.

684 It has often been said that courts should not be "*overawed by practical problems*" in fashioning appropriate remedies.[857] This applies with even greater force at the certification stage, as it is not for the certification court to finally determine the precise logistics of distribution. The final model of allocation will be subject to the approval and oversight of the trial court, once all information has been presented and disputes between the parties have been resolved.

685 If the Applicants' proposed arrangement is not accepted by the Court and no appropriate alternative arrangements can be designed, it will always be open to

---

[857] *Modderfontein Squatters, Greater Benoni City Council v Modderklip Boerdery (Pty) Ltd (Agri SA and Legal Resources Centre, Amici Curiae): President of the Republic of South Africa & others v Modderklip Boerdery (Pty) Ltd (Agri SA and Legal Resources Centre, Amici Curiae)* 2004 (6) SA 40 (SCA) at para 42; *Minister of Home Affairs and Others v Somali Association of South Africa and Another* 2015 (3) SA 545 (SCA) at para 26.

the Court to insist that individual members would have to prove their individual damages as they would have done in a separated quantum hearing as individual litigants. That would be extremely cumbersome but it would be far less cumbersome that requiring individual plaintiffs individually and repeatedly to prove their cases on both merits and quantum which (however unlikely) must be treated as the more desirable alternative postulated by Anglo in seeking to resist certification on this ground.

686 It is necessary to address a final misconception. Anglo wrongly asserts that the final award would be paid to the funder, before being distributed to the proposed trust for the benefit of the class members. That is a simple misreading of the funding documents. Nowhere in the Claim Funding Agreement does it provide that the class members' 75% share of any award is paid into the funder's "Resolution Trust Account".[858] Instead, the 75% of the award due to the class members would be paid directly into the proposed trust for distribution to the class members.

[858] Hanna p 001-9721 para 16.

XI APPROPRIATENESS AND THE INTERESTS OF JUSTICE

A. INTRODUCTION

687 The next issue is whether the proposed class action is appropriate and in the interests of justice. The test for appropriateness is set out in *CRC Trust* as follows:

> *"whether given the composition of the class and the nature of the proposed action a class action is the most appropriate means of determining the claims of class members."*[859]

688 The appropriateness criterion, like the other factors, is but one measure that assists the court in deciding whether the interests of justice favour certification.[860] There is no hard and fast test for the interests of justice. The interests of justice require flexibility in applying the certification factors, which avoids elevating the presence or absence of a given factor into a jurisdictional pre-requisite.[861] Assessing what is in the interests of justice is a value judgment of what would be fair and just to all concerned. The enquiry is neither based strictly on the proven facts, nor does it indulge technicalities.[862]

---

[859] CRC Trust (n 23) at para 26.

[860] Mukkadam (n 23) at para 35.

[861] Id at para 36-37.

[862] *S v Dlamini; S v Dladla; S v Joubert; S v Schietekat* 1994 (4) SA 623 (CC) at Paragraph 46; *Ellish en Andere v Prokereur-Generaal, Witwatersrand Plaaslike Afdeling* 1994 (4) SA 835; and *S v Ntsele* 1997 (11) BCLR 1543 (CC) at para 8.

689 Courts have embraced the injunction in *Mukkadam* by balancing appropriateness with other certification factors, such as triability,[863] and class definitions.[864] In *Nkala I*, the Court held that the appropriateness enquiry falls away once it is shown that there are sufficient common issues, the determination of which would advance the class members' cases — as is patently the case here. The Court said:

> *"[110] In any event, we hold that once it has been established that there are sufficient common issues whose determination would advance the cases of all individual mineworkers, then there is no need for the court to engage in the exercise of examining whether these common issues outweigh the non-common ones. In such a case it has to be in the interests of justice that a class action be certified. Articulated differently, once the determination on whether there are sufficient common issues to warrant a class action is made, the question of the most appropriate way to proceed would almost certainly fall away."*

690 Appropriateness and the interests of justice must be viewed in light of the Constitutional right of access to court,[865] and the right to approach a court on behalf of a class of persons to vindicate a right in the Bill of Rights.[866] Certification

---

[863] See: De Bruyn (n 397) at paras 295 to 300 where Unterhalter J found it inappropriate to certify a class action in which there was no triable cause of action. The Learned Judge concluded at paragraph 300 that:

"In these circumstances, whatever the virtues of a class action, without a cause of action, the application for certification must fail. The matter may be framed as one of weight: the absence of a cause of action weighs too heavily to permit certification. It is also a matter of logic. Why must a court trigger the machinery of a class action to determine something that does not exist in law? To do so would be to place a ghost in the machinery of justice."

[864] *Stellenbosch University* (n 331) at para 60

[865] Section 34 of the Constitution, which reads:

> *"Everyone has the right to have any dispute that can be resolved by the application of law decided in a fair public hearing before a court or, where appropriate, another independent and impartial tribunal or forum."*

[866] Section 38(c) of the Constitution, which reads:

> *"Anyone listed in this section has the right to approach a competent court, alleging that a right in the Bill of Rights has been infringed or threatened, and the court may grant appropriate relief including a declaration of rights. The persons who may approach a court are — …(c) anyone acting as a member of, or in the interests of, a group or class of persons…"*

is no more than a request for permission to enter the doors of court as a group, and for the representatives to act on behalf of the group.[867] But certification presents obvious disadvantages to applicants seeking class certification. Certification proceedings, force a plaintiff:

> *"…to commence the action on bended knee; before the case even begins, he or she is put on the defensive. No other type of plaintiff is required to go through this kind of torture test to obtain a day in court."*[868]

691 It is perhaps with this consideration in mind that the SCA in *CRC Trust* adopted the "appropriateness" standard rather than the more exacting "superiority" test used in other jurisdictions. Two conclusions flow from this. Primarily, appropriateness is not a question of whether the claimants should be allowed to pursue their claims, but how they should do so. Secondly, the Applicants do not have to prove that a class action is the only way to proceed, but that it is an appropriate way to proceed. So the Applicants do not need to discount every other possible means of pursuing their claims.

692 The appropriateness standard would partly be met if the proposed class action achieves the objectives of class actions, which include: (i) the efficiency of allowing the plaintiffs with common issues to litigate in a single hearing; (ii) judicial economy; (iii) proper management of litigation that would otherwise be unmanageable; (iv) improving access to justice by enabling plaintiffs to bring joint claims that would otherwise be uneconomical for each plaintiff to bring

---

[867] Nkala (n 22) at para 27

[868] Mulheron, p25, fn 12, quoting from AJ Roman, "Class Actions in Canada: The Path to Reform?" (1987) Advocates' Society J28, 31

separately, (v) protecting defendants against a multiplicity of actions; and (vi) avoiding the possibility of multiple conflicting decisions on the same issues.

693 Anglo raises every conceivable technical point to resist certification. But it has not made any meaningful attempt to compare the advantages and disadvantages of a class action, which is the very purpose of the appropriateness enquiry.[869] Anglo does not propose a viable alternative to a class action. It suggests that the class members should pursue an action in Zambia because South African Courts are for South Africans. Anglo does so, knowing that this will enable it to escape justice because of the limitations in the Zambian legal system, which we explore below.

694 In what follows, we address Anglo's objections on appropriateness. We first show that the proposed class action is the only sensible way to litigate the common issues in this matter. Next, we demonstrate that a class action in South Africa is preferable to Zambia. Finally, we show that notwithstanding Anglo's objection, the opt-out mechanism is permissible, appropriate, and in the interests of justice.

B. A CLASS ACTION IS THE ONLY SENSIBLE PROCEDURE

695 The appropriateness and necessity of the proposed class action is readily apparent when one has regard to the composition of the classes.

---

[869] *De Bruyn* (n 397) at para 286

696 The classes comprise two categories of people in Kabwe which ranks among the most polluted sites worldwide, and is a significant instance of lead pollution.[870]

696.1 The first category comprises children who reside in Kabwe, or resided in Kabwe for two years between the ages of zero and seven. They were born there, and by coincidence of their birth were exposed to lead poisoning. They did not choose Kabwe. They did not know what Anglo knew decades ago: the pollution caused by its operations from which it profited, were harmful. So, the simple acts of childhood, such as playing in the dirt,[871] became hazardous and will likely shape the course of their lives permanently.

696.2 The second category are women of child-bearing age who reside in Kabwe (or resided there for two years between the ages of zero and seven), have fallen pregnant or are capable of falling pregnant, and suffered injury as a result of exposure to lead. They too did not choose Kabwe. Their most basic right to bodily integrity and to make decisions concerning their production has been breached.

697 The class is large by any measure. There is some dispute about how the classes should be composed or defined, which affects the exact number of persons

---

[870] FA ZMK19, 001-761 to 001-762 "Discussion Paper, Series A, No.2019-338 Assessing the population wide exposure to lead pollution in Zambia: blood lead level estimation based on survey data" Masato Hiwatari et al

[871] Applicants' supporting affidavits: First Applicant's Affidavit, p 001-1375, paras 6-7; Second Applicant Affidavit, p 001-1379, para 7; Third Applicant's Affidavit, p 001-1383, para 7; Fourth Applicant's Affidavit, p 001-1387, para 8; Fifth Applicant's Affidavit, p 001-1391, para 7; Sixth Applicant's Affidavit, p 001-1396, para 7; Seventh Applicant's Affidavit, p 001-1402, paras 13-15; Eighth Applicant's Affidavit, p 001-1406, para 7; Ninth Applicant's Affidavit, p 001-1410, para 8; Tenth Applicant's Affidavit, p 001-1436, para 6; Eleventh Applicant's Affidavit, p 001-1418, para 6; Twelfth Applicant's Affidavit, p 001-1422, para 8; Thirteenth Applicant's Affidavit, p 001-1426, para 5

comprising the classes. We have dealt with this debate above. On both versions, the classes are large enough to make a class action appropriate.

697.1 Professor Thompson, an expert in biostatistics,[872] estimates the "children's class" as at between 89 000 and 99 000 children with BLLs above 5 µg/dl.

697.2 Anglo says the classes should be limited by geography and BLL. We have explored why this is unsustainable. But even Anglo's expert, Prof. Canning, estimates the class of children in Kabwe at 114 745,[873] on their unduly restrictive conception the class of children in the Kabwe area whose BLLs are above 45 µg/dl is 5 576.[874]

698 Class members have triable claims against Anglo for the harm they suffered as a result of lead poisoning. All they seek, is an opportunity to have their case tried. A class action is their only hope. Without a class action, it is unlikely that the class members will attain any relief at all. This is so for several reasons.

699 Lack of resources: The residents of Kabwe are largely underprivileged and lack the resources to pursue claims against Anglo on an individualised basis. This is illustrated that by the fact that the class representative parents are either unemployed, or have menial jobs.[875]

---

[872] Prof. Thomspon Report: p 001-1686 para 43

[873] AA, 001-3127, para 1289.1; Canning Report, "AA12," p 001-3868 para 93(a)

[874] Anglo AA: 001-3128, para 1289.2; Canning Affidavit, "AA12," p 001-3868 para 94(b).

[875] The unredacted supporting affidavits show that the third, fourth, fifth, sixth, eighth, and twelfth applicants' parents are unemployed: A3, p 001-1382, para 1; A4, p 001-1386, para 1; A5, p 001-1390, para 1; A6, p 001-1395, para 1; A8, p 001-1405, para 1. The tenth applicant does not attend school for lack of funds (A10: p 001-1414, para 6

699.1 Any other mechanism will require them to draw from their meagre resources to finance their claims. This certification application is only made possible by the considerable litigation funding which has been made available. Without it, the individual claims will likely not be pursued.

699.2 The proposed litigation aggregates the claims of over 140,000 class members. On the unlikely chance that some class members could afford lawyers, legal expenses will likely exceed their claims. Moreover, the costs of pursuing litigation could disincentivise those persons with smaller claims from doing so.

699.3 By contrast, Anglo is a highly resourced and dogged litigant. It has spared no expense in opposing the certification application and launching misconceived interlocutory applications. Litigating against Anglo on anything other than an aggregated basis will be costly.

699.4 The proposed class action gives the class members a fighting chance and encourages access to court, which is patently in the interests of justice. A class action would minimise the costs of legal representation, and ensure justice for the class members.

700 Numerosity and complexity: The putative class in this case is extremely large and their individual claims are not economically viable. A class action is the only means of providing them access to justice.

700.1 It would be impossible to bring all of the over 140,000 potential class members before court in a single hearing. Nor is it in the interests of justice for them to approach the court individually.

700.2 The factual and legal issues involved in this matter are complicated and will likely require expert evidence. A class action is the only sensible way to receive common evidence and decide common issues once and for all.

700.3 This point is illustrated inadvertently by Anglo's focus on the triability question. Anglo produced reams of evidence in an attempt to show that there is no cause of action against it. That evidence (and more) would have to be repeated in numerous individualised trials, which only suits Anglo by making litigation against it prohibitively expensive. It does not serve access to justice for the Applicants nor judicial economy.

701 Traditional litigation options are unsuitable: Traditional litigation methods are unsuitable and do not present the advantages of class action. The conventional methods require preliminary gathering of evidence and that each claim be pleaded.

701.1 That would include the names, personal details of every claimant, particular medical history, the extent of their damages, and the particularity required in Uniform Rule 18. This volume of evidence would have to be gathered in advance, whether a thousand litigants claim in one action or in individual actions.

701.2 To illustrate this, the Applicants' attorneys, Mbuyisa Moleele, represent a further 1058 individuals in addition to the thirteen class representatives.[876] It took the firm five weeks to take instructions from these individuals,[877]

[876] FA p 001-131 para 295

[877] FA p001-138 para 310.1

who form a fraction of the potential class. Ms Mbuyisa says that even under normal circumstances, signing up the whole class would be resource-intensive, lengthy, and costly. She is correct. The practicalities of pleading these facts would only increase the cost.

701.3 By contrast, in a class action, this information need not be gathered and pleaded in advance. It can be pleaded generically, or on behalf of a few claimants only. If the class succeeds on the common issues, the detailed individual information will be provided in the future, to the extent necessary. If it fails on the common issues, the work of gathering that mass of personal information never has to be done.

702 Judicial Economy: Any other alternative would entail numerous identical claims against Anglo in South African Courts.

702.1 The cause of action would be pleaded identically, and Anglo's defences would be identical, its evidence would be the same, and its legal arguments would be the same. The only distinguishing features would relate to the individualised issues such as damages (which the class members propose to determine in the opt-in stage).

702.2 Re-litigating the same questions over and over again in individual lawsuits would be a waste of judicial resources and pose the risk of inconsistent findings.

703 No alternative litigation methods: Anglo has not suggested any alternative, likely because there is none. The most commonly suggested alternative is a test case.

But even this is notional possibility is unworkable. The outcome of a test case only binds the parties to it. Anglo has not indicated any intention to be bound by the outcome in subsequent cases. The Applicants' attorneys contemplated test cases and found them expensive. The reasoning, set out in paragraph 317.2 of the founding affidavit is unassailable. In explaining the years of work that have gone into this matter, Ms Mbuyisa says:

> *"…So in 2007, we had to contemplate a litigation process that would have involved running individual 'test cases' and then obtaining instructions from tens of thousands of individual clients to pursue follow-on cases if the 'test cases' were successful. To run litigation of the complexity and scale of the present matter on this basis would have been extremely costly and too risky financially."*[878]

704 Information asymmetry: The class action enables people with limited access to information to obtain the necessary redress.

705 The interests of justice require that the women and children of Kabwe be allowed to proceed by class action. It is their only hope. If the facility of a class action is denied to them, most of them will not be able to sue at all. They will be denied their right to proceed by class action in s 38(c) of the Constitution. They will be denied their right of access to court in s 34 of the Constitution. They will be denied any remedy.

706 The Applicants' complaint is that Anglo's conduct resulted in environmental harm which caused them damages. International authorities have shown that such claims are best resolved on a class-wide basis, because (i) the environmental pollution is typically located to a particular source, and (ii) the harm is suffered

---

[878] FA p 001-142 -143 para 317.2.

by a large number of people.[879] If the cause of action had arisen in South Africa, there would be no question that it should proceed by way of class action, arguably without the need for certification.[880]

707 Failure to certify would be the death knell of the entire suit, in a procedural decision that is independent of the merits of the underlying claims. More so when regard is had to the only other option — Zambia.

C. WHY A SOUTH AFRICAN CLASS ACTION IS APPROPRIATE

708 Anglo insists that the Applicants should seek relief in Zambia. Anglo does not deny this Court's jurisdiction. It contends that a class action in a South African court is inappropriate simply because the Zambian High Court has jurisdiction. But this fails to engage with the interests of justice in the context of the present case.

709 The Zambian origin of the cause of action does not change the appropriateness of a class action in South Africa. On the contrary, it confirms that certification of the class action in South Africa is not only appropriate but mandatory because such certification is clearly in the interests of justice. This is so because there is

---

[879] In *CRC Trust* (n 23) at para 21, the SCA made the following comment about the utility of class actions: "...*Class actions are a particularly appropriate way in which to vindicate some types of Constitutional rights, but they are equally useful in the context of mass personal injury cases or consumer litigation...*" The learned authors Du Plessis et al discuss the scope for class actions in environmental claims in their work "Class Action Litigation in South Africa," pp52-54

[880] In *Mukaddam* (n 23) at para 40 the Constitutional Court stated that there is no need for certification in (i) cases against the State enforcing rights entrenched in the Bill of Rights, and (ii) claims enforcing Constitutional Rights in the wider public interest. At paragraph 42, the Court left left open the question whether certification is necessary for class actions brought to enforce a Constitutional Right against private actors pursuant to section 38 of the Constitution.

no prospect that the members of the class will be able to access justice if they have to litigate their claims in Zambia.

710 There are insuperable systemic barriers preventing access to justice in Zambia on a class-wide basis. Mwenye SC lists these in his expert opinion.

710.1 Class members would lack access to legal representation. The majority of lawyers practice from Lusaka and other main cities. There are few lawyers in Kabwe.[881] Other than private lawyers, organisations such as the National Legal Clinic for Women, Legal Resources Foundation, and the Legal Aid Board do not litigate cases involving tortious claims for large numbers of claimants.[882] Even if they did, they simply lack the capacity (in the sense of number of lawyers) to conduct litigation of such a magnitude.[883]

710.2 Assuming the class members could find legal representation with the requisite capacity to pursue a claim of this magnitude, the costs of legal representation are prohibitive. Zambian law proscribes contingency fee arrangements.[884] Clients must personally pay expert witnesses, including medical experts,[885] upfront because Zambian law does not allow legal practitioners to incur those expenses on their behalf.[886]

---

[881] Mwenye SC 2020 p 001-1714 para 6.43(b).

[882] Id p 001-1715-1716 para 6.45-6.48.

[883] Id p 001-1716 para 6.49.

[884] Id p 001-1717 para 6.50.

[885] Id p 001-1714 para 6.42.

[886] Id p 001-1720 para 6.61-6.62.

710.3 Zambia only expressly permits an opt-in mechanism. The opt-out mechanism is not available in Zambia, except for instances concerning deceased estates, trust property, or the construction of statutes.[887] An opt-in mechanism would eviscerate the class making it under-inclusive.

711 The barriers to substantial justice for group actions in Zambia featured prominently in *Vedanta*,[888] when the UK Supreme Court considered whether to exercise jurisdiction over Zambian claims against an English parent company. Despite Zambia being the convenient forum,[889] the UK Supreme Court held that the English Courts could exercise jurisdiction because substantial justice could not be achieved in Zambian legal system. The Court held:

> *"89. In the present case the judge described this as an "access to justice" issue. By this he meant that the real risk (in his view a probability) that substantial justice would be unavailable in Zambia had nothing to do with any lack of independence or competence in its judiciary or any lack of a fair civil procedure suitable for handling large group claims. Rather, it derived essentially from two factors: first, the practicable impossibility of funding such group claims where the claimants were all in extreme poverty; and secondly, the absence within Zambia of sufficiently substantial and suitably experienced legal teams to enable litigation of this size and complexity to be prosecuted effectively, in particular against a defendant (KCM) with a track record which suggested that it would prove an obdurate opponent. The judge acknowledged that in the large amount of evidence and lengthy argument presented on this issue there was material going both ways, giving rise to factual issues some of which he had to resolve, but others of which he could not resolve without a full trial. Nonetheless he concluded not merely that there was a real risk but a probability that the claimants would not obtain access to justice so that, in his view, and notwithstanding the need for caution and cogent evidence, this reason for preferring the English to the Zambian jurisdiction was established by a substantial margin beyond the real risk which the law requires. There is no satisfactory substitute for a full reading of the judge's careful analysis of this issue, to which he gave his full and detailed attention notwithstanding the fact that he had already*

---

[887] Id p 001-1713, para 6.41.

[888] *Vedanta* (n 412).

[889] Id at para 85

> *concluded, without regard to the access to justice issue, that he should refuse the defendants' applications upon the basis that England was the proper place for the trial of the case. I will confine myself to a bare summary of his reasoning, sufficient to make sense of the analysis which follows.*
>
> *90. The judge found that the claimants were at the poorer end of the poverty scale in one of the poorest countries of the world, that they had no sufficient resources of their own (even as a large group) with which to fund the litigation themselves, that they would not obtain legal aid for this claim and nor could it be funded by a Conditional Fee Agreement ("CFA") because CFAs are unlawful in Zambia."*[890]

712 Anglo's legal experts did not refute these barriers to accessing substantial justice in Zambia.[891] Professor Ndulo limited his opinion to issues concerning choice of law and the merits, making no comment on accessibility.[892] Gibson QC, who argued *Vedanta,*[893] addresses it only in the context of the parent company's duty of care.

713 There is an additional barrier of access to Anglo, which is engaging in jurisdictional gamesmanship. Anglo is domiciled in this Court's jurisdiction. Absent Anglo's submitting to jurisdiction, the Zambian High Court cannot exercise jurisdiction over it. Anglo has not even indicated a willingness or commitment to submit to the Zambian High Court's jurisdiction. By objecting to the South African Court's jurisdiction, it can avoid effective class-wide justice in South Africa. By not submitting to the Zambian High Court's jurisdiction, Anglo could avoid justice in Zambia.

---

[890] Id at paras 89-90.

[891] This was pointed out in the replying affidavit at p 001-7760 para 490.

[892] Ndulo p 001-3900 to 001-3907.

[893] Gibson p 001-3944, paras 15-16.

714 So, Anglo says that the interests of justice favour this Court refusing certification, thus forcing the Applicants to chase Anglo to Zambia (i) where systemic barriers effectively prevent access to justice for class members, and (ii) with no guarantee that Anglo will submit to that court's jurisdiction. In effect, Anglo is invoking the interests of justice in an attempt to deny the class members any prospect of access to justice. That ought to be the end of the "South Africa" or "Zambia" debate, but we nevertheless address the seven further reasons invoked by Anglo in its attempt to ensure that class members are deprived altogether of access to justice in their attempt to vindicate claims against Anglo. [894]

715 First, Anglo says "…*the case has almost nothing to do with South Africa,*"[895] except that it is domiciled here.[896] This complaint is wholly unfounded. This Court has jurisdiction over Anglo by virtue of its domicile. Each individual member of the class has the right to sue Anglo in this Court and this Court would be obliged to exercise jurisdiction over his or her claim. If individual members of the class can sue individually in this Court, it has to be in the interests of justice for them to do so collectively in a class action when the evidence is clear that absence a South African class action, they will not have any access to justice.

716 Then, rather astonishingly, Anglo contends that South African courts should not use scarce judicial resources to resolve a Zambian dispute. Entertaining a class action, says Anglo, would limit the right of access to Court "*…enjoyed by South*

---

[894] AA p 001-3030 para 948.

[895] AA p 001-3028.

[896] AA p001-2038 para 947.

Africans and those connected with South African disputes," with the result that South Africans would wait longer for their disputes to be heard.

716.1 The notion that South African courts are reserved for South Africans is xenophobic and unfounded. South African courts exist to resolve disputes within their jurisdiction, regardless of the parties' nationality. Anglo's domicile establishes the jurisdiction of this Court over the proposed class action.

716.2 Anglo's concern about the Court's workload disregards the judicial economy achieved by certifying a class action. Anglo does not engage with the Applicant's evidence that the class will not be able to access justice in Zambia. So it must be assumed to postulate either of the untenable propositions that —

716.2.1 numerous individualised actions would be less cumbersome than a single class action; or

716.2.2 a complete denial of access to justice would be a more desirable outcome than allocating judicial resources of this Court to the present class action designed to obtain relief from a defendant domiciled within the jurisdiction of this Court.

716.3 In any event, it is clear that the Court's overburdened roll is no reason to refuse certification and does not bear on the interests of justice. The SCA stated this emphatically in *Standard Bank*,[897] holding that:

---

[897] *Standard Bank of SA Limited and Others v Thobejane and Others; Standard Bank of South Africa Limited v Gqirana and Another* 2021 (6) SA 403 (SCA).

> *"[42] The Gauteng Court's finding that a court may refuse to hear matters in order to reduce its workload is also wrong. This issue is a well-trodden trail. Only two cases need to be addressed. In Bester, the Full Court addressed virtually all the concerns ventilated in the Court a quo and reached the opposite conclusion. The judgment contains a traverse of the case law about the debate concerning congestion of the roll by matters that could have been heard by another court. It concluded that it was not open to the High Court to decline to hear any matter over which it had jurisdiction and no abuse could exist on the part of a plaintiff who deemed it more propitious to sue out of the High Court than out of the Magistrates' Court. It also held:*
>
> *'That, however, is not the end of the matter. In the Bank of Lisbon and South Africa judgment Coetzee DJP elaborated on the problem of the congested rolls and what should be understood by the term "access to justice". Without being drawn into a fruitless debate on this topic, I can only state that courts should be extremely wary of closing their doors to any litigant entitled to approach a particular court. The doors of the courts should at all times be open to litigants falling within their jurisdiction. If congested rolls tend to hamper the proper functioning of the courts then a solution should be found elsewhere, but not by refusing to hear a litigant or to entertain proceedings in a matter within the court's jurisdiction and properly before the court.'"*

717 Third, Anglo also invokes the enormity of the undertaking. But class actions are inherently large undertakings. The very idea is that, by aggregating multiple individualised actions into a single action, the overall burden is reduced and access to justice is increased. On Anglo's logic, the interests of justice only favour small class actions.

718 Anglo's fourth argument is that a South African class action will curtail its ability to defend itself, because neither party can subpoena Zambian witnesses and documents located in Zambia.[898] This argument is logically unsound, factually unfounded, and legally unsustainable.

---

[898] AA p 001-3031 para 948.5.

718.1 It is logically unsound because the ability to compel evidence is not a function of a class action mechanism. Anglo disregards the fact that the logistical issues they raise would be magnified and duplicated if required to be litigated thousands of times over in the individual trials that are the only alternative if this class action is not certified. The same issue would arise regardless of how the matter is litigated in South Africa. Given that numerous documents and witnesses are in South Africa, the same challenge would also arise if the matter was litigated in Zambia.

718.2 The argument is factually unfounded because Anglo has not had any difficulty in securing the volumes of documents attached to its answering affidavit.

718.3 A wealth of evidence is in South Africa and within Anglo's control. Anglo does not explain why a Zambian Court would not face the same problems in respect of documents located in South Africa. The Zambian High Court cannot subpoena documents from Anglo as a *peregrinus*.[899] In fact, South African Courts have a crucial power that Zambian Courts do not have, namely the power to subpoena the apparently elusive documents which Anglo has been unable to locate in its own archives and in the private archives that hold records of its directors and senior leadership.[900]

718.4 As for the complaint concerning witnesses, there are several ready answers. First, as with documentary evidence, the same problem would arise if the trial is conducted in Zambia. Second, the Superior Courts Act

---

[899] Mwenye 2020 p 001-1719 paras 6.56-6.57.

[900] RA p 001-7763 para 499.

and the Uniform Rules allow for evidence to be taken by commission *de bene esse*. As Erasmus points out, three options are available where a witness is unwilling to cooperate:

> *"If the evidence of any person is to be taken before a commissioner outside the Republic, the court cannot compel a witness either to appear before the commission or to comply with an order duces tecum. It merely directs that the witness be examined, and leaves it to the court in whose area the witness is to compel his attendance. The following possible courses of action present themselves:*
>
> *(i) In those countries where there is legislation similar or comparable to the Foreign Courts Evidence Act 80 of 1962, the procedure provided for in such legislation may be adopted.*
>
> *(ii) Where there is no such legislation, the procedure laid down in the Hague Convention on the Taking of Evidence Abroad in Civil or Commercial Matters, may be followed, but only in respect of those countries which have acceded to the Convention. The Republic has acceded to the Convention under certain reservations.*
>
> *(iii) Where there is no such legislation, as aforesaid, and the Convention cannot be applied, the only alternative will be to apply to the court before which the action is pending for the issue of a letter of request to the government of the country where the witness is and the commission is to sit. In such a letter of request the government concerned is requested to take steps to obtain the evidence of the witness. If the court grants the application, the request is forwarded to a proper authority in the foreign country through the Department of International Relations and Cooperation (formerly the Department of Foreign Affairs). Whether or not effect is given to the letter of request depends entirely upon the foreign country concerned."*[901]

719 Fifth, Anglo cynically accuses the Applicants of depriving Zambian Courts of the opportunity to develop opt-out class actions.[902] In other words, the women and children of Kabwe must (i) forego an established and permissible process in South Africa, and (ii) instead venture to develop Zambian procedural law. But

---

[901] Erasmus: Superior Courts Practice at B1-286 cited with approval in *Randgold & Exploration Co Ltd and Another v Gold Fields Operations Ltd and Others* 2020 (3) SA 251 (GJ) at para 109.

[902] AA p 001-3138 para 1329.

how are the Applicants to do so, without access to legal funding (because of the provisions prohibiting contingency fee arrangements)? This question appears to have evaded Mr Schottler. Quite apart from this, the notion that South African courts are duty-bound to push litigants away to pressure courts in other countries to "*develop home-grown class action procedures*,"[903] simply lacks merit.

720 Sixth, Anglo accuses the Applicants of attempting to "*evade the (entirely justifiable) Zambian prohibition on contingency-fee arrangements,*" and encourages this Court to "*respect Zambian policy choices and decline the invitation.*"[904] It is not clear how this trope affects the interests of justice analysis. Anglo correctly points out that the South African policy until recently also prohibited contingency fee arrangements and champerty. The very reason why this changed was to permit greater access to justice for impecunious litigants,[905] with guardrails being put into place to protect against abuses. It can hardly be argued that this Court should not certify a class action as a genuflection to Zambian policy which is not the law in South Africa. Anglo's assertion also fails for another reason, namely: that a plaintiff is entitled to select a jurisdiction that favours them and doing so is not an abuse of process.[906]

---

[903] AA p 001-3137 para 1329.3.

[904] AA p 001-3138 para 1329.6.

[905] *PWC* (n 734) at para 50; *Gold Fields Limited and Others v Motley Rice LLC, in re: Nkala v Harmony Gold Mining Company Limited and Others* 2015(4) SA 299 (GJ) at paras 59-61; *EP Property Projects (Pty) Ltd v Registrar of Deeds, Cape Town and Another and Four Related Applications* 2014 (1) SA 141 (WCC).

[906] *Gqirana* (n 897) at paras 48-51.

721 Finally, Anglo says that this matter will involve the development of Zambian law by a South African court. It does not involve development of Zambian law, but its application. Our Courts are capable of performing this exercise.

722 Without this class action, there is no real dispute that the class members will have no access to justice. None of the Anglo arguments detract from this reality. Indeed, several of them tacitly presuppose it. The interests of justice can never mandate an outcome that will deny access to justice. So Anglo's attempts to resist certification on these grounds must be rejected.

D. THE OPT-OUT MECHANISM AND JURISDICTION

723 The Applicants propose a bifurcated mechanism. In stage one, in which the common issues of liability will be determined, will be conducted on an opt-out basis. That is, the proceedings in stage one will bind the class members unless they opt-out. Stage two, dealing with individualised matters and damages will be conducted on an opt-in basis.

724 We now turn to deal with Anglo's contentions about the appropriateness of the opt-out mechanism. Anglo says that the opt-out mechanism is inappropriate for class actions in which the class plaintiffs are foreign *peregrini* because this Court lacks jurisdiction over foreign *peregrini*.[907] It contends that their status gives rise to the following consequences: -

[907] AA p 001-2959 paras 798-807.

724.1 First, that the certification and court rulings at stage one would not bind class members in Zambia other than the class representatives, and that this could result in class members filing further South African proceedings against Anglo if the present class action was unsuccessful at stage one. This would be contrary to the interests of justice which requires the orderly and final determination of the claims.

724.2 Second, that certification would entail the court exercising jurisdiction over foreign class members over whom it has no jurisdiction.

724.3 Third, that an adverse costs order against the class members at the end of stage one could be unenforceable on the grounds that the Court had no jurisdiction over the class member.

725 Anglo's third objection is moot in view of the indemnity policy taken out by the funder. In any event, there is little realistic prospect of Anglo ever seeking to pursue indigent Kabwe residents to recover costs in this matter.

726 Anglo's first two grounds of complaint assume that South African Courts do not have jurisdiction over absent foreign plaintiffs in an opt-out class action because there is no consent to jurisdiction from that absent foreign plaintiff. That assumption is incorrect.

726.1 South African Courts determine the circumstances in which they exercise jurisdiction over absent foreign plaintiffs. There is no requirement of consent for a South African Court to exercise jurisdiction over absent foreign litigants.

726.2 By way of example, a South African Court will exercise jurisdiction over a foreign defendant on the basis of even a nominal attachment of assets to found jurisdiction. If that foreign defendant then elects not to consent to the South African Court's jurisdiction and not to participate in the South African proceedings, that will not deprive the South African Court of its jurisdiction over the matter and the defendant will not be able to resist a plea of *res judicata* if it attempts at a later stage to relitigate in South Africa the issues determined by the hearing that took place without its consent.

726.3 Just as our law developed the common law rules of attachments to found and attach jurisdiction to deal with jurisdiction over foreign defendants, it can develop rules of jurisdiction to deal with class action jurisdiction over foreign absent plaintiffs.

726.4 So if (as we submit has already happened) South African Courts develop rules of jurisdiction to exercise jurisdiction over foreign absent plaintiffs on the basis of an opt-out class action, any judgment in the class action will be binding in South Africa on those absent plaintiffs unless they opt-out and they cannot claim a right to relitigate issues determined in their absence in the class action because they did not want to be bound by the class action determination but failed to communicate this intention by opting out.

The opt-out mechanism in relation to peregrini is appropriate and consistent with South African law

727 In *Ngxuza,*[908] the SCA dealt with a class action involving local *peregrini*. It SCA held that a proper opt-out class action procedure would be sufficient to found jurisdiction over local *peregrini* on the conventional jurisdictional principles. It also reached the same conclusion on a simple adaptation of the ordinary rules of jurisdiction to cater for class actions, by emphasizing the need to tailor new jurisdictional rules that gave effect to the fundamental right of access to court in the context of class actions:

> *"[22] ...First, this is no ordinary litigation. It is a class action. It is an innovation expressly mandated by the Constitution. We are enjoined by the Constitution to interpret the Bill of Rights, including its standing provisions, so as to 'promote the values that underlie an open and democratic society based on human dignity, equality and freedom'. As pointed out earlier we are also enjoined to develop the common law which includes the common law of jurisdiction so as to 'promote the spirit, purport and objects of the Bill of Rights'. This Court has in the past not been averse to developing the doctrines and principles of jurisdiction so as to ensure rational and equitable rules. In Roberts Construction Co Ltd v Willcox Bros (Pty) Ltd this Court held, applying the common law doctrine of cohesion of a cause of action (continentia causae), that where one court has jurisdiction over a part of a cause, considerations of convenience, justice and good sense justify its exercising jurisdiction over the whole cause. The partial location of the object of a contractual performance (a bridge between two provinces) within the jurisdiction of one court therefore gave that court jurisdiction over the whole cause of action. The Court expressly left open the further development and application of the doctrine of cohesion of causes. The present seems to me a matter amply justifying its further evolution. The Eastern Cape Division has jurisdiction over the original applicants and over members of the class entitled to payment of their pensions within its domain. <u>That, in my view, is sufficient to give it jurisdiction over the whole class, who, subject to satisfactory 'opt out' procedures, will accordingly be bound by its judgment.</u>*

---

[908] *Permanent Secretary, Department Of Welfare, Eastern Cape, And Another v Ngxuza And Others* 2001 (4) SA 1184 (SCA) pars 22 – 24.

> *[23] In any event, even if a strict approach would weigh against permitting inclusion of extra-jurisdictional applicants in a plaintiff class, it is plain that the Constitution requires adjustment of the relevant rules, along sensible and practical lines, to ensure the efficacy of the class action mechanism. As O'Regan J pointed out in Ferreira v Levin NO, the constitutional provisions on standing are a recognition of the particular responsibility the courts carry in a constitutional democracy to ensure that constitutional rights are honoured:*
>
> *'This role requires that access to the courts in constitutional matters should not be precluded by rules of standing developed in a different constitutional environment in which a different model of adjudication predominated. In particular, it is important that it is not only those with vested interests who should be afforded standing in constitutional challenges, where remedies may have a wide impact.'*
>
> *[24] There can in my view be no doubt that the Constitution requires that, once an applicant has established a jurisdictional basis for his or her own suit, the fact that extra jurisdictional applicants are sought to be included in the class cannot impede the progress of the action."*

728 In *Nkala*, this Court certified an opt-out class action that included tens of thousands of foreign plaintiffs, who were migrant mineworkers.[909] The court nonetheless assumed jurisdiction over the foreign putative plaintiffs and (with obvious relevance to the present case) certified the opt-out class action *inter alia* because those foreign plaintiffs would have no access to justice absent certification of the class action.[910]

> *"It is not disputed that the majority of the class members are impoverished rural people, many of whom are in poor health, who are spread across the subcontinent and who have very limited access to the civil justice system. The very large proportion of class members who were migrant workers from Mozambique, Malawi, Lesotho and Swaziland, probably have no access to the South African justice system at all. […] It was not disputed that the majority of mineworkers have little to no access to the South African justice system, as they are all impoverished or indigent and are living in the rural areas of South*

---

[909] *Nkala* (n 22) at par 7.

[910] Id at paras 100 to 103.

> *Africa, Mozambique, Malawi, Lesotho and Swaziland, and are in poor health".*[911] *(Emphases added)*

729 *De Bruyn* is not authority for the proposition that opt-in mechanism is preferable. There, Ms De Bruyn sought to certify a class action on behalf of four classes who had suffered damages from misrepresentations made by Steinhoff, its directors, and its auditors. Since Steinhoff shares were traded on the Frankfurt bourse, one of the classes comprised persons who purchased Steinhoff shares on the Frankfurt Stock exchange. This class potentially included *foreign peregrini.* The respondents argued (as Anglo does here) that the court lacked jurisdiction over *foreign peregrini,* absent submission to jurisdiction, which could only be achieved through the opt-in mechanism. The class definition was ultimately revised, as pointed out in the Judgement:

> *[34] Although these matters were much debated before me, the issue has been simplified. Ms De Bruyn's counsel have proposed revised class definitions. Membership of JSE 1 Class, JSE 2 Class and the FSE Class requires that persons are ordinarily resident or domiciled in South Africa. The Foreign Shareholders' Class requires persons who are not domiciled or ordinarily domiciled in South Africa to opt in to be counted as members of this class. These revised definitions are intended to cure the jurisdictional difficulties raised by the respondents.*
>
> *[35] The principle of our law is that a plaintiff always submits to the jurisdiction in which she brings her action. It follows that if peregrini opt in to the Foreign Shareholders' Class, they intend to bring the class action, submit to the jurisdiction of this court and will be bound by the outcome before this court. This cures the jurisdictional complaint in respect of the Foreign Shareholders' class.*
>
> *[36] Plainly, the same result was intended by the modifications of the other three classes. The intention is to ensure that the members of these classes are incolae of the court and bound by the outcome of the litigation before this court. In an action sounding in money, a court has jurisdiction over a defendant who is domiciled or resident in the area over which the court exercises jurisdiction. This gives expression*

---

[911] Id at paras 100; 103.

to the principle of effectiveness that lies at the foundation of the law of jurisdiction."[912]

730 *De Bruyn* is not authority for the proposition that our law requires submission to jurisdiction by opting in. Nor is it authority for the proposition that an opt-out mechanism with proper notice is insufficient to establish jurisdiction. Although these issues were debated in *De Bruyn*, the views above are plainly *obiter* because the class definitions were revised. Moreover, De Bruyn is distinguishable from the present case.

730.1 There the court was concerned with wealthy *peregrini* from multiple jurisdictions with no risk of a denial of access to justice if the class was not certified.

730.2 The plaintiffs were investors who had the means to look after their commercial interests individually.

730.3 Some of those investors had already instituted litigation in other jurisdictions.[913]

730.4 Moreover an FSE class member in Liechtenstein or Barbados could notionally have been bound by the outcome of litigation in South Africa without knowing.

731 In the present case,

---

[912] *De Bruyn* (n 397) at paras 34-36

[913] Id para 3, para 31.

731.1 the class members face an absolute denial of access to justice if the class is not certified.

731.2 There is no danger of parallel litigation in South Africa and Zambia, given the access to justice constraints addressed above.

731.3 Moreover, the locality of the class members is limited, which ensures that they can receive proper notice of the proceedings, and there is no realistic prospect of any innocent plaintiffs being deprived of claims that they would have sought to bring individually, still less of any repeat litigation being brought by absent foreign plaintiffs, either in South Africa or anywhere else.

732 The approach in *Ngxuza* and *Nkala* is binding and should be adopted in this case. Quite apart from authority, the endorsed opt-out approach is to be preferred in the present case for the reasons set out below.

733 It promotes the underlying purpose of a class action. There are sound policy reasons why an opt-out procedure is the preferable mechanism for class action plaintiffs in general and for foreign plaintiffs specifically.

733.1 To require every peregrine plaintiff to expressly opt in, would defeat the utility of a class action. Empirical studies show that participation rates are invariably higher in opt-out class actions.[914] Higher participation rates meet the purpose of class actions of judicial economy and deciding once

[914] Willging, Hooper and Niemic "Empirical Study of Class Actions in Four Federal District Courts: Final Report to the Advisory Committee on Civil Rules" *Federal Judicial Center*, 1996. (Finding that less than 1.2% of class members in the US cases under survey opted out.)

and for all on the issues. This is of course inconvenient to a recalcitrant defendant seeking to limit its liability.

733.2 Opt-in class actions tend to be under-inclusive. This negates meaningful class action relief,[915] and leads to an under-inclusive class. These factors were the very basis for the approach in *Airia Brands v Air Canada*:[916]

> *"First, to the extent that class actions are intended to have a regulatory affect by requiring market actors to internalize the costs of wrongful conduct, under-inclusive plaintiff classes mean that the costs internalized are less than the costs generated by the wrongful conduct … Second, to the extent that class actions are intended to facilitate compensation for wrongs suffered, under-inclusive plaintiff classes result in the failure of members of the plaintiff class to receive compensation … Finally, to the extent the class actions are intended to also bring closure to matters for defendants, the under-inclusiveness of plaintiff classes means that defendants will be left with unresolved claims that might be brought in other actions or in other fora."*

733.3 An opt-out procedure best gives effect to the purpose of a class action: to resolve several disputes on a once-off basis with judicial economy and efficiency. Canada, the USA and Australia have all recognised this by legislating that class actions must be conducted on an opt-out basis.[917]

---

[915] *Currie v. McDonald's Restaurants of Canada Ltd. et al*. 74 O.R. (3d) 321 [2005] O.J. No. 506 par 29.

[916] Airia Brands Inc. v Air Canada 2017 ONCA 792 at par 85. See also Walker, in "Cross Border Class Actions: A View from Across the Border" (2004) 3 *Mich. St. L. Rev*. 755.

[917] See e.g. Federal Rules of Civil Procedure, Rule 23(c)(2)(A) (USA); Class Proceedings Act, 1992, S.O. 1992, c. 6, s 9 (Ontario, Canada); Part IVA of the Federal Court of Australia Act 1976 (Cth), s 33J. A minority of provinces in Canada has statutory opt-in mechanisms.

See also Mulheron's criticism of England's limited opt-in system as being 'wholly inadequate' and that the 'continuing gap in English civil procedure' is 'the generic opt-out class action'. Mulheron "Justice Enhanced: Framing an Opt-out Class Action for England" *The Modern Law Review* Vol. 70, No. 4 (Jul. 2007), pp. 550 – 580 at p552.

734 In the South African context, this opt-out procedure best gives effect to the constitutional right of access to courts[918] and the constitutional class action standing provisions[919] and have been adopted on this basis in *Nkala*, and *Ngxuza*. The SCA in *Children's Resource* referred to the opt-out regime as the *"conventional situation"*.[920]

735 Opt-out regimes include the vulnerable and the individuals with small claims by default. It more effectively ensures that defendants are assessed for the full extent of loss and damage that they have caused.[921] Unwilling litigants have the opportunity to distance themselves by opting out.

The position in foreign jurisdictions

736 The submissions above, are consistent with the law in the United States and Canada, where courts have consistently certified opt-out class actions in which some or even a majority of class members are foreign *peregrini*. In this regard, it is significant that in jurisdictions where class actions are more established, has been general endorsement of an approach favouring certification of an opt-out class action comprising *foreign peregrini*.

---

[918] S 34 provides that *"Everyone has the right to have any dispute that can be resolved by the application of law decided in a fair public hearing before a court or, where appropriate, another independent and impartial tribunal of forum."*

[919] S 38(c).

[920] Nkala (n 22) at para 29.

[921] Mulheron *supra* at p 556.

The position in Canada

737 In *Silver v Imax*, [922] the Ontario Superior Court certified a global securities class action in respect of common law and statutory misrepresentation claims. The misrepresentations related to Imax's alleged non-compliance with accounting standards and publication of inflated revenues which, in turn, inflated the trading price of its shares. Imax is dual listed: on the Toronto Stock Exchange and on the NASDAQ. The vast majority of the class members (85% – 90%) were *peregrini*.[923] Despite this, the court certified an opt-out class, comprising: *"all persons, other than Excluded Persons, who acquired securities of Imax during the Class Period on the TSX and on NASDAQ and held some or all of those securities at the close of trading on August 9, 2006"*.[924]

738 In *Ramdath,*[925] the Ontario Superior Court certified an opt-out class action against a Canadian university, to include 119 students, 65% of whom were foreign *peregrini*. The court rejected the 'second bite' arguments and expert legal evidence that the Ontario Court's judgment would not be recognised in India and China, where many *peregrini* were resident. It held:

> *"Nor do I accept the proposition that the court should not exercise jurisdiction over non-resident class members where there is evidence that a particular foreign jurisdiction might not recognize a class action judgment either altogether (as is said to be the case in China) or in the absence of actual notice (as is said to be the case in India). The hypothetical failure of another state to observe the generally accepted principles of private international law in connection with the assumption*

---

[922] *Silver v Imax Corp* (2009) 86 C.P.C. 6th 273 (Can. Ont. Sup. Ct. J.) (Certification Decision). See also the general discussion of *Imax* in Monestier "*Is Canada the New Shangri-La of Global Securities Class Actions?*" 32 *Nw. J. Int'l L. & Bus*. 305 (2012).

[923] *Silver* id at para 110.

[924] Id at paras 98 and 232.

[925] *Ramdath v George Brown College* 2010 ONSC 2019

> *of jurisdiction and the recognition of foreign judgments should not preclude an Ontario court from taking jurisdiction in a class action involving its residents, provided the conditions set out in Currie are met…" [double dipping – ought not to be a condition to be a class but rather to claim an amount during the opt-in liability stage – that way won't be out of pocket twice and deals with its concerns about finality.]"*[926]

739 In *Airia Brands*,[927] the Ontario Court of Appeal considered jurisdiction over absent foreign claimants in an opt-out class action involving a claim for conspiracy to fix prices for air freight shipping services. The class included many foreign plaintiffs who were known and unknown. The respondent resisted the certification of a class comprising absent foreign plaintiffs, on the grounds that the court would lack jurisdiction absent their express consent. The Court below upheld that motion. In reversing the decision, the Ontario Court of appeal rejected the notion that jurisdiction over absent foreign plaintiffs could only be established by their presence or consent to that court's jurisdiction.[928]

740 An important difference between South Africa and Canada is that the latter recognises *forum non conveniens*. So, even if the traditional grounds for jurisdiction are established, a Canadian Court can decline to exercise jurisdiction on that ground.[929] That, as we have pointed out above, is not our law. Nevertheless, the point remains that the Canadian Courts sees nothing untoward about using opt-out mechanism to exercise class action jurisdiction over foreign absent plaintiffs who have not expressly consented to its jurisdiction. And under South African law, any concerns about the inappropriate certification of opt-out

---

[926] Id at para 72.

[927] *Airia Brands Inc. v Air Canada* 2017 ONCA 792.

[928] Id at para 8

[929] *Purolator Canada Inc. v Canada Council of Teamsters et al* 2022 ONSC 5009 (Canlii) at paras 41-53 summarises the position.

class actions of foreign plaintiffs who can and ought rather to sue elsewhere can always be addressed under the interests of justice inquiry.

The United States: Phillips v Shutts

741 In *Phillips Petroleum Company v Shutts*,[930] the US Supreme Court rejected the argument that an opt-in mechanism was required to establish jurisdiction over foreign absent plaintiffs. The Court held that adequate notice and failure to opt-out is sufficient to found jurisdiction over absent *peregrini*. Importantly, it disapproved of the opt-in procedure as a viable alternative. The Court held that the key jurisdictional question is a due process issue sufficiently addressed by proper notice and the opportunity to opt-out. Justice Rehnquist, for the majority, wrote:[931]

> *"In this case we hold that a forum State may exercise jurisdiction over the claim of an absent class-action plaintiff, even though that plaintiff may not possess the minimum contacts with the forum which would support personal jurisdiction over a defendant. If the forum State wishes to bind an absent plaintiff concerning a claim for money damages or similar relief at law, it must provide minimal procedural due process protection. The plaintiff must receive notice plus an opportunity to be heard and participate in the litigation, whether in person or through counsel. The notice must be the best practicable, "reasonably calculated, under all the circumstances, to apprise interested parties of the pendency of the action and afford them an opportunity to present their objections. […]*
>
> *We reject petitioner's contention that the Due Process Clause of the Fourteenth Amendment requires that absent plaintiffs affirmatively "opt in" to the class, rather than be deemed members of the class if they do not "opt out." We think that such a contention is supported by little, if any precedent, and that it ignores the differences between class-action plaintiffs, on the one hand, and defendants in non-class civil suits on the other. Any plaintiff may consent to jurisdiction. Keeton v. Hustler Magazine, Inc., 465 U. S. 770 (1984). The essential*

[930] *Phillips Petroleum Company v Shutts* 472 U.SA 797 (1985)

[931] Id at 808 – 810.

> *question, then, is how stringent the requirement for a showing of consent will be. […] We conclude that the Kansas court properly asserted personal jurisdiction over the absent plaintiffs and their claims against petitioner" (Emphasis added.)*

742 The Court also described what it thought appropriate notice would be on the facts of that case. It held that the opt-in approach undermines the purpose of a class action:

> *"Requiring a plaintiff to affirmatively request inclusion would probably impede the prosecution of those class actions involving an aggregation of small individual claims, where a large number of claims are required to make it economical to bring suit. The plaintiff's claim may be so small, or the plaintiff so unfamiliar with the law, that he would not file suit individually, nor would he affirmatively request inclusion in the class if such a request were required by the Constitution." (Emphasis added.)*

743 The Court reasoned that foreign plaintiffs wishing to litigate on their own, would likely have the resources and information required fully to appreciate their rights and the consequences of opting out.[932] These parties stand in different positions in respect of pending litigation, and their interests are protected by different procedural devices.

744 Class actions confer benefits to absent *peregrine* plaintiffs.[933] The economies of cost favour the *peregrinus,* whose interests are represented by the class representative. In contrast, foreign named defendants are directed to appear in unfamiliar jurisdictions and to incur costs to avoid the risk of default judgments against them. This distinction featured heavily in *Phillips,* as part of the Court's

---

[932] Id. *"If, on the other hand, the plaintiff's claim is sufficiently large or important that he wishes to litigate it on his own, he will likely have retained an attorney or have thought about filing suit and should be fully capable of exercising his right to "opt out." In this case over 3,400 members of the potential class did "opt out," which belies the contention that "opt out" procedures result in guaranteed jurisdiction by inertia."*

[933] See also *Air Canada* par 69.

analysis of the mechanisms for submission to jurisdiction. The Court rejected the notion that the rules to establish jurisdiction over defendants applied equally and unreflexively to peregrine class plaintiffs, because these persons are so differently placed. They are different in that class *peregrini* interests are protected by the class representative and court oversight, whereas the named foreign defendant received no such protection. It is also different in that it provides cost benefits to the *peregrini* but cost liabilities to the defendant.

744.1 At p 808, the Court described the peregrine defendant's position as follows:

> *"The burdens placed by a State upon an absent class-action plaintiff are not of the same order or magnitude as those it places upon an absent defendant. An out-of-state defendant summoned by a plaintiff is faced with the full powers of the forum State to render judgment against it. The defendant must generally hire counsel and travel to the forum to defend itself from the plaintiff's claim, or suffer a default judgment. The defendant may be forced to participate in extended and often costly discovery, and will be forced to respond in damages or to comply with some other form of remedy imposed by the court should it lose the suit. The defendant may also face liability for court costs and attorney's fees. These burdens are substantial, and the minimum contacts requirement of the Due Process Clause prevents the forum State from unfairly imposing them upon the defendant."*

744.2 The Court contrasted this with the position of a peregrine plaintiff, highlighting the many benefits which accrue to a class members:

> *"A class-action plaintiff, however, is in quite a different posture. […] As the Court pointed out in Hansberry, the class action was an invention of equity to enable it to proceed to a decree in suits where the number of those interested in the litigation was too great to permit joinder. The absent parties would be bound by the decree so long as the named parties adequately represented the absent class and the prosecution of the litigation was within the common interest. […]*
>
> *Modern plaintiff class actions follow the same goals, permitting litigation of a suit involving common questions when there are too*

many plaintiffs for proper joinder. Class actions also may permit the plaintiffs to pool claims which would be uneconomical to litigate individually. For example, this lawsuit involves claims averaging about $100 per plaintiff; most of the plaintiffs would have no realistic day in court if a class action were not available.

In sharp contrast to the predicament of a defendant haled into an out-of-state forum, the plaintiffs in this suit were not haled anywhere to defend themselves upon pain of a default judgment. […]

The concern of the typical class-action rules for the absent plaintiffs is manifested in other ways. Most jurisdictions, including Kansas, require that a class action, once certified, may not be dismissed or compromised without the approval of the court. In many jurisdictions such as Kansas the court may amend the pleadings to ensure that all sections of the class are represented adequately. […]

Besides this continuing solicitude for their rights, absent plaintiff class members are not subject to other burdens imposed upon defendants. They need not hire counsel or appear. They are almost never subject to counter claims or cross-claims, or liability for fees or costs. Absent plaintiff class members are not subject to coercive or punitive remedies. Nor will an adverse judgment typically bind an absent plaintiff for any damages, although a valid adverse judgment may extinguish any of the plaintiff's claims which were litigated.

Unlike a defendant in a normal civil suit, an absent class-action plaintiff is not required to do anything. He may sit back and allow the litigation to run its course, content in knowing that there are safeguards provided for his protection."

Conclusion

745 So jurisdiction over foreign plaintiffs in opt-out class action procedures is consistent with

745.1 South African authority,

745.2 The principles of jurisdiction under the Constitution, and

745.3 Practice and authority in common law jurisdictions with lengthier experience in dealing with class actions.

746 Any concerns about the inappropriateness of certifying class actions involving foreign plaintiffs in a particular case can and should be dealt with in South Africa as questions relating to the interests of justice in relation to certification and not as questions of jurisdiction.

747 As has been pointed out above, the interests of justice overwhelmingly favour certification in the present case. For present purposes, we merely point out that the jurisdictional complaints raised by Anglo to an opt-out class action and the related res judicata fears are simply unfounded.

E. CONCLUSION ON APPROPRIATENESS AND THE INTERESTS OF JUSTICE

748 Anglo seeks to make the class action as difficult as possible. Anglo's strategy is to avoid liability altogether by pushing the class members to Zambia, or reduce their liability through an opt-in class action. Anglo has no interest in justice. That is why it vehemently opposes certification instead of making realistic proposals for the effective implementation and conduct of a class action.

749 We submit that the question is not whether complexity can be avoided, but how best to deal with it.[934] The best way to deal with the complexity is for all of the

---

[934] See, *the discussion in Mulheron (2004) at p 258.* See also*:* Antibiotic Antitrust 333 F.Supp. 278 (SD NY 1971), where the New York District Court held at para 8:

"It should be noted at the outset that difficulties in management are of significance only if they make the class action a less 'fair and efficient' method of adjudication than other available techniques. This

common evidence to be led once, and decided once, in a decision that is binding on all class members and all defendants. That is in the interests of justice.

---

perspective is particularly important in the present cases where the defendants, after reciting potential manageability problems, seem to conclude that no remedy is better than an imperfect one. The court would be hesitant to conclude that conspiring defendants may freely engage in predatory price practices to the detriment of millions of individual consumers and then claim the freedom to keep their ill-gotten gains which, once lodged in the corporate coffers, are said to become a 'pot of gold' inaccessible to the mulcted consumers because they are many and their individual claims small."

XII NOTIFICATION PROCEDURES

750 The Applicants seek approval of the amended class notice, reflected as Annexure A to the notice of motion,[935] and the methods of distribution proposed in the founding papers.[936]

751 This notice is for the first stage, opt-out process. Its purpose is to inform the class members of the class action, the procedure, and their rights to opt out. After the conclusion of the first stage, the Applicants will seek further directions from the trial court on the publication of further class notices for the second stage, opt-in procedure.

A. THE CONTENT AND METHOD OF COMMUNICATION

752 The class notice will be published in English, the official language of Zambia, and will also be translated into Bemba and Nyanja, the local languages spoken by the vast majority of residents of the Kabwe District.[937] These notices will be distributed on regular rotation using three mediums:

752.1 Newspapers: The notice will be published once a week for four weeks, in all three languages, in three national newspapers which are available in the Kabwe District;[938]

---

[935] Amended class notice p 002-162.

[936] NoM p 001-3 para 4. FA p 001-144 Section XIV.

[937] FA p 001-144 para 321; Moyo p 001-2313 para 8.

[938] FA p 001-145 para 325. Annexure B p 001-11. Table of coverage ZMX 85 p 001-1373.

752.2 Radio: A radio announcement, reflected as Annexure C to the notice of motion, will be broadcast on nine local and regional radio stations which are available in the Kabwe District. The announcement will be made in all three languages, twice a day, on alternate days, for four weeks.[939]

752.3 Churches: Notices will be placed on church notice boards across Kabwe, as the residents of the Kabwe District are particularly devout and the majority attend Christian churches regularly. As a result, important public announcements are often made through the churches.[940]

753 Ms Lydia Moyo, a Kabwe resident who has been assisting MM and LD with paralegal duties, confirms that these proposed measures would be sufficient to bring the notice to the attention of the Kabwe community.[941]

754 Anglo does not deny the adequacy of the coverage, it does not offer any alternative wording, nor does it suggest alternative methods of communication.[942]

755 Instead, Anglo contends that the notices will not be understood by the residents of Kabwe.[943]

---

[939] FA p 001-145 para 326. List of radio stations, Annexure B p 001-11. Coverage card at ZMX85 001-1372.

[940] FA p 001-146 para 327. List of churches, Annexure D p 001-13.

[941] Moyo p 001-2311 at p 001-2317 para 18.

[942] AA p 001-2960 paras 803 – 807; AA p 001-3138 paras 1330 – 1333.

[943] Id.

756 In *Nkala,*[944] this Court addressed similar complaints by Anglo and other mines, which contended that the opt-out notices would not be understood illiterate and semi-literate mineworkers. This Court dismissed that complaint, noting that the respondents "*do not suggest any alternative wording the for the notices*" and that "*[i]t is really difficult to see how the notices can be simplified. They are brief. They say what needs to be said and no more. They are neutral and objective. They avoid any ambiguity and they will be translated where necessary*".

757 The same can be said for the notice in this class action. It is modelled on notice that was approved in *Nkala*. It also goes further than the *Nkala* notice, by explaining the class action procedure (under the heading "*What is a class action?*")[945] and the nature and effect of the opt-out process (the further headings "*What is Opt-Out?*" and "*What class members need to do*").[946]

758 The notices must also be understood in the Kabwe context. Ms Moyo explains that information primarily travels by word-of-mouth, radio, and through churches. Thus, information on the class action is likely to spread quickly, even to the illiterate and semi-literate. Prospective class members will then be able to consult the written notices for further information.[947]

---

[944] Id para 167.

[945] Amended class notice p 002-164.

[946] Id p 002-165.

[947] Moyo p 001-2316 paras 16 – 17.

759 If class members require more information or have queries, the notice directs them to contact Ms Mbuyisa of MM or the local representative, Mr Patrick Malenga, on his Zambian cellphone number.

760 It is therefore patronising for Anglo to suggest that the prospective class members would be unable to comprehend the class notices. Its failure to offer any alternative means for spreading information and awareness reflects that this concern is not genuine.

761 Anglo also takes issue with the proposed method of communicating opt-outs, as it argues that the options of posting or emailing notices to MM's addresses would be inaccessible to prospective class members.[948] Anglo offers no further substantiation for this contention, nor does it suggest an alternative.

762 In *Nkala*, this court approved of a similar process by which opt-out notices would be communicated, in writing, to the attorneys' postal address, email or fax numbers in South Africa. That case also involved a substantial number of class members outside South Africa's borders. The proposed process in this case is not materially different.

763 In any event, the Applicants would take their direction from the court on alternative means of communicating and receiving opt-out notices and would also be prepared to identify a site in Kabwe where class members may deliver opt-out notices.

---

[948] Id.

764 Finally, Anglo argues that an opt-out procedure is impermissible because it involves making decisions for children who, without the assistant of a parent or guardian are unable to make an informed decision about whether to opt out.[949] Their argument may well be in line with the law in Michigan,[950] but it does not accord with the position in South Africa. It is well established in our law that a guardian represents a child, and our courts have certified class actions involving children.[951] The same concern, on Anglo's version, would also apply to opt-in class actions. Anglo's apparent concern for the children of Kabwe rings hollow.

B. THE COSTS OF THE NOTIFICATION PROCEDURE

765 The Applicants have sought an order that Anglo pay the costs of publishing the notice.[952]

766 Courts in South Africa and abroad have exercised their discretion in favour of requiring the respondents to cover the costs of the notification procedure.[953]

---

[949] AA, p001-2962, para 804

[950] In Re Flint Water Cases No.16-10444 (E.D. Mich. Aug.31, 2021) at pages 58-70

[951] A recent example is the Listeriosis class action, some of the details of which are reported in a skirmish concerning subpoenas in *Deltamune (Pty) Ltd and Others v Tiger Branks Limited and Others* 2022 (3) SA 339 (SCA). The SCA describes the class as follows:

> *"[4] On 3 December 2018 the high court authorised a class action by 18 individuals against Tiger Brands for damages allegedly suffered as a result of the L. mono infection. In its order, the high court certified four classes of plaintiffs. The first class consists of those who contracted listeriosis as a result of eating the contaminated food products. The second class comprises those who contracted listeriosis while in utero, as a result of their mothers eating the contaminated food. The third class comprises the dependents of those who died from contracting listeriosis as a result of eating the contaminated food products. The fourth class is made up of those who maintained other persons who contracted listeriosis, as a result of eating contaminated food products; or his or her mother eating such products while carrying that person in utero."*

[952] NoM p 001-4 prayer 7.

[953] See *Stellenbosch University* (n 331) para 7 of the order. On the relevant comparative law, see Mulheron at pp 359 – 362.

767 In this case, several factors weigh in favour of Anglo covering the costs, in full or in part:

767.1 The costs are likely to be substantial;

767.2 An efficient notification and opt-out process stands to benefit Anglo, giving it certainty as to whether it will face further litigation from individuals who have elected to opt-out;

767.3 Anglo does not deny that it has the means and resources to cover these costs, nor could it; and

767.4 This litigation emerges from decades of Anglo's neglect in Kabwe, making it just and equitable that it should bear the costs of notifying prospective class members of their rights to opt-out.

768 The presence of a third-party funder does not diminish these considerations. The costs of an extensive notification procedure are likely substantial and will be better spent in preparing the matter for trial.

XIII CONCLUSION AND COSTS

769 Historical environmental disasters, such as Kabwe, raise complex issues. But, complexity does not permit impunity, nor does it entail that victims should be deprived of access to justice.

770 As the previous chapters have demonstrated, the Applicants have made out an ample case for certification: the judicial permission to proceed to trial as a class action.

771 The Applicants therefore seek an order in terms of the amended notice of motion, together with costs, including the costs of three senior counsel and three junior counsel.

GILBERT MARCUS SC

MATTHEW CHASKALSON SC

GRACE GOEDHART SC

MABASA SIBANDA

CHRIS MCCONNACHIE

THABANG POOE

Applicants' counsel

Chambers, Sandton

30 September 2022