REPUBLIC OF SOUTH AFRICA



IN THE HIGH COURT OF SOUTH AFRICA GAUTENG DIVISION, JOHANNESBURG

(1) REPORTABLE: YES/NO
(2) OF INTEREST TO OTHER JUDGES: YES/NO
(3) REVISED

SIGNATURE DATE

In the matter between:

VARIOUS PARTIES OBO MINORS

First to Twelfth Applicants

CASE NO: 2020/32777

Thirteenth Applicant

and

ANGLO AMERICAN SOUTH AFRICA LIMITED

Respondent

and

AMNESTY INTERNATIONAL

First amicus curiae

THE SOUTH AFRICAN LITIGATION CENTRE

Second amicus curiae

THE UNITED NATIONS SPECIAL RAPPORTEUR ON TOXICS AND HUMAN RIGHTS

Third amicus curiae

THE UNITED NATIONS SPECIAL RAPPORTEUR ON EXTREME POVERTY AND HUMAN RIGHTS

Fourth amicus curiae

THE UNITED NATIONS SPECIAL RAPPORTEUR ON THE RIGHTS OF PERSONS WITH DISABILITIES

Fifth amicus curiae

THE UNITED NATIONS WORKING GROUP ON BUSINESS AND HUMAN RIGHTS

Sixth amicus curiae

THE UNITED NATIONS WORKING GROUP ON DISCRIMINATION AGAINST WOMEN AND GIRLS

Seventh amicus curiae

Summary: Practice — Class action — Certification— No prima facie case established on the facts — Certification denied — All other factors are secondary.

Practice — Class Action — Duty of court to screen class actions to ensure that it is in the interest of justice for them to proceed.

Practice — Class Action — Bifurcated procedure —Opt-in or opt-out — foreign peregrini — no expressed or implied submission to jurisdiction of this court — Opt-out procedure not suitable.

Practice — Class Action — Prescription — Zambian statute of limitations applies — Majority of the claims in the second proposed class time-barred.

Practice—Class Action — Overbreadth of classes — Mismatch between the class definition and triable issues.

ORDER

The application is dismissed with costs, including the costs of three junior and three senior counsel.

JUDGMENT

WINDELL, J:

INTRODUCTION

[1] This is an application in which the applicants seek judicial permission to issue a class action against the respondent, Anglo American South Africa Limited (Anglo).¹

¹ Previously known as the Anglo American Corporation of South Africa Ltd.

The proposed class action seeks monetary compensation for two classes from the Kabwe district in Zambia, who have been injured by lead exposure: (a) children and (b) women of childbearing age.

- [2] Lead (chemical symbol Pb) has been mined and smelted by humans for eons. It is found in varying concentrations throughout the earth's crust, most frequently in the lead ore galena, which consists of mineralized lead sulphide (PbS) and other compounds. Due to its relative abundance, malleability, and durability, lead has been utilised for a variety of purposes throughout human history, including plumbing, ammunition, paint, and, for a significant portion of the 20th century, as a fuel additive. Lead, unlike many other metals such as iron and zinc, is extremely toxic to humans, and the associated risks and symptoms are well documented.² There is a risk of permanent brain damage and even death.³
- [3] Lead enters the body through ingestion and inhalation. After entering the body, the substance may be absorbed into the blood and subsequently deposited in organs and bones. Over time, lead can accumulate in the body in this manner. Young children, whose brains and bodies are still developing, are especially susceptible to lead poisoning due to their hand-to-mouth and object-to-mouth contact, their habit of crawling and failure to wash their hands regularly. In children with iron and/or calcium deficiency, a condition prevalent in low-income nations like Zambia, lead absorption can be even higher. In fact, the incidence of lead poisoning in children under 3 years old in Zambia's mining town Kabwe (Kabwe), is among the highest in the world.

² Dr A.R.L Clark "The sources of lead pollution and its effects on children living in the Mining Community of Kabwe, Zambia".

³ Affidavit and Expert reports of Professor P Dargan, Consultant Physician and Professor of Clinical Toxicology. See also the 2010 World Health Organisation ("WHO") report on 'Childhood Lead Poisoning'.

⁴ Professor Dargan.

⁵ Křibek *et al* "Kabwe Town and its surroundings (central Zambia) belong to the most contaminated districts in Africa"); Yabe *et al* 2019 "Kabwe is known as one of the most significant cases of environmental pollution in the world".



- [4] Women of childbearing age are particularly predisposed to lead exposure during pregnancy and are likely to pass it on to their unborn children.⁶ Elevated maternal blood concentrations of lead are associated with gestational hypertension, pre-eclampsia, and an increased risk of miscarriage. A link has also been established between prenatal lead exposure and neurodevelopmental issues in children.
- [5] The town of Kabwe is the capital of the Zambian Central Province and the Kabwe district and is home to 225 000 people. The Kabwe district covers an area of almost 1 570 km², the size of the City of Johannesburg. Members of the proposed classes are estimated to make up approximately 140 000 members of this population.
- [6] Kabwe is one of the most lead-polluted locations on the planet.⁷ There is irrefutable evidence of massive lead contamination of the soil and of astronomically high levels of lead in the blood (BLLs) of a significant portion of the local population. The unit of measurement for BLLs is micrograms per decilitre (µg/dL) and it can be measured through a simple blood test.
- [7] Supported by scientific evidence, the applicants argue that no safe level of lead in the blood exists.⁸ The National Institute of Communicable Diseases, which is the responsible South African organ of state for monitoring communicable diseases, however, 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. A level of 45 µg/dL is the threshold at which chelation treatment is required.⁹

⁶ Professor Dargan.

⁷ Yabe *et al*/ Chemosphere 119 (2015) 940. "Lead poisoning in children from townships in the vicinity of a lead-zinc mine in Kabwe, Zambia".

⁸ Professor Dargan para 8.3.6.2.3.

⁹ Chelation therapy is a medical treatment using various chemical agents to draw heavy metals out of the body. The treatment regime will depend on the blood lead concentration, the patient's symptoms and the environmental lead burden.

- [8] The thirteen applicants comprise of 11 children between the ages of 2 and 10, and two young women (aged 17 and 20) of childbearing age, who have lived their entire lives in and around Kabwe. The sixth applicant has since withdrawn. They have been examined and evaluated by two experts, Professors Dargan and Adnams, and their expert affidavits and reports detail their observations and conclusions. The blood lead levels of the applicants were measured in November 2019 and February 2020. Two of the applicants' BLLs exceeded 100 μg/dL, and all but four of the applicants' BLLs exceeded 50 μg/dL. They all present with recognised sequelae of lead exposure and lead poisoning.
- [9] Numerous studies have been conducted in Kabwe. The studies confirm that the primary source of lead pollution in Kabwe, is the Kabwe lead mine (the Mine), which operated from 1906 until it closed in 1994. Despite the passage of time since the Mine's closure, it continues to leave behind a toxic legacy. This is due to the fact that lead is dense, stable, and resistant to corrosion. After lead has been deposited in the soil, it typically remains stationary and does not undergo degradation, thereby presenting a potentially centuries-long hazard. Today it is universally accepted that, without remediation, lead that was deposited in the soil a century ago will persist in the present day.
- [10] Wind is one of the most important factors in lead's transport and deposition in the environment. In Kabwe, a flat region with low-lying hills, the wind flows unimpeded by mountains, allowing contaminants from mining and smelting operations to be carried directly into neighbouring communities. Particles of lead require a minimum wind speed in addition to other variables, including particle size, to become airborne.

¹⁰ 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". The very high levels of lead in soil were described as "a well-known and unfortunate side effect of the mining industry".

However, once airborne, they are deposited in the environment by the prevailing winds. Lead fumes that escape during the smelting process is especially susceptible to wind dispersion because it does not require a minimum velocity to become airborne.

[11] The applicants contend that notwithstanding the passage of nearly twenty-five

[11] The applicants contend that notwithstanding the passage of nearly twenty-five years since the smelters ceased operations in 1994, BLLs of the local inhabitants indicate that historical contaminants continue to persist in the current soils and dust, resulting in ongoing lead exposure. There are claims that the contamination of soil and dust in Kabwe was predominantly caused by airborne emissions from the Mine, with some dispersion from waste dumps and the Kabwe canal contributing to a lesser degree.

[12] The application is unique. The applicants, who are citizens of Zambia and peregrini of this court (i.e, people neither domiciled nor resident in South Africa), are seeking redress in a South African Court, for a wrong committed in Zambia. They seek to hold Anglo liable for lead pollution that occurred during its involvement in the Mine from 1925 to 1974, beginning and ending 97 and 47 years ago respectively (the relevant period). The applicants' cause of action is based on the tort of negligence. The parties agree that Zambian law will govern the substantive issues (the *lex causae*) and procedural matters will be governed by South African Law — the *lex fori* (the domestic law of the country in which proceedings are instituted).

[13] The Zambian law mirrors the relevant English common law principles, which is part of Zambian law by virtue of section 2(a) of the English Law (Extent of Application) (Amendment Act 2011, Chapter 11). This means that English common law principles

entity.

Affidavit and expert report of Professor Roy Harrison, Queen Elizabeth II Birmingham Centenary Professor of Environmental Health at the School of Geography, Earth and Environmental Sciences, University of Birmingham.
 Anglo invested in the Mine in 1925 and held a minority interest of ± 10% through an intermediate

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. Mr Musa Mwenye SC, the former Attorney General of Zambia, and the applicants' Zambian law expert, opines that 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. The elements of the tort of negligence are therefore well-established. The Zambian Supreme Court has held that it requires proof of a duty of care; a breach of that duty through negligent conduct; actionable harm; a causal connection between the negligent conduct and the harm, involving both factual and legal causation; and damages.

[14] In *Michael Chilufya Sata MP v Zambia Bottlers Limited*,¹⁵ the Zambian Supreme Court went a step further to clarify that in order to establish the tort of negligence, the negligence of the defendant must occasion actual damage to the claimant and that there is no right of action for nominal damages.

[15] In determining whether a class action is the appropriate procedural vehicle for the claims, the overarching requirement is the interest of justice (See *Mukkadam v Pioneer Foods (Pty) Ltd*¹⁶). In *Trustees for the time being of Children's Resource Centre Trust and Others v Pioneer Foods (Pty) Ltd and Others (CRC Trust)*¹⁷ the Supreme Court of Appeal (SCA) identified certain factors to be considered. First, there is a class or classes which are identifiable by objective criteria; Second, a cause of action raising a triable issue; Third, the right to relief depends upon the determination

¹³ Professor Muna Ndulo, Zambian Law expert.

¹⁶ Mukkadam v Pioneer Foods (Pty) Ltd and Others 2013 (5) SA 89 (CC).

¹⁴ Mwenye paras 6.19-6.22. Attorney-General v Mwanza [2017] ZMSC 140 at 1368 -1369; Mwansa v Zambian Breweries PLC [2017] ZMSC 42 at 13; Konkola Copper Mines PLC v Nyasulu and Others [2015] ZMSC 33 at 5 - 6, 9.

¹⁵ SCZ Judgment No. 1 of 2003. Mwenye SC report para 6.20.

¹⁷ Trustees for the time being of Children's Resource Centre Trust and Others v Pioneer Foods (Pty) Ltd and Others (CRC Trust) 2013 (2) SA 213 (SCA)

of issues of fact, or law, or both, common to all members of the class; Fourth, the relief sought, or damages claimed, must flow from the cause of action and be determinable and ascertainable; Fifth, if the claim is for damages, there is a suitable procedure for allocating the damages to members of the class; Sixth, the proposed representatives of the classes are suitable to be permitted to conduct the action and represent the class; Seventh, 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.

[16] In *Mukkadam*, the Constitutional Court held that the various factors in *CRC*Trust were not jurisdictional facts but were merely considerations to be considered in an application for certification and the absence of one or another requirement must not oblige a court to refuse certification where the interest of justice demand otherwise.¹⁸

[17] The applicants propose that the class action advances in two stages: In the first stage, questions of fact and law that are common to all class members will be determined. This will not fully determine the merits of the class members' individual claims, but it will go a considerable way to resolving their claims. In the second stage, class members will prove their individual claims, including proof of individual harm and quantum. The applicants propose that the first stage be decided on an opt-out and the second stage on an opt-in basis.

[18] This proposed bifurcated procedure is in accordance with the class action certified by this court in *Nkala and Others v Harmony Gold Mining Company Limited* and *Others*, ¹⁹ on behalf of mineworkers suffering from silicosis and related injuries.

¹⁸ Mukkadam (n 16) para 35.

¹⁹ Nkala and Others v Harmony Gold Mining Company Limited and Others 2016 (5) SA 240 (GJ).

The applicants contend that this approach is equally appropriate for a class action of this scale. Anglo disagrees. It contends that if the application for certification is to be granted at all, it should be granted on re-drawn and tightly defined classes, which must operate on an opt-in basis (Anglo's alternative case). I will return to this issue and Anglo's alternative case later in the judgment.

[19] Anglo opposes the application on various grounds. Some of the grounds are valid, while others are not. Hence, I will commence with the three issues that do not pose an insurmountable obstacle to the certification of the class action. They are: Suitability of the class representatives; Commonality and the Funding Agreements. Following that, I will then determine whether there is a cause of action raising a triable issue, which aspect, in my view, is fatal to the application. Finally, I shall discuss 'Anglo's alternative case' which includes the damages claims, the suitability of an opt-out procedure and the class definitions.

SUITABILITY OF THE CLASS REPRESENTATIVES

[20] The twelve Applicants are the proposed class representatives. The sixth applicant has withdrawn as a class representative but continues to be a member of the proposed class. Suitability of the class representatives turns on two primary considerations: Whether the proposed class representatives have the capacity to conduct the litigation on behalf of the class; and whether their interests are in conflict with those whom they wish to represent.²⁰

[21] A conflict of interest arises if the purpose of the litigation is to enrich the representatives, or to serve interests other than those of the class. The second issue, namely, whether the representative has the capacity to conduct the litigation properly

²⁰ CRC Trust (n 17) para 46 – 48.

on behalf of the class, is important because 'unsuccessful litigation will have the effect of destroying the claims'.²¹

[22] 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. Section 14 of the Children's Act 38 of 2005, read with s 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'. 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'.

[23] 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'. Section 14 thus provides an opportunity to realise the right contained in s 10, as it links a child's right to participation with his or her right of access to a court. The Children's Act places a corresponding duty on parents and guardians to represent children and to assist them.

[24] To achieve the objectives of s 14 read with ss 10 and 18(3)(b), the applicants' attorney, Ms Mbuyisa, confirms that the following measures have been put in place: 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. Second, where the children are of such an age, maturity and

²¹ Ibid para 47.

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. Third, the proposed class representatives, represented by their parents and guardians where necessary, are all readily contactable to obtain instructions and give advice.

- [25] 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. Instead, Anglo raises objections relating to the 'typicality' of the class representatives and complains of an alleged conflict of interest.
- [26] First, Anglo contends that the applicants' BLLs 'are not representative of the BLL distribution in Kabwe district generally'. Anglo claims that while all of the applicants currently suffer from 'maladies' caused by lead, the proposed class would include individuals who do not currently suffer from any lead-induced harm. Second, Anglo alleges that the applicants are also atypical of the classes, because they all live in Kasanda, Makululu and Chowa (the KMC townships), and do not include class members drawn from the wider Kabwe district. Third, Anglo alleges that there is a conflict of interest between proposed class members because some have suffered more serious and urgent injuries than others.
- [27] Typicality is not a requirement for certification under South African law. In CRC Trust, the SCA explained this point as follows, with reference to s 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.²²

[28] This court also applied this dictum in *Nkala*, 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. Similarly, in *De Bruyn v Steinhoff International Holdings N.V. and Others (De Bruyn),* ²³ Unterhalter J 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.' ²⁴

[29] To the extent that any further evidence from individual residents of Kabwe is required to resolve the issues raised by Anglo, that can be addressed by calling additional witnesses.²⁵ This reasoning applies with equal force to Anglo's complaint about the lack of class representatives from other parts of the Kabwe district.

[30] 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

²² CRC Trust (n 17) para 46.

²³ De Bruyn v Steinhoff International Holdings N.V. and Others [2020] ZAGPJHC 145 (26 June 2020); 2022 (1) SA 442 (GJ).

²⁴ De Bruyn para 56.

²⁵ Nkala (n 19) para 135.

immediate payments, whereas the interests of the latter will have an interest in contingent future payments.

[31] 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 once-and-for-all rule. Therefore, all class members will have an active interest in obtaining damages for future losses. The fact that some class members may have more pressing needs than others is hardly a conflict of interest that would disqualify certification.

[32] As acknowledged in *Nkala*, there will always be some tensions between the needs and interests of class members, but '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'. '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.'²⁶ 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.

[33] The proposed class representatives satisfy the criteria specified in the class definitions. The evidence of these class representatives, supplemented with further evidence from other witnesses where necessary, would provide a basis for the trial court to resolve the common issues at the first stage.

COMMONALITY

26 Ibid para 141.

[34] Anglo does not seriously deny that there are a variety of anticipated legal and factual issues that are common to all members of the class that can be appropriately resolved in a class action.

These common issues include, the precise role played by Anglo in relation to the Mine and its operations from 1925; The existence of a duty of care owed by Anglo; What Anglo knew and ought reasonably to have known of the harms of lead pollution; What measures Anglo ought reasonably to have taken to prevent lead poisoning of local residents; Whether Anglo was negligent in failing to take those measures, timeously or at all; Issues of factual and legal causation, including: the correct test for factual causation ('but for' or 'material contribution'); the Mine's contribution to lead pollution in the Kabwe district, including during the different periods of it operations; the link between lead pollution and elevated BLLs; the link between elevated BLLs and different categories of sequelae injuries; the causative role, if any, in the extent of lead emissions when the Mine was operated by Zambia Consolidated Copper Mines Limited (ZCCM), of negligence on the part of Anglo prior to 1974; whether ZCCM's conduct after 1974 broke the chain of causation between Anglo's negligence and resulting harm.

[36] Scalia J, addressing the issue of commonality in *Wal-Mart*,²⁷ stated that the claims:

'... must depend upon a common contention ... That common contention, moreover, must be of such a nature that it must be capable of classwide resolution – which means that determination of its truth or falsity will resolve an issue that is central to the validity of each one of the claims in one stroke.'

²⁷ Wal-Mart Stores, Inc, Petitioner v Betty Dukes et al 564 U.S. 338. CRC Trust (n 17) para 44. See also Mukkadam (n 16) para 17.

[37] In CRC Trust Wallis J remarked that Wal-Mart 'highlights' the point that the class action does not have to dispose of every aspect of the claim in order to obtain certification. He held as follows:

'It might in an appropriate case be restricted to the primary issue of liability, leaving quantum to be dealt with by individual claimants. Certain common issues could be certified for the entire class, and other subsidiary issues certified in respect of defined sub-classes. But the question in respect of any class or sub-class is always whether there are common issues that can be determined that will dispose of all or a significant part of the claims by the members of the class or sub-class'.²⁸

[38] This does not require that the class members' causes of action be identical. In *Nkala*, this court approved of the Canadian Supreme Court's approach to commonality in *Vivendi*,²⁹ 'which is founded on flexibility and common sense'. Three key insights emerge: 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. Second, common issues do not require identical answers. In *Nkala* the court remarked that '(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.' Instead 'the common question may require nuanced and varied answers based on the situations of individual members.'³⁰ Thus, commonality depends on the existence of common questions, not common answers. 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 the entire class. It is sufficient that determination

²⁸ CRC Trust (n 17) para 45.

²⁹ Vivendi Canada inc v Michell Dell'niello [2014] SCR 1.

³⁰ Nkala (n 19) para 94.

of the common issues 'allows the claims to move forward without duplication of the judicial analysis'. The court held that the flexible approach in *Vivendi* accords with our class action jurisprudence, as 'it ensures that the interests of justice predominate'. ³¹ [39] 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. A similar argument was raised in *Nkala* that was rejected by the court. It held 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.'

[40] In theory, the trial court could be asked to adjudicate on the medical evaluation of each and every case, but the reality is that if the trial 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.

[41] Each of the anticipated common issues would arise again and again if the prospective class members were to bring individual claims against Anglo. Both parties have introduced voluminous evidence on these issues, running to thousands of pages,

³¹ Ibid para 97. See also Stellenbosch University Law Clinic end Others v Lifestyle Direct Group International (Pty) Ltd and Others [2021] ZAWCHC 133; [2021] 4 All SA 219 (WCC) at paras 61 – 63.

involving many experts. No individual litigant in this matter could be expected to match Anglo's resources in one-on-one litigation.

- [42] 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. A class action would help to avoid the duplication of judicial efforts to resolve these issues. The resolution of any and all of the common issues would also help the class members' claims to move forward. It would not 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.
- [43] Anglo has not offered any practical suitable alternative to a class action for receiving and adjudicating the copious quantities of common evidence that would arise in every individual claim raise by residents of Kabwe. The advantage that a class action offers is that the courts would not need to be further burdened by litigating repeatedly a series of other issues that are common to the class. This underlines why class action proceedings of this nature are the only realistic and appropriate method of determining these disputes.

THE LAWYERS AND THE FUNDING ARRANGEMENTS

[44] 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. 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 Miners³² and then on the Chakalane/Qubeka silicosis litigation, on behalf of former gold Miners who contracted silicosis.³³

[45] Given the breadth and complexity of the proposed class action litigation, the only effective way to prosecute such litigation is through a multi-jurisdictional team of legal representatives with extensive experience in litigation on this scale. 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.

[46] The estimated costs to trial are substantial, standing at approximately £4.76 million. These costs could never be met by the applicants and prospective class members, the majority of whom are indigent. Nor would it be feasible for these costs to be covered by the legal team. This has required third-party litigation funding and contingency fee arrangements to make this litigation possible. 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. These funding arrangements have three key parts.

[47] 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. The terms of this funding are set out in the Claim Funding Agreement concluded between MM, LD and KFL. 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. The Litigation Funding Agreement includes a clause that the funder will have no control

32 Lubbe v Cape Pic [2000] 1 WLR 1545 (HL).

³³ Blom & Others v Anglo American and Others (unreported judgment of WLD, case number 18267/2004 delivered on 24 June 2005); Qubeka & Others v AngloGold Ashanti Limited [2014] ZAGPJHC 70.

over the litigation. 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.

[48] Mr Robert Hanna, managing director of Augusta Ventures Limited (AVL) further confirms that KFL has sufficient committed capital to fund this litigation. He further emphasises that, in over 200 cases funded to date to which it has committed over £266 million in capital, no Augusta company has ever failed to meet a contractual obligation to provide funding. 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. In the Claim Funding Agreement, KFL has bound itself to comply diligently with the Code.

[49] 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. The policy schedule has been specifically amended to reflect that the class members (on behalf of the class) are the insured, alongside KFL.

[50] Third, the applicants have concluded contingency fee agreements with their attorneys and counsel, reflected in the amended 'Client Funding Agreements'. The lawyers will be paid 62% of their ordinary fees and 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 (CFA),³⁴ as the lawyers are charging reduced rates. Instead, the 38% is merely a deferred portion of the fees, contingent on success.

³⁴ Contingency Fee Act 66 of 1997.

[51] 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. In their notice of intention to amend, the applicants foreshadow the insertion in the notice of motion of the following paragraph:

'3A The proposed funding arrangements in the class action are approved, subject to the following:

- a. any settlement agreement reached by the parties shall only be of force and effect if approved by the trial court; and
- b. the funder's return, whether under a settlement or final award, will be subject to the approval of the trial court.'
- [52] The various agreements have undergone amendments for purposes of clarity and to address issues raised by Anglo in its answering papers. The applicants express their willingness to negotiate further amendments to these arrangements if required by the court.
- [53] The applicants' proposed funding model is a novelty in the South African landscape. ³⁵ It combines the third-party funding model with a contingency fee arrangement between the lawyers and the class representatives (and class members). The only example in which these features were combined, is the Ontario Superior Court of Justice judgment of *Houle v St Jude Medical Inc.* ³⁶ In *De Bruyn*, the court derived a six-part test as to how courts should assess funding arrangements from *Houle*, in particular (a) Whether the arrangements are fair and reasonable towards the class members and whether they potentially overcompensate the funders; (b) Whether

36 Houle v St Jude Medical Inc. 2018 ONSC 6352 para 5.

³⁵ Anglo American South Africa Limited v Kabwe 2022 JDR 2294 (GJ) para 2.

they are fair and reasonable to the defendant in particular in relation to its interest in having adverse costs orders honoured; and (c) Whether the funding arrangements create the capacity for the funder to interfere with the duty of the class lawyers to act in the best interests of their clients or whether they create mechanisms for the class representatives to be able to give instructions and exercise control over the litigation in the best interests of class members.

[54] Anglo raises three areas of concern: (a) The 'Litigation Management Covenants' between the lawyers and the funder; (b) The reasonableness of the funder's return; and (c), the After-the-Event insurance cover.

First concern: the funders' return

- [55] In exchange for the litigation funding, KFL has contracted with the lawyers to take 25% of the applicants' total settlement or award, as well as 100% of the budgeted costs and disbursements that may be recovered from Anglo on the classes' behalf.
- [56] It is the duty of the certifying court to specify whether a particular reward is (or is not), ex ante, a reasonable return for the risk assumed by the funder. The parties are agreed that the trial court or a settlement court ultimately must approve the final pay-out to the funder and may then re-evaluate the reasonableness of the return on an ex post facto basis.
- [57] Anglo's objection to the proposed funders' return is that the funding scheme proposes a potentially excessive return to the litigation funders, who stand to make many multiples on their investment. The funder has contracted for itself the right to take a flat fee of 25% of the class members' ultimate award, in circumstances where contingency fee arrangements generally in South Africa only permit the lesser of twice the investment made, or 25%.

[58] Anglo submits that the excessiveness of the return is demonstrated in the following example: If the class members receive a modest settlement or judgment of R21,000 each, the funders are likely to receive more than R525 million as well as taxed costs. That is more than a three-fold return on their investment, which is now projected to be R158 million.

[59] Firstly, the CFA does not apply to third-party litigation funders. Nor is there any basis for Anglo's contention that public policy requires the CFA caps to be applied to third-party funders as a binding rule. The CFA is intended to address the specific mischief that arises in contingency fee arrangements, namely the conflict of interest that may arise between lawyers' duties to their clients and their profit motive. Those concerns do not arise in third-party funding arrangements such as this, where the funders have no say over the litigation and have no role in representing or advising the litigants. It is for this reason that the courts in the United Kingdom (UK) have rejected using contingency fee legislation as determinative of public policy governing third-party funding.

[60] In Akhmedova v Akhmedova,³⁷ in addressing the argument that the statutory prohibition of contingency fee arrangements in family court proceedings should inform a similar public policy ban on third-party funding, the Court made the following observations:

'70. It seems to me that I should be very cautious in accepting the analogy that, because conditional fee agreements are prohibited in family proceedings, public policy prohibits third-party funding in family proceedings. That analogy seems to me to be misplaced because the different treatment afforded by the courts to contracts with lawyers is obvious. There is a clear concern about a person's lawyer having a financial

³⁷ Akhmedova v Akhmedova [2020] EWHC 1526 (Fam) paras 41- 45.

interest in the outcome of proceedings which might improperly influence both the advice and the representation given. Those concerns do not arise in third-party funding arrangements where the lawyers conducting the proceedings have no financial interest in the outcome. In this context, I am also mindful of the inappropriateness of extending the prohibition on third party litigation funding to family proceedings as if settlement were any more difficult/desirable in those proceedings or because a portion of the monies at stake in the litigation were used to pay a funder.'

[61] I agree with the applicants' argument that an assessment of *ex ante* reasonableness is not the place to draw the hard lines that Anglo seeks to impose. In my view, it is also premature as the trial court (or a court confirming a settlement agreement) will be best placed to determine whether the proposed funder's return is indeed reasonable, once the outcome and quantum is known, the costs have been incurred, and a damages award has been determined.³⁸ To impose an arbitrary 200% cap and exclusion of costs, at this interim stage, would be unreasonable.

[62] Anglo's example, namely that the funder stands to gain a return of over 330% on deployed capital, completely ignores the very real alternative: that the funder may receive a 0% return.

[63] The proposed return of recovered costs to the funder is also ex ante reasonable. It is the funder which will foot the legal bills throughout this litigation, not the class representatives. These are disbursements that it has made throughout the litigation, leaving it out of pocket. Lawyers acting on contingency are entitled to recover disbursements on top of a success fee, even though they are otherwise prohibited from retaining a costs award over and above their fees. Recovery of out-of-pocket

³⁸ De Bruyn (n 23) para 89.

expenses is permitted under the CFA and there is no reason, in law or policy, to deprive the third-party funder of a similar entitlement. ³⁹

Second concern: ATE insurance cover.

[64] The applicants' funder has contracted with an insurance company for a socalled 'After-the-Event' (ATE) insurance policy. In the founding affidavit, Ms Mbuyisa explained that the purpose of the ATE Insurance is 'to meet an adverse costs order in the event the litigation is unsuccessful and to ensure the class members will not be required to make any payment in respect of adverse costs'.

[65] Anglo raises two criticisms against the ATE insurance policy: First, its amount — an indemnity limit of £2 million — is not sufficient to meet the potential adverse costs orders; and Second, Anglo is not a beneficiary of the insurance policy, despite recognition that its interests in the honouring of adverse costs orders deserve consideration in the interests of justice calculus.

[66] As confirmed in *De Bruyn*, it is not a requirement for certification that the applicants should provide security for costs. The defendant's potential to recuperate costs is merely a consideration (and by no means a dominant consideration) and the existence of any measures to satisfy costs orders counts in favour of certification.

[67] Anglo does not provide an explanation for why costs totalling £2 million (equivalent to more than R40 million) are inadequate to offset an adverse costs award. It would be reasonable to anticipate that in order to substantiate the complaint it is advancing, it would furnish comprehensive information regarding the projected costs.

³⁹ Mofokeng v Road Accident Fund, Makhuvele v Road Accident Fund, Mokatse v Road Accident Fund, Komme v Road Accident Fund [2012] ZAGPJHC 150 para 49 to 50.

As no evidence has been presented to support this claim, the complaint is without merit.

[68] Anglo advanced a new argument during the hearing that was not addressed in its papers. It contends that there are 'restrictions' in the ATE policy which, it alleges, means that a 'favourable costs award for Anglo is unlikely to be honoured'. In advancing this argument, Anglo relies on the Federal Court of Australia's judgment in *Petersen Superannuation Fund (Pty) Ltd v Bank of Queensland Limited*, ⁴⁰ a judgment dealing with security for costs, which concerned whether an ATE insurance policy could be relied on by a litigant in lieu of making payment of security.

[69] The judgment is irrelevant because this court is not hearing a security for costs application. It is for the same reason that Unterhalter J, in *De Bruyn*, held that *Petersen* was of little relevance in certification proceedings:

'109. Deloitte placed some reliance upon the Petersen case, decided in the Federal Court of Australia. There the question was whether an insurance policy provided sufficient security for the costs of litigation funded by a third party funder. Although the case is of some interest in the scrutiny it gave to the policy of insurance, class certification does not require that security for costs be provided by an applicant or those who fund her. Rather, the interests of the defendants figure as one set of interests among others that warrant consideration when the funding arrangements are scrutinized. To the extent that adverse costs orders made in favour of the defendants are likely to be honoured, this counts in favour of certification. It is, with much else, a factor to be weighed. Given DRRT's funding commitments, taken together with the insurance cover secured by Therium, defendants are not placed at significant risk that adverse cost orders will not be paid, for so long as the funders continue to fund the litigation.' 41

⁴⁰ Petersen Superannuation Fund Pty Ltd v Bank of Queensland Limited [2017] FCA 699.

⁴¹ At para 109.

- [70] Anglo has failed to provide a calculation of its estimated costs or an explanation for how its estimated taxed legal costs could exceed the R40 million indemnity cover. In any case, I agree with the applicants that Anglo's taxed costs are likely to be significantly lower than the applicants' because it bears none of the burdens associated with bringing and managing a class action of this size. Furthermore, Mr Hanna has stated that the ATE policy's limit of indemnity is still being reviewed, and that additional insurance coverage will be sought if reasonably necessary.
- [71] Anglo also claims that enforcing an adverse costs order against the funder and insurer would be difficult. This complaint is also without merit. KFL took out an insurance policy to cover any unexpected costs. It would not have done so if it intended to avoid any costs order. 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'. Anglo is thus in a much better position than if the applicants had been litigating alone, without litigation funding. Augusta's market reputation and the ATE insurance policy provide additional guarantees and safeguards.
- [72] As a result, Anglo's complaints about the ATE Policy's "restrictions" are without merit. Anglo is not entitled to cost security. So, it cannot complain about the insurance policy's limit, a fortiori in circumstances where it has not even taken this court into its confidence by disclosing its anticipated litigation budget and recoverable taxed costs.

Third concern: the Litigation Management Covenants

[73] Anglo complains that the funding agreements afford the funder improper control over the envisaged class action. In support of its contention, it relies on *Houle*.

[74] There is a fundamental distinction between class action claimants in South Africa and class action claimants in Ontario. It is not disputed that the applicants and class members in the present matter require third-party funding arrangements to litigate the class action. Without third party funding they would have no other way to pursue this class action. It is also not disputed that the various authorities relied on by the applicants, emphasises the value of commercial third-party litigation funding in advancing access to justice.⁴²

[75] This, however, does not apply to the class members in *Houle*, nor to any other class members in Ontario. According to *Houle*, the Class Proceedings Fund in Ontario provides public funding for class action disbursements (but not counsel's fees). In return for funding disbursements and indemnifying class action plaintiffs against costs awards, the Fund takes a 10% levy on class damages over and above the recovery of the disbursements that it funds. The provision for public funding of class action disbursements and a contingency fee regime for counsel's fees is a funding mechanism that ensures that most class action plaintiffs in Ontario do not need litigation funding to get access to court.

[76] As a result, the *Houle* judgment emerges from a completely different social context and must be considered as such.

[77] The rest of the complaints directed against certain clauses in the funding agreements are made entirely on the authority of the *Houle* judgment. On closer inspection, however, it is entirely unsupported by *Houle*. The clauses in *Houle* that are similar to the funding agreement clauses to which Anglo takes greatest exception, are clauses that the Court in *Houle* did not have any difficulties with. Clauses 4.1.9

⁴² Price Waterhouse Coopers Inc and Others v National Potato Co-Operative Ltd 2004 (6) SA 66 (SCA) para 46 (PWC). 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).

and 4.2.1, for example, which require MM and LD to provide Case Information to the funder, sparked heated debate. These clauses were said to be 'even worse' than clause 7.2.7 of the *Houle* agreement, which the Ontario Courts allegedly found to be offensive.

[78] However, clause 7.2.7 of the *Houle* agreement was not found to be offensive by the Ontario Courts. The 'litigation management covenant' clauses in *Houle* that were found to be offensive are listed in paragraph 93 of the judgment of the Court a quo which is reproduced in paragraph 48 of the Appeal Court judgment. Clause 7.2.7 is not one of these clauses.

[79] In any case, there is a distinction between clauses in *Houle* that impose obligations on the clients themselves and clauses in the current funding agreement that impose obligations on MM, but subject to their overriding obligation to act in the best interests of their clients. There is a further difference between clauses in *Houle* that place obligations on the attorneys of record in *Houle* and clauses in the funding agreement that place obligations on LD, who are consultants engaged by MM, who remain duty bound to act in the best interests of their clients.

[80] If all of the *Houle* clauses on which Anglo relied incorrectly are removed, nothing remains of its 'litigation management covenant' complaint.

Conclusion on funding agreement

[81] As remarked in the interlocutory application, this court, 'as the guardian of the child's best interests, has a heightened duty to scrutinise the funding arrangements. Because the purported claims of thousands of Zambian children may be rendered *res judicata* by an action in a foreign jurisdiction, it is the duty of the court to ensure that these claims are adequately pursued by way of funding arrangements that are not only

sufficient, but that do not deliver extortionate profits for third party funders at the cost of the children and that insulates the classes and their lawyers from undue influence from Kabwe Finance.'43

[82] Anglo's concerns are without merit because the necessary safeguards developed by our class action jurisprudence have been built into the proposed funding arrangements. First, the applicants have provided detailed disclosure of the funding arrangements, which is without a doubt among the most detailed and transparent disclosures of any class certification proceeding to date.⁴⁴ Second, the terms of the relevant funding agreements are explicit that neither the funder nor LD will exercise control over the case, which is to be conducted by MM on the instructions of the class representatives. Third, the applicants are represented by experienced attorneys and independent advocates who are bound by ethical rules to represent the interests of their clients.

[83] Fourth, the funder is part of the Augusta Group, a leading third-party litigation funder with a well-established track record and reputation. That reputation creates its own safeguard. Abuses and underhanded dealings, of the kind that Anglo alleges, would be disastrous to its professional standing and credibility with the courts. Fifth, the funder is bound by the Association of Litigation Funders' Code (ALF), which explicitly prohibits funder control of litigation and other abuses. AVL is a member of the ALF and the Code's requirements have been explicitly incorporated in the Claim Funding Agreement, thereby making them contractually binding on the funder.

[84] Anglo's attempt to characterise the Code as inadequate protection ignores the history and significance of the Code, as well as the weight it has been given by courts

⁴³ Anglo American South Africa Limited v Kabwe 2022 JDR 2294 (GJ) para 19.

⁴⁴ Mr Hanna's first affidavit; Mr Hanna's second affidavit; Mr Hanna's third affidavit.

in England and Wales. The significance of the Code was recently explained in Akhmedova:⁴⁵

In Chapter 11 of his Final Report from the Review of Civil Litigation Costs (2009), Lord Justice Jackson concluded that "in principle, third party litigation Approved Judgment funding is beneficial and should be supported" for five reasons, including that it promotes access to justice and, for some parties, may be the only means of funding litigation (para. 1.2). He also recommended that a voluntary code be established (para. 2.12) and that it be made clear that funding arrangements complying with such regulation would not be overturned on grounds of maintenance and champerty (para. 5.3). The Civil Justice Council — an agency of the Ministry of Justice — published its Code of Conduct in 2011 which is administered on a self-regulatory basis by the ALF. In his sixth lecture on the Civil Litigation Costs Review Implementation Programme, Lord Justice Jackson stated that the Code of Conduct was a satisfactory implementation of his recommendations.

- 42. The Code of Conduct specifically governs the control which can be exercised by a funder. For example, the Code forbids the funder from seeking to influence the client's solicitor or barrister to cede control or conduct of the dispute to the funder (para. 9.3) and it also provides for an independent QC to resolve any dispute between a funder and client about settlement (para. 13.2).
- 43. Following those developments, the judicial attitude to litigation funding was summarised by the Court of Appeal in Excalibur Ventures LLC v Texas Keystone Inc (2016) EWCA Civ 1144 as follows: "litigation funding is an accepted and judicially sanctioned activity perceived to be in the public interest" (paragraph 31j. Mr Gourgey QC's researches have revealed that no agreement with a professional litigation funder has been found to be contra to public policy during the course of the last fifteen years.

⁴⁵ Akhmedova v Akhmedova [2020] EWHC 1526 (Fam) paras 41-45.

45. It is thus difficult to envisage how litigation funding conducted by a responsible funder adhering to the Code of Conduct could be construed to be illegal and offensive champerty or might be held to corrupt justice.'

[85] Sixth, the applicants are protected by the provisions of the CFA, particularly is 5 which gives them the right to seek the review of any terms of the contingency fee agreement and the fees. Seventh, in response to Anglo's repeated claims that the settlement will be hijacked by funders and lawyers to the detriment of the class, applicants and prospective class members are afforded two critical layers of protection: If the class representatives object to any settlement proposal, they may refer a dispute to an independent senior counsel, in terms of the dispute resolution mechanisms in the Claim Funding Agreement. And the applicants and class members are further protected by the court, as the parties would have to seek judicial approval of any settlement, in terms of the procedures approved in the *Nikala* settlement judgment.⁴⁶

A CAUSE OF ACTION RAISING A TRIABLE ISSUE

The applicants' case

[86] The applicants seek redress in a South African court on the basis that Anglo was the parent company and head office of the Anglo group that oversaw, managed and/or advised the Mine from its headquarters in Johannesburg, within the jurisdiction of this court, during the relevant period.⁴⁷ It is asserted that Anglo exercised control

46 Ex Parte Nkala and Others [2019] ZAGPJHC 260 (26 July 2019) para 19.

⁴⁷ Our legal system does not recognise the doctrine of *forum non conveniens* and may not decline to hear cases that are within their jurisdiction, merely because another court may have jurisdiction. The only exception is in admiralty cases. See *Standard Bank of South Africa Ltd and Others v Mpongo and Others* [2021] ZASCA 92; 2021 (6) SA 403 (SCA) 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. *TMT Services & Supplies (Pty) Ltd t/a Tragic Management Technologies v MEC: Department of Transport, Province of KwaZulu-Natal and Others* [2022] ZASCA 27 (15 March 2022) t para 34.

over the Mine through an ever-changing set of subsidiaries, and although its organisational structure is quite complex, the Mine was firmly a part of Anglo's 'group system'. Anglo's 1968 Annual Report described it in the following terms:

'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'.

[87] More than 66% of all lead produced in the Mine's lifetime was mined and smelted during the relevant period, resulting in a broadly commensurate level of lead pollution. The period from 1974 to 1994 accounted for little over 22% of the lead production and only around 12% was produced before 1925. It is alleged that as consulting engineer and manager of the Mine, Anglo supervised the design and installation of the Mine's smelting equipment and provided guidance and direction on mine safety and the management of lead pollution.

[88] The applicants contend that the question of whether and when a multinational parent company owes a duty of care in respect of the actions of a foreign subsidiary is well-settled in English law, and they are confident that there is sufficient evidence to prove that Anglo owed a duty of care to the members of the classes.⁴⁹

[89] Foreign law is a question of fact in this court. Anglo's expert on English law, Mr C.A.W Gibson QC, scrutinized the draft particulars of claim (POC) and the founding

^{48&}quot; Professor Betterton; Professor Harrison.

⁴⁹ See Mr Hermer QC and Mr Musa Mwenye SC. See also *Vedanta Resources PLC and another v Lungowe* [2019] UKSC 20 and *Okpabi v Royal Dutch Shell PLC* [2021] UKSC 3.

affidavit. He is of the opinion that 'an English court would likely determine that *the duty* of care alleged in the draft POC together with its supporting affidavit raises a real issue to be tried'. He further stated that '[I]t will be a question of fact and degree whether or not the evidence adduced demonstrates a sufficient level of knowledge, control, supervision and intervention for the purposes of attaching legal responsibility.'50

[90] The applicants allege that Anglo is still liable for the ongoing harm suffered by the residents because it knew of the toxic effects of lead on the human body from the very outset of its involvement with the Mine. They aver that Anglo's own internal reports and correspondence demonstrate that it knew or reasonably ought to have known of the dangers of lead pollution, the threat to the Kabwe community, and what had to be done to address this threat.⁵¹ It is alleged that despite several warnings and recommendations, Anglo and the Mine's owner at the time, RBHDC (The Rhodesian Broken Hill Development Corporation) elected not to incur the costs of implementing any significant preventative measures to address the problem. It is alleged that children were already falling ill and dying of lead poisoning,⁵² and a high percentage of them had massive BLLs, while Anglo reportedly exercised control over the Mine.

[91] It is the applicants' case that over the course of its almost 50-year involvement in the Mine's affairs, Anglo negligently breached its duty of care by, *inter alia*, failing to conduct the necessary investigations on the impact of lead pollution on the surrounding communities by taking common sense measures, such as long-term

⁵⁰ Gibson QC para 136.

⁵¹ The 1893 Broken Hill Report; Letter from the RBHDC to the Mine's General Superintendent and consulting engineer, dated 30 August 1907; The Broken Hill Council report of 1924; The South Australian Royal Commission Report on Plumbism 1925; RBHDC monthly reports; Correspondence in the late 1940's and early 1950's between Anglo's Chief Medical Officer, Dr van Blommestein, and Mine officials. Investigation by the Anglo Research Department dated 1957; June 1960 report entitled "Lead Losses from Newnam Hearth Doyle Impingers".

⁵² Dr Lawrence (1969/1970) and Dr Clark (1971 to 1974).

sampling of air, water, soil and vegetation and monitoring the health impacts on the local communities in Kabwe.

[92] The applicants contend that Anglo's negligence therefore caused or materially contributed to the existing levels of lead pollution in Kabwe and the resulting actionable harm. It is alleged that Anglo acted negligently in at least five material respects: it failed to investigate; it failed to protect; it failed to cease and relocate; it failed to remediate; and it failed to warn. It is alleged that 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. The danger to historic and future Kabwe residents were therefore both foreseen and reasonably foreseeable and Anglo failed to take reasonable steps to prevent this harm. [93] The applicants argue that 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'.53 As Lord Hoffmann explained in Jolley,54 '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'. 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. For example, in Smith v Leech Brain & Co Ltd and Another,55 a worker suffered a burn from molten metal that resulted in cancer and his death. Lord Parker CJ held that the test is not whether these defendants could reasonably have foreseen that a burn would cause cancer and that (the plaintiff) would

⁵³ Attorney General of the British Virgin Islands v Hartwell [2004] 1 WLR 1273 paras 21, 25.

⁵⁴ Jolley v Sutton LBC [2000] 1 WLR 1082 to 1091D.

⁵⁵ Smith v Leech Brain & Co Ltd and Another [1961] 3 ALL ER 1159.

die. 56 Instead, 'the question is whether these defendants would reasonably foresee the type of injury suffered, namely, the burn'.

[94] This means that so long as the risk of injury from lead exposure was foreseen or reasonably foreseeable, that is sufficient. It is contended that the particularities or degree of the injuries actually suffered by the class members are therefore not relevant to this inquiry. 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'.⁵⁷ The more severe the harm, the more likely a reasonable person would pay heed, regardless of the risk of harm eventuating.

[95] The applicants claim that they will demonstrate that Anglo's negligent conduct factually caused the actionable harms suffered by the class members. Their case is two-fold: Firstly, Anglo's negligence was the 'but for' cause of the present-day levels of lead pollution in Kabwe and the resulting harms. ⁵⁸ 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 (the duty to prevent). 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 (the duty to cease or relocate and remediate). Secondly, even if the applicants fall short of proving the 'but for' causation at trial, they need only prove, on a balance of probabilities, that Anglo's negligence materially contributed to

58 Sienkiewicz v Grief [2011]2 AC 229 paras 16 -17.

⁵⁶ At 1162.

⁵⁷ Lord Reid in Overseas Tankship (UK) Ltd v Miller Steamship Co Pty (The Wagon Mound (No2)) [1966] 2 All ER 709 at 719.

the present-day levels of lead contamination in the Kabwe environment to establish liability.⁵⁹

[96] 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. ODivisible 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, it is generally agreed that the accumulation of exposure does not worsen the severity of the injury. Therefore, any contribution to injury which is not de minimis — trivial or of no significance — is a material contribution, that attracts liability.

[97] 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. 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. There is broad agreement that the injuries arising from exposure to lead are, in general, best classified as divisible, dose-related injuries.

⁵⁹ 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. Hermer 2020 paras 29 —31; Gibson at para 42.

⁶⁰ As to what is required to establish a "material contribution", see *Bonnington Castings Ltd v Wardlaw* 1956 AC 613 and *Sienkiewich v Grief* [2011] 2 AC 229.

⁶¹ See Holtby v Brigham Covvan (Hull) Ltd [2000] ICR 1086; [2000] 3 All ER 421; Thompsons v Smiths Shiprepairs (North Shields) Ltd [1984] QB 405.

⁶² The approach to cumulative causation involving divisible, dose-related injuries of this nature was explained by Lord Philips in *Sienkiewicz v Grief* [2011] 2 AC 229 drawing on the 1956 House of Lords judgment in *Bonnington Castings Ltd v Wardlaw* 1956 AC 613.

Anglo's case

[98] Anglo categorically denies any responsibility with respect to the ongoing environmental crisis. It raises several valid arguments, in which it presents a multitude of issues. One contention posits that the applicants are targeting the incorrect entity. ZCCM, a Zambian state-owned entity, and its predecessors in title, at all times from 1905 to 1994 owned and operated the Mine. It is currently listed on the Lusaka and London Stock Exchanges and Euronext with a market capitalisation of almost R5 billion.

[99] Zambia gained independence in 1964, and in August 1969 the Zambian government announced that it would acquire control of the mining industry through a process of nationalisation. This resulted in a series of restructurings and schemes of arrangement and gave birth to the creation of the state-controlled Nchanga Consolidated Copper Mines Ltd (NCCM), with effect from January 1970.

[100] It is alleged that ZCCM is the 'obvious culprit' as it was obliged, and remains obliged, both by assumption of liability and by statute, to remediate the Mine and the area surrounding it.⁶³It is alleged that ZCCM's failure to clean up the lead pollution after the Mine closed in 1994 is to blame, and members of the proposed classes would not have been exposed to the adverse effects of lead pollution if not for ZCCM's reckless neglect, which continues to this day.

[101] It is common cause that smelting activities in the period up to 1925 was heavily pollutive, given that ZCCM employed no pollution controls whatsoever. During ZCCM's control of the Mine (1974-1994) there was no emission control for years because the electrostatic precipitator, a crucial piece of emission control equipment, was broken

⁶³ See section 9A of the Zambian Mines and Minerals Act 1995.

and not repaired or replaced while smelting continued. All measures of lead pollution in the surrounding communities sky-rocketed from the levels recorded in 1974, being the end of the relevant period. This worsened in 1985, when (again in ZCCM's own words) the Imperial Smelting Furnace's (ISF) pollution controls became non-operational. It worsened further when, in 1989, the pollution controls collapsed and were removed, without being replaced. Thus, by the time the Mine was shut down in 1994, ZCCM had operated its lead smelter without adequate atmospheric emission control for 12 years, and without any such control for 5 years. This and other failures are detailed in Anglo's papers.

[102] In ZCCM's own words, the period beginning in 1985 represents probably 'the worst period of lead pollution, in the history of the Kabwe Mine'. In 1989, ZCCM decided to settle out of court any legal cases filed against it, because, in its own words, it was 'culpable from (an operations) point of view'. ZCCM simultaneously documented its awareness that the issue would persist even if the plant was shut down.

[103] In 1995, ZCCM publicly accepted responsibility for the ongoing crisis and vowed to implement a promising remediation plan with substantial assistance from outside sources. In August 1996, ZCCM wrote the following in a letter to an engineering company, SRK Consultants in Johannesburg:

'Elevated blood lead levels and thus lead poisoning will not decrease in number naturally. If no rehabilitation or remediation exercise is embarked on, it can be guaranteed that the children from the mining townships will continue to be born with elevated blood lead levels and be susceptible to further increases that are likely to lower their life chances in terms of academic and hence economic potential. The welfare and well-being of entire communities shall continue to be disrupted and in its worst case cut short. ZCCM now has the knowledge and the possible solutions that have the backing of those that are world's leading experts in the field of lead poisoning

and contamination. It would be difficult if not impossible to hand down the responsibility of remediation, rehabilitation and more importantly, liability to another generation. The repercussions and consequences of not remediating can only grow with time.'

[104] The remediation plan was not implemented by ZCCM. Instead, it disposed of the Mine and surrounding land to private investors and sold over 2,000 contaminated homes to the community. As a result, the community still has unrestricted access to exposed mine dumps, whose contaminated dust settles daily on the surrounding homes. The continuation of artisanal and small-scale mining by thousands of people and smelting by third parties continue unabated.⁶⁴

[105] Anglo asserts that following the closure of the Mine in 1994, and in accordance with Zambian legislation enacted in 2000, ZCCM retained all historical liabilities associated with the Mine. It held the legal responsibility to address the environmental and health impacts on Kabwe residents and became responsible for the remediation and rehabilitation of the Mine. In the 2000s, the World Bank and the Zambian government attempted on multiple occasions to assist ZCCM in remediating the Mine's surroundings. These efforts are ongoing, but they have been largely unsuccessful to date. The Kabwe Canal continues to transport lead-polluted debris to the nearby town of Chowa, due to ZCCM's disastrous decision to backfill a sedimentation pond. Dump surfaces remain largely uncovered and artisanal and small-scale miners dig for lead on 'Black Mountain', an old slag heap where children play directly exposed to slag dust.

⁶⁴ On the eve of the hearing Anglo filed a further supplementary affidavit deposed to by Mr Schottler, the Head of Legal-Global Disputes' for the Anglo Group of Companies. The affidavit comprised of two pages and 70 photographs and some videos. The purported purpose of the affidavit was to provide an 'updated view as to what is happening currently at Kabwe' and includes a short description of the photographs. The applicants objected to the admissibility of the affidavit. The affidavit in my view does not take the matter any further. Mr Schottler does not have any relevant technical expertise and is thus unable to give context to any of the photographs in an admissible manner. There is therefore no basis to admit the affidavit into evidence.

[106] Anglo argues that ZCCM's negligence and omissions is an unforeseeable intervening event (*novus actus interveniens*), that absolves Anglo of all liability. It is submitted that ZCCM's actions and omissions are proximate in time to the proposed classes' injuries and took place against a crystal-clear backdrop of knowledge of the harmful effects of its decisions. By contrast, Anglo's 'alleged and speculative omissions' occurred in a different era, between a century and 48 years ago, when knowledge of the harmful effects of lead pollution on smelter communities were only starting to emerge in international publications. For example, it would be another twenty years (1990s to 2000s) before the use of lead in petrol was considered harmful enough to start phasing out. Indeed, the contemporary documents bear out the proposition that the Mine (and thus, much less Anglo) was not aware until the late 1960s of any adverse health effects on the surrounding community.

[107] Anglo further argues that even if a causal link between any conduct of Anglo during the relevant period and any injuries currently suffered could be shown (which it cannot), then Anglo would only be held responsible for such contribution if it could be shown (which it cannot) that the contribution was made in a negligent way—i.e. that Anglo's 'guilty lead' emitted between 50 and 100 years ago contributes to current injury and that such contribution was more than *de minimis*. It is reasoned that in such case Anglo could only be held liable to the extent of the guilty contribution and no more. But even then, the causal link was broken by the subsequent reckless conduct of ZCCM.

[108] In this regard it is submitted that ZCCM's reckless emissions between 1974 and 1994, as well as its reckless conduct after that, in failing to remediate, and in fact exacerbating lead pollution in Kabwe, renders any potentially negligent acts by Anglo entirely remote from the damage — both because such conduct by ZCCM was not foreseeable by Anglo, was entirely unreasonable (and indeed reckless), and because

it constitutes a series of intervening acts and omissions committed with foresight of the danger and thus breaking the causal chain.

[109] Anglo argues further that the applicants' experts acknowledge that, between 1946 to 1974, the Mine made substantial and beneficial modifications to its smelters and their air pollution control devices. Anglo has demonstrated that the way the technology employed by the Mine evolved over the relevant period, was consistent with then international practice. This evidence is not disputed by the applicants. The applicants' experts also do not specify what the prevailing standards were at the time. It is argued that in the absence of articulating and establishing what the prevailing standard was during the relevant period, this court is invited to embark upon 'an impossible enquiry' into whether Anglo has breached such unknown standard. Thus, the applicants cannot argue that the new technology over this period did not conform to prevailing standards.

[110] It is further contended that the applicants' case is devoid of any specifics regarding Anglo's alleged wrongdoing, as it is not specified what the reasonable Mine in Anglo's position would have done differently to prevent or reduce lead emissions at the time. Anglo alleges that, with the exception of a few isolated operational events that the applicants seek to elevate to systemic pollution control problems, there is no evidence from the applicants regarding the deficiencies of the Mine's smelters during this time period, nor the extent to which these smelters permitted the emission of lead fumes into the atmosphere. This is in stark contrast to the admittedly serious systemic issues that ZCCM highlighted in the years following 1974.

[111] Anglo concludes that the applicants' case on the Mine's knowledge (and thus, in their minds Anglo's knowledge), fatally suffers from hindsight bias and is simply based on conjecture derived from contemporary knowledge of lead pollution in Kabwe,

after the pollution of the last 50 years under the stewardship of ZCCM. And while the question of foreseeability may be fact-bound, the trial court will not be furnished with any better facts than those already produced through the historical documents that the applicants have relied upon. Relying on *inter alia, Roe v Minister of Health*, 65 and *Glasgow Corp v Muir*, 66 it is contended that it is impermissible for a court to apply present day spectacles to assessing what was known or ought to have been known at the time.

Discussion

[112] The above summary of the parties' arguments indicates that the application is fiercely contested. In and of themselves, the certification application documents are close to 15,000 pages. Anglo and the applicant have each submitted a plethora of reports and expert affidavits that contain not only technical evidence, but also explain the history and the development of the Mine. There are 800 pages of heads of argument alone. This is to be anticipated, given the substantial weight of inquiries concerning foreseeability, standard of care, causation, and knowledge of the harm.

[113] I am mindful of the fact that the certification of a class action is a procedural step and is not an invitation to weigh the probabilities. For purposes of certification, this court only needs to be convinced that there is a cause of action raising a 'triable issue'. It requires a two-part enquiry: first, whether there is a prima facie case on the facts, and second, whether there is an arguable case on the law. A prima facie case is established when the facts alleged by the applicant, if accepted, will establish a

⁶⁵ Roe v Minister of Health [1954] 2 Q.B. 66.

⁶⁶ Glasgow Corp v Muir [1943] A.C. 448.

⁶⁷ CRC Trust (n 17) para 41.

cause of action. As Wallis JA remarked in CRC Trust, this is not a difficult hurdle to cross.⁶⁸

[114] The test does not however preclude the court from examining the evidence on behalf of Anglo. The appropriate way to deal with that kind of factual material is set out in *CRC Trust*:

The test does not preclude the court from looking at the evidence on behalf of the person resisting certification, where that 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. That is not an invitation to weigh the probabilities at the certification stage. It is merely a recognition that the court should not shut its eyes to unchallenged evidence in deciding the certification application'. ⁶⁹

[115] A class action should however not be certified if the case is 'hopeless'. In *CRC Trust* the SCA remarked that a case is *legally* hopeless if it could be the subject of a successful exception. The test on exception is whether on all possible readings of the facts no cause of action is made out. In such instance, it is for the defendant to satisfy the court that the conclusion of law for which the plaintiff contends cannot be supported upon every interpretation that can be put upon the facts. It is *factually* hopeless if the evidence available and potentially available after discovery and other steps directed at procuring evidence will not sustain the cause of action on which the claim is based. To [116] The applicants' case faces several difficulties. As will be elaborated upon in the following sections, I hold the view that the applicants' case is factually and legally flawed. Firstly, the facts and documentary evidence the applicants rely on in support

⁶⁸ Ibid para 40.

⁶⁹ Ibid para 41.

⁷⁰ Ibid para 35.

of their claim is insufficient to establish a prima facie case against Anglo. Second, the applicants' proposed legal conclusions are untenable and not supported by the facts.

The applicants' case is factually hopeless

[117] As a starting point it is necessary to provide a brief analysis of the evidence that the applicants relied on to establish a prima facie case. The first document on which the applicants place great reliance on, is the 1893 Broken Hill Report (the Report). They argue that this Report constitutes prima facie proof of Anglo's knowledge of the harm of lead and more specifically knowledge of harm to the historical Kabwe community. As a result, the applicants consistently cite the Report and the so-called 'Broken Hill attitude' in support of their argument against Anglo.

[118] In the late 1880's, after children and adults fell ill with lead poisoning, the New South Wales authorities appointed a commission of inquiry to investigate the problem of lead poisoning at Broken Hill in Australia. The commission had 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 around the mines and smelter nests, who were not themselves engaged in mining. 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 Report purportedly presented substantial evidence of lead poisoning in the neighbouring communities of Broken Hill, Australia, attributed to the emission of fumes from the lead smelters which were 'injurious to the general population'. The commission noted that 'the kind of poisoning to be expected among both classes (workers and townspeople) is almost exclusively of the chronic sort'.

[119] The applicants argue that 'initial evidence' suggests that the Mine had direct contact with Broken Hill, Australia and ought to have been aware of the Report. According to them, further investigation into this will be conducted via discovery and subpoenaing of local archives. The applicants further argue that, in any event, regardless of whether Anglo had actual knowledge of its contents, the Report amply demonstrates that the risks were already well understood when Anglo got involved in the Mine, the tools to investigate the impact of lead pollution were widely available, and the harms were identifiable by applying a 'modicum of common sense'. It is submitted that this is prima facie evidence of a 'dirty dysfunctional operation ... of long-standing disregard and neglect.'

[120] However, Anglo was only established in 1917. There is not any evidence that the Report came to the attention of Anglo at any point (including between 1925 and 1974). The applicants do not explain how an entity, established 24 years after the Report was published, located in a different country and on a different continent, and in an age of basic forms of communication technology, came to know of this Report. In these circumstances, it cannot be suggested that Anglo had knowledge of the harms set out in the Report.

[121] However, notwithstanding whether Anglo (or the Mine) was made aware of the Report, a cursory examination of the entire document (not just the excerpts cited by the applicants) indicates that the applicants have exaggerated the significance of the report to support their position. The applicants' primary argument regarding the Report is that it demonstrates knowledge that Anglo ought to have had about the 'general population' in Kabwe, because the board responsible for the Report pointed to the 'general population' in Willyama as being injured by lead fumes from the smelters at Broken Hill, Australia. However, their selective quotation fails to consider the complete

contents of the board's conclusion and recommendations: The report described the different types of emissions from the smelter stacks with which it was concerned: fumes and flue-dust. There is a distinction between fumes and flue-dust. Fumes float away and the latter sinks to the ground close to the smelter. The report concluded that:

'From these data we conclude that the fumes are injurious to the general population, and after considering all the circumstances, it seems probable that at this place the effectively poisonous part of the matters which issue from the stacks is the heavier part, or flue dust — no direct evidence having appeared to show that the fume which travels to very great distances actually exerts poisonous influence; and that the fluedust affects man perhaps mainly through drinking water. Hence, we are of the opinion — not that the lead-fume is innocuous, but that in the present case the task of preventing the escape of particles of flue-dust should be regarded as imperative and urgently needing to be undertaken'.

[122] The report then recommended that the flue-dust which was settling within 600 yards of the Australian mine was responsible for 'exerting poisonous influence' and the cause of harm which, in turn, required a recommendation to close the drinking water reservoirs in which the flue-dust was landing and ensuring piped water supplies.

[123] Therefore, the findings of the board are more nuanced than the applicants care to explain. However, even were it to be assumed that the Mine (or, for that matter, Anglo) had seen the Report, the only knowledge that could be gleaned from it is that:

(a) potential harm to residents living close to a lead mine can be eliminated by preventing flue-dust and closing open drinking water reservoirs; (b) there is no evidence that fumes which are dispersed through the stacks cause harm to the general population, and (c) the communities surrounding the mine, beyond 600 yards (548 m) north, were not considered to be at risk of harm. Consequently, it cannot be argued

that knowledge of the Report equates to knowledge of the risk of harm to the historical Kabwe community.

[124] The applicants further aver that 'Anglo's knowledge of the wider impacts of its activities' are demonstrated by a 'series of documents' that show water and soil contamination on the Routledge Farm during 1966, to the south east of the Mine site. The 'series of documents' referred to consist of a mere five pages and the evidence does not support the applicants' case that the Mine (or, for that matter, Anglo) had knowledge of the harms of lead exposure to the historical community living in the Kabwe district.

[125] On the applicants' own version, the evidence shows that two tailings dam breaks in 1960 and 1965 caused damage to Mr Routledge's fish, livestock and crops. This is far short of demonstrating that the Mine or Anglo knew that emissions from the smelters were reaching the entire Kabwe district and causing the historical community harm. These five pages make no mention of lead pollution and are thus irrelevant to the applicants' hypothesis about the origin of lead pollution in Kabwe's historical communities, which is that prevailing winds dispersed airborne emissions from mine stacks.

[126] The applicants place significant reliance on a memorandum prepared by Dr. van Blommenstein. The objective of the memorandum was to determine the lead concentrations to which the Mine's employees were being subjected. In doing so, it provided a number of recommendations aimed at mitigating 'worker exposure to lead inhalation and ingestion'. The applicants fail to mention that the Mine subsequently established an experimental vacuum system, a dust collection system, and a dust counting laboratory in response to Dr. van Blommenstein's recommendations. The applicants argue that while Dr. van Blommenstein 'only expressed concern for

employees of the Mine, the risks to the wider community must have been reasonably foreseeable'. But this again is mere assertion, without factual substantiation. Although the applicants acknowledge the lack of evidence linking Dr. van Blommenstein to the historical Kabwe community's harms, they improperly request that this court—sitting more than half a century later—deduce that the Mine or Anglo should have been aware of harms to the historical Kabwe community due to the Mine's knowledge of worker harms.

[127] Lastly, in around 1970, Dr lan Lawrence was employed as a medical doctor at the Mine. He tested approximately 500 blood samples from children living in the vicinity of the Mine and found high BLLs. Within a month, his research led to the commissioning of a report by the Mine from a Professor Lane and a Mr King of Manchester University. It also prompted extensive investigations into children's blood lead levels being carried out by NCCM, (a predecessor of ZCCM). The applicants have not yet been able to locate a copy of this report and Anglo claims to have no knowledge of its whereabouts. However, it is clear from contemporaneous memoranda that the report of Professor Lane and Dr King endorsed Dr Lawrence's findings and made recommendations for reduction in environmental lead contamination.

[128] Therefore, before the early 1970s, there is no evidence to imply that Anglo was specifically aware of the risks that lead pollution posed to the historical Kabwe community. The detrimental consequences of lead pollution on children in Kasanda, Makululu, and Chowa were not made widely known until 1975, a year after the relevant period, when Dr. Clark, a young doctor employed by the Mine, published his thesis on the sources of lead pollution and its effects on children living in the mining community of Kabwe, Zambia. Prior to 1975, the Mine was concerned about the health of *adult employees* who worked at the Mine and were thus exposed to lead emissions.

However, Anglo, has provided evidence that the Mine has consistently and conscientiously attempted to mitigate this risk to their employees.

[129] In their founding affidavit, the applicants' only apparent theory of 'what went wrong' in Kabwe during the relevant period was that the stack heights of the smelter stacks were too *short*, resulting in a fumigating and looping plume from the smelter delivering pollutants to the ground, where they looped downwards and enveloped nearby residences. When Anglo pointed out in the answering affidavit that the stack heights were consistently increased with every technological upgrade during the relevant period, far beyond what the applicants' experts stated was required in the founding papers, the applicants' theory of breach changed. In the replying affidavit, the applicants contend that *tall* smelter stacks were the cause for contamination in Kabwe, not short ones. The ostensible reason given in response was that fallout from short stacks would not have reached Kabwe's residential areas, whereas tall stacks allowed contamination of the entire district.

[130] Nevertheless, the applicants in argument concede that they must establish that Anglo was aware, or should have been aware, that lead persisted in the environment for more than half a century and that the continued presence of lead would be detrimental to the present community. The applicants rely on the opinions of Professors Betterton and Harrison to back up these claims.

[131] Professor Betterton opines that 'by 1914, the dangers of lead poisoning were widely known across the lead mining industry, as was the need to mitigate exposure'. This is a broad assertion. He fails to specify the kind of harm that was recognized during that period or the corrective actions that should have been executed to avert those harms. In any case, this statement does not imply that Anglo knew that lead pollution would harm future generations because it lingered in the environment for a

period of 50 to 100 years. The applicants have therefore not demonstrated through Professor Betterton's evidence that the Mine or Anglo were aware of the long-term harm caused by lead in the environment.

[132] In relation to Professor Harrison's opinion, it is averred that 'once the local environment becomes contaminated with lead, this will remain in the environment. Already by the 1950s there was substantial scientific evidence of lead's long-lasting effects'. A section of Professor Harrison's report is then quoted to back up this claim. However, the quote from Professor Harrison's study only shows that lead persists in the environment; it makes no mention of the fact that by the 1950s, it was recognised that lead poses a threat to future generations when it remains in the environment. It suffices to recall that clinical investigators during the 1950s and 1960s regarded BLLs between 50 and 60 µ/dL as typical. This finding is not unexpected, considering that lead was pervasive in several habitats during the 1950s, including areas adjacent to lead mines and urban areas due to gasoline emissions.

[133] Therefore, the applicants have not succeeded in establishing, through the testimony of Professor Harrison, that the Mine (and Anglo, consequently) were aware of the persistent dangers, particularly those linked to lead in the environment, over the past fifty to one hundred years. Furthermore, in response to the inquiry regarding whether Anglo or the Mine should have been aware of the enduring environmental damage caused by lead, Professor Harrison provided the following statement:

'By 1974, there were published studies showing contamination of sites where lead had been used many years before (E10, E15, E20, E21). While the precise magnitude of the lifetime of lead in soil was not known with the confidence level of the present time, there were at least strong grounds to expect that the contamination would exist for 50 years and possibly longer (E17, E22)' (Emphasis added)

Will the applicants' case get better at trial?

[134] As the events at issue in this proposed class action span more than a century, the applicants' case relies almost solely on historical documents written by deceased or otherwise untraceable authors. The founding affidavit demonstrates that in preparing their case, the applicants' attorneys have visited the ZCCM archive twice in 2018 and 2019 and have had a Zambian agent access the ZCCM archive once more in 2020. In addition to the National Archives, Kew (UK), the British Library, London (UK), and the Johannesburg Public Library, the applicants have had access to other archives and repositories around the globe. Anglo contends that, as a result of this exhaustive search and the significant efforts made by the applicants' attorneys to prepare this application over a 17-year period, there is no chance that the evidence presented to this court will change materially after certification, and that evidence available and potentially available after discovery and other steps designed to procure evidence will not support the underlying cause of action. It is therefore contended that the case is 'factually hopeless' and that it is not in interests of justice to allow a class action to proceed if the applicants have not demonstrated a cause of action raising a triable issue.

[135] The applicants disagree. They assert that additional incriminating documents held in so-called 'private archives' may become available to them during pre-trial discovery, and they will use the subpoena process to gain access to these 'private archives'.

[136] Firstly, the applicants have evidently acknowledged that Anglo might not possess the required documents. In their reply they note a concern about the 'apparent lack of documents that Anglo has been able to locate in its own archives in South Africa and in private archives that hold records of its directors and senior leadership'.

The applicants have now indicated that they would like to access the aforementioned 'private archives' through the subpoena procedure. However, the applicants don't say which private archives they want to access. To be fair to Anglo, the application for certification has been in the works for the past 17 years. The applicants were duty-bound to specify where those archives might be and why they believe that those archives would contain documents they would need to prove their case. Therefore, the notion that any pertinent documents remain in unidentified 'private archives' or that the evidence presented in this court will materially alter subsequent to certification is purely speculative.

[137] Secondly, given that the applicants' case is predicated upon historical documents, the certification court is in as good a position as a trial court to read the historical documents; and to divine their meaning. Expert testimony on the meaning of the documents is not admissible, and oral testimony during the trial will not help clarify their meaning. In addition, locating relevant witnesses at an appropriately senior level still alive and with memories intact, when the shortest period in issue is 48 years ago, and the longest stretches back almost 100 years, will be an exceedingly difficult task.

[138] Thirdly, a substantial portion of the material facts presented by Anglo are either undisputed or are indisputable. For example, the facts pertaining to the Mine's operation from 1974 until its closure in 1994, as well as the failed remediation attempts that continue to this day, were not addressed by the applicants in their founding affidavits. Anglo's factual material is also not materially contested by countervailing factual material put up by the applicants in reply. Thus, the applicants have failed to

⁷¹ KPMG Chartered Accountants (SA) v Securefin Ltd and Another 2009 (4) SA 399 (SCA) para 40.

effectively refute the evidence of ZCCM's recent and reckless conduct spanning decades, which is clearly evidenced by documents.

[139] Following the nationalization of the mine, Anglo held an indirect minority stake in ZCCM. The applicants cannot meaningfully contest Anglo's evidence that it had no say in the Mine's operations after 1974. For this reason, Anglo's alleged acts and omissions during the period between 1926 and 1974 represents the highwater mark for the applicants' case. Following that, ZCCM admittedly ran down the Mine by failing to invest in skills and maintenance. From at least 1985 to 1994, it operated the smelter plant with inadequate (and, for the most part, no) emissions control. During this period, all measures of lead pollution, including community blood lead levels, skyrocketed. After the Mine's closure, ZCCM neglected its remediation obligations, which is typically an integral component of a mine's life cycle.

[140] The applicants have further failed to advance any evidence of knowledge of harm to an unborn class living in townships yet to be formed to make up the Kabwe district. This aspect was dealt with in great detail in Anglo's papers. The applicants' expert, Professor Taylor conceded that he was unable to conclude that the Mine was mindful of the impacts that the smelter operations might also have had on the community:

'It does not necessarily follow that the company were mindful of the impacts that the smelter operations might also have had on the community. Nonetheless, it is without a doubt that the issue of lead rich dust on workers and the need to supress it was widespread in the industry.'⁷²

[141] Consequently, how could the Mine then, at the relevant time, have been aware of a *future* generation community? According to the applicants' own expert, based on

⁷² Taylor first report.

available research, it was possible to expect only by 1974 (i.e. the end of the relevant period) that lead contamination would remain in the soil and be harmful to future generations 'for 50 years and possibly longer'. It is also agreed that it was only in the mid-to late 1970s that the US Environmental Protection Agency first issued standards for ambient airborne lead. Leaded petrol was only banned in the United States of America (USA) from 1990 and in parts of Africa from 2005. In a similar vein, it was only shown by the late 1960s and early 1970s that studies in the United Kingdom revealed extensive lead contamination around lead-zinc smelters. Dr Clark, writing in 1975, considered childhood BLLs of between 12 and 22 µg/dL in the Municipality neighbourhood to be within 'the normal range of blood lead levels to be expected in a community unaffected by lead pollution'.

[142] The applicants' case is further bereft of any specification of what Anglo is said to have done wrong, because they fail to say what the reasonable miner in Anglo's shoes would have done differently to prevent or minimise lead emissions at the time. In contrast, the applicants' witness Dr Lawrence confirmed under oath that, in his view, 'the Mine was run very efficiently' in 1969 and the early 1970s.

[143] All of this is evidence is undisputed and will not get better during the trial. Those issues, on the other hand, that can truly only be resolved at trial — because they depend on facts or opinions that are vigorously disputed or disputable between the parties — do not change the essential lack of merits of the applicants' case.

[144] Based on the aforementioned, it can be concluded that Anglo is not prima facie liable, regardless of whether this is due to a *novus actus* absolving Anglo of potential liability or foreseeability. Thus, in the language of *CRC Trust*, this is an example of a case that is 'factually hopeless' because: '...the evidence available and potentially

⁷³ Betterton second report para 12.60.

available after discovery and other steps directed at procuring evidence will not sustain the cause of action on which the claim is based. In other words, if there is no prima facie case then it is factually hopeless.'

The applicants' legal arguments are untenable

[145] The applicants' case fatally suffers from hindsight bias. In *Muir*,⁷⁴ the House of Lords cautioned as follows:

'The court must be careful to place itself in the position of the person charged with the duty and to consider what he or she should have reasonably anticipated as a natural and probable consequence of neglect, and not to give undue weight to the fact that a distressing accident has happened, or that witnesses are prone to express regret, ex post facto, that they did not take some step which it is now realised would definitely have accident.'

In a similar vein, in *Roe*,⁷⁵ which the Zambian Supreme Court endorsed, Lord Justice Denning warned that '[we] must not look at the 1947 accident with 1954 spectacles'.⁷⁶ It is apposite to briefly refer to the facts in *Roe*. Disinfectant, in which ampoules of anaesthetic were stored, had seeped into the ampoules through invisible cracks. The possibility that this might occur was not generally known at the time of the incident, which occurred in 1947. The claimants, who received spinal injections of the anaesthetic, became paralysed. The hospital authorities were sued, but held not liable, because the risk to the claimants was not reasonably foreseeable at that date. The conduct of the doctors was consequently judged according to what reasonable doctors would have foreseen in 1947 — at the time of the incident.⁷⁷

⁷⁴ Glasgow Corp v Muir [1943] A.C. 448 at 454.

⁷⁵ Roe v Minister of Health [1954] 2 Q.B. 66.

⁷⁶ Ibid at 84.

⁷⁷ Clerk & Lindsell on Torts (23rd Ed) at 7 - 174.

[147] Similarly, in *Thompson v Smith Shiprepairers (North Shields) Ltd*,⁷⁸ it was held that where there had long been a general practice of inaction regarding the possibility of deafness through industrial noise, the defendants were only liable for failure to take steps once there was awareness of the danger and protective equipment had become available. For this purpose, 1963 was adopted as the operative date, and the claimants were held not to be entitled to damages for impairment of hearing sustained before 1963.⁷⁹

[148] To establish that Anglo owed a duty of care 50 years and more ago to the proposed class members currently living in the Kabwe district, this court must be satisfied that there is prima facie evidence to find that between almost 100 and nearly 50 years ago, Anglo must have foreseen that the current community, not the historical community, would suffer harm from lead released into the environment by the Mine during the relevant period.

[149] This is an important distinction with *Margereson v JW Roberts*, ⁸⁰ and *CSR v Young*, ⁸¹ relied on by the applicants. In those cases, the court found asbestos mines liable for harm suffered by community members. Individuals residing in close proximity to the pertinent mines during the defendant's operation of said mines were involved in those cases. They did not involve current, present-day residents around the asbestos mines. In the present matter, however, the applicants seek to establish a duty of care generations into the future; a feature of their case for which they quote no precedent. The lack of precedent is indicative of the difficulties, for obvious reasons, of establishing a duty of care to those whose very existence is as yet unknown.

⁷⁸ Thompson v Smith Shiprepairers (North Shields) Ltd [1984] Q.B. 405.

⁷⁹ Clerk & Lindsell on Torts (23rd Ed) at 7 - 194.

⁸⁰ Margereson v JW Roberts [1996] Env LR 304 at 310.

⁸¹ CSR v Young 1998 16 NSWCCR 56 2260.

[150] The factors mentioned above clearly differentiate this case from *Vedanta*⁸² or *Okpabi*, ⁸³ which are cited by the applicants to substantiate their assertion that mining companies have a responsibility to exercise caution towards the communities residing in the vicinity of their subsidiaries' mines. The present matter is considerably more comparable to the case of *Cambridge Water Co*, ⁸⁴ in which the plaintiff sought to hold the defendant (*Eastern Counties Leather or ECL*) liable in negligence and nuisance for spillages of PCE solvent in 1976 which, in 1991 (only some 15 years later), caused damage to an aquafer. In that case the House of Lords (per Lord Goff) held:

'But it by no means follows that the defendant should be held liable for damage of a type which he could not reasonably foresee; and the development of the law of negligence in the past 60 years points strongly towards a requirement that such foreseeability should be a prerequisite of liability in damages for nuisance, as it is of liability in negligence.'

[151] Lord Goff also indicated that neither the common law nor statutory law would hold a 'historic polluter' liable for damage done before relevant legislation controlling the pollutant came into force:

'I wish to add that the present case may be regarded as one of what is nowadays called historic pollution, in the sense that the relevant occurrence (the seepage of PCE through the floor of ECL's premises) took place before the relevant legislation came into force; and it appears that, under the current philosophy, it is not envisaged that statutory liability should be imposed for historic pollution... If so, it would be strange if liability for such pollution were to arise under a principle of common law.'

⁸² Vedanta Resources PLC and another v Lungowe and others [2019] UKSC 20.

⁸³ Okpabi v Royal Dutch Shell PLC [2021] UKSC 3.

^{84 [1994] 2} A.C. 264.

[152] Likewise, in *Savage v. Fairclough*, ⁸⁵ liability in nuisance was not established because the plaintiff's future water supply contamination caused by the application of pig manure-induced nitrates in the ground could not have been predicted in 1991.

Conclusion on triable issues

[153] 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. '86 [154] This court is however duty-bound to screen class actions to ensure that it is in the interest of justice for them to proceed. That is because unlike ordinary actions, class actions have the potential to overwhelm the administration of justice and to exhaust the resources of both plaintiffs and defendants. Because a class action permits the aggregation of claims, even if a claimant has a weak claim, the sheer number of class members and the potential pay-out might force the defendant to settle a meritless claim to avoid an existential threat. 87 For these reasons, the Constitutional Court recognised in Mukkadam that '[p]ermitting a class action in some cases may ... be oppressive and as a result inconsistent with the interests of justice.' 88 [155] A court will not allow a class action, with its significant entailments of cost to the parties and burdens upon the court to proceed, under the interests of justice standard, in circumstances where the certification court considered the cause of action implausible but not unarguable. As remarked in De Bruyn:89

85 Savage v. Fairclough [2000] Env L.R. 183.

⁸⁶ Mulheron, p25, fn 12, quoting from AJ Roman, "Class Actions in Canada: The Path to Reform?" (1987) Advocates' Society J28, 31

⁸⁷ CRC Trust (n 17) para 24. Milton Handler 25 Years of Antitrust 864 – 5 (1973) wrote: 'Any device which is workable only because it utilises the threat of unmanageable and expensive litigation to compel settlement is not a rule of procedure — it is a form of legalised blackmail.'
88 Mukkadam (n 16) para 38.

⁸⁹ De Bruyn (n 23) para 297.

'[C]lass actions 'often involve complex litigation, of importance to many, with significant consequences of both expense and expectation. For this reason also, the interests of justice require that a certification court should not permit a class action to proceed on the minimal premise that the cause of action is not hopeless. Too many, risk too much to proceed on this basis'.

[156] In this regard, the attempts by the applicants to draw a distinction between a case that is legally untenable and one that is factually untenable is flawed. It was made expressly clear in *CRC Trust* that a class action could fail to present a triable cause of action either because it was bad in law or because it was unsustainable on the evidence.⁹⁰ To permit either sort of case to go ahead would be to 'place a ghost in the machinery of justice.' ⁹¹

[157] This is, unfortunately, one of those cases. Firstly, the applicants failed to make out a prima facie case on the facts. Secondly, they failed to make out an arguable case on the law. They have not cited any precedent in which an alleged historical polluter was held liable in tort for negligence because it owed a duty of care to those who had not yet been born at the time it allegedly polluted. I agree with counsel for Anglo that the limited legal precedents available indicate that establishing such an intergenerational duty of care is untenable, as damage to subsequent generations and decades into the future could not have been foreseen. Therefore, the harm now contended for by the applicants was not foreseeable at the relevant time, nor were the proposed classes, the majority of whom had not yet been born.

[158] Thirdly, in order to show that Anglo acted negligently during the relevant period, the applicants needed to show (at least prima facie) what the prevailing standard of reasonableness was during the relevant period, and then show that Anglo fell short of

⁹⁰ CRC Trust para 35.

⁹¹ De Bruyn para 300.

this standard. They failed to do so. Instead, the applicants subjected Anglo to modern standards and modern knowledge. It is undisputed that Anglo installed emissions controls that were state-of-the-art for their time and which were, according to the applicants' expert, 'highly efficient, often approaching 99% even for the smallest particles'.92 The applicants have failed to state how this was not reasonable technology employed for its time.

[159] Insufficient factual evidence therefore exists to substantiate a cause of action that presents a triable issue. This is intrinsically fatal to the application, because, as remarked in *De Bruyn*, 'there is nothing for the trial court to determine', and there are no other factors justifying certification of the class action.⁹³

[160] In the result, the application for certification of the class action must fail. In view of the conclusion I have reached, it is unnecessary to deal with the amici arguments.

THE ALTERNATIVE CASE

THE DETERMINATION AND ALLOCATION OF DAMAGES

[161] The damages or relief sought must be derived from the cause of action and be measurable and capable of being ascertained (determination). In addition, there must be an appropriate procedure for allocating the damages to the members of the class (allocation).⁹⁴ These requirements have no direct parallel in other common law countries' class action jurisprudence. These two requirements 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.

⁹² Prof Betterton.

⁹³ De Bruyn para 24. See also Bartosch v Standard Bank of South Africa Limited 2014 JDR 1687 (ECP).

⁹⁴ CRC Trust para 26.

[162] As stated in *De Bruyn*, the role of the court considering certification, 'is not to determine damages but to gauge whether they are capable of determination and allocation.'95 It is merely a preliminary assessment, as part of the broader interests of justice inquiry.

[163] The various heads of damages are set out in the draft particulars of claim. 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.

[164] In terms of the bifurcated, two-stage procedure proposed by the applicants, damages will be determined at the second stage of the proceedings. The applicants contend that 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 settlement eventuate, this would assist in determining the appropriate tariff payable to individual cass members and the overall value of the settlement.

[165] In *Flint*,⁹⁶ the court approved a settlement containing 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. The applicants propose that in the present matter, 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.

⁹⁵ De Bruyn para 285.

⁹⁶ In Re Flint Water Cases 5:16-cv-10444-JEL-EAS (E.D. Mich. Nov. 10, 2021).

[166] However, as this will rely on the issues in dispute, the pleadings, and the parties' intentions toward settlement, it is impossible to predict how this procedure will play out at this point. However, it may involve the following options: 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). 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). If any further disputes remain over individual cases, individual hearings of the issues peculiar to individual claimants' damages claims (individual hearings).

[167] The applicants seek the direct allocation of any damages award to the class members. They suggested one type of allocation mechanism that could be employed, once all information has been presented and disputes between the parties have been resolved and subject to agreement with Anglo and the sanction of the trial court. It is proposed that following the determination of appropriate brackets or sub-classes of claimants in respect of the quantum of damages to be paid, that a further public notice process be employed to enable class members to claim their damages. 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.

[168] 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,

⁹⁷ Nkala (n 19) 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")

undertaken by the applicants' attorneys. 98 That Trust assumed responsibility for arranging the medical evaluation of claimants and approving payments based on predetermined tariffs.

[169] If the applicants' proposed arrangement is not accepted by the trial court and no appropriate alternative arrangements can be designed, it will always be open to that 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.

[170] That being said, the applicants have not made out a case for the remediation relief they propose. In any event, such relief is inappropriate and ineffective in the form advanced by the applicants, because they have not demonstrated that this remedy is legally sustainable in Zambian law.

Remediation relief

[171] The draft POC attached to the founding affidavit allege that: 'The members of the class have suffered estimated damages under the following heads as a result of the Defendant's conduct: Remediation of the home environment; Remediation of the community environment...'

[172] According to Mr Mwenye SC's affidavit, the applicants intend to bring their claim under Zambian law's tort of negligence. He firstly cites the Zambian Supreme Court case of *Michael Chilufya Sata MP v Zambia Bottlers Limited*, ⁹⁹ (referred to earlier), as authority for the proposition that there is no right of action for nominal damages in negligence. Actual damage to the claimant must be proved. Secondly, he considers

⁹⁸ Blom (n 33),

⁹⁹ Michael Chilufya Sata MP v Zambia Bottlers Limited (2003) ZR 1.

whether the alleged physical harm to the proposed claimants' health and wellbeing is actionable. However, he does not address whether the alleged damage to the 'home environment' and 'community environment' is actionable as a negligence claim. Similarly, Mr Hermer QC, the applicants' English law expert, does not address this issue.

[173] The onus lies on the party who asserts that the law of a foreign country applies where it differs from our own. Each aspect of foreign law is a factual question and any evidence on that aspect must emanate from someone with the necessary expertise.

[174] Absent any allegation by Mr Mwenye SC (or Mr Hermer QC) that damages for remediation is actionable as a common law negligence claim, the applicants have failed to show that this claim raises a triable cause of action. For this reason alone, the application to certify the class action including the remedial remedy must be denied.

[175] Regardless, there are valid reasons to be sceptical of such a claim because the applicants have failed to provide any factual or legal information about it. Is it a negligence claim for damage to property? Is it a nuisance claim? Is it a form of special damages arising from the characteristics of the alleged personal injuries? Regarding each of these alternatives, Zambian precedent that establishes the triability of the remediation relief has not been presented. There is also some reason to doubt whether the English law recognises an actionable claim for remediation damages in

[176] To begin with, should the claim be pursued in the form of damages to the property of the class members, there is no evidence that they possess any specific property rights or titles that would qualify them to seek compensation for 'the home environment' and 'community environment.' In fact, these two 'environments' are left undefined.

the form that it is claimed.

[177] The supporting affidavits, draft POC, and founding affidavit do not specify the tenure or title of the properties to which the remediation claims pertain. The founding documents make no allegation or provide any proof of ownership of the properties for which remediation damages are sought. The founding papers are also silent on the nature of the titles relating to the undefined 'community environment'; presumably some of which would be municipal or State-owned. What precisely constitutes the 'community environment' is also not addressed. It follows that, on the facts before the court, there is no basis to consider that there could be any claim for negligence by Anglo resulting in damage to any prospective class member's property, even if the draft POC were to be amended.

[178] The applicants further request that the court disregard the ongoing remediation initiatives conducted by ZCCM and the Government of Zambia via the Zambia Mining and Environmental Remediation and Improvement Project (ZMERIP). The plans for that remediation project indicate complex interaction between the Zambian State, the project's global funder (the World Bank), and the affected communities. It demonstrates how further remediation would require extensive consultation, not least because it risks displacement of affected communities and implicates rights attendant to the various properties on which remediation will be performed.

[179] Anglo explains in its answering affidavit that the ZMERIP project components include rehabilitation of waste disposal areas, such as lining the Kabwe Canal and upgrading the solid and hazardous waste disposal facility. Emergency interventions have been undertaken, such as repairs to one of the tailings dams to reduce the outflow of tailings and seepage. Remediation of contaminated hotspots includes remediating the Mine's Primary School and select households in Kasanda and Makululu, as well as improving environmental infrastructure. Efforts are also underway

to strengthen environmental governance and compliance and to undertake localised interventions involving local and national State institutions.

[180] The applicants make no mention of how damages for Anglo's alleged liability for remediation would be determined in the context of these existing and ongoing efforts. In reply, the applicants simply say that the ZMERIP remediation efforts do not negate their claim for remediation relief, that Anglo is blame-shifting to ZCCM, and that any shared liability can simply be apportioned at trial. This, however, misses the point that the remediation relief must be demonstrated to be ascertainable in a certification hearing in order to be properly amenable to determination in a class action.

[181] For the first time, the applicants now admit in their heads of argument that 'the effort to remediate the Kabwe environment will undoubtedly require the combined action of the Zambian government, ZCCM and civil society' but they argue that the complexity of the problem should not preclude the right to a remedy. I agree with Anglo's contention that this trivialisation of Anglo's concerns masks the depth of the problem in the applicants' case: As remediation activities are ongoing in Kabwe, any remediation damages for which Anglo is allegedly liable is a shifting goalpost. The history of ZCCM's efforts show that remediation may in fact make matters worse if not handled with great care. The applicants fail so much as to make a basic proposal of how ZCCM's and the Zambian Government's ongoing responsibility and jurisdiction over remediation efforts will be navigated concurrently to determining the claim for remediation damages against Anglo. In this, they have failed to make out a prima facie case that the remediation relief is ascertainable or determinable.

[182] In *Kirk v Executive Flight Centre Fuel Services Ltd*,¹⁰⁰ the Court of Appeal for British Columbia considered the certification of a class action in a case concerning the spill of helicopter fuel in certain water sources. The Court held that the plaintiff is not required to show proof of harm on a balance of probabilities at the certification stage, but he must show that a methodology exists 'that is not purely theoretical but is capable of proving and measuring harm on a class-wide basis.' ¹⁰¹ The Court explained that: 'A proposed methodology will not satisfy the certification requirements if it shows only how a loss can be measured, rather than how such a loss can be established on a class-wide basis'.

[183] In the present matter the applicants have not attempted to show either how remediation damages can be measured nor how such a loss could be established on a class-wide basis. 102 The applicants have therefore failed to show that the proposed claims for remediation relief have any basis in law.

Conclusion on remediation relief

[184] The applicants have not attempted to clarify or provide context for the term 'remedial'. They failed to adduce any evidence or to demonstrate that such remediation is feasible, both in terms of the likelihood that any necessary steps would be successful and in terms of the class members' ability to carry out such remediation both practically and legally.

¹⁰⁰ Kirk v Executive Flight Centre Fuel Services Ltd 2019 BCCA 2019 BCCA 111.

¹⁰¹ *Ibid* para 103.

¹⁰² See also *Pro-Sys Consultants Ltd v Microsoft Corporation* [2013] 3 SCR 477, in which the Supreme Court of Canada considered an application to certify a class action by 'indirect purchasers' of Microsoft products. The Court held: 'The requirement at the certification stage is not that the methodology quantify the damages in question; rather, the critical element that the methodology must establish is the ability to prove 'common impact'.... It is not necessary at the certification stage that the methodology establish the actual loss to the class, as long as the plaintiff has demonstrated that there is a methodology capable of doing so.

In any case, the damages they claim for such remediation relief have not been demonstrated to be determinable or allocable, as required by precedent. There is no evidence indicating what remediation would entail or how it would be carried out. Worse, how could the hypothetical cost of remediating (say) school grounds be allocated as damages to any specific class member? These issues are not addressed in the documents submitted by the applicants.

[186] The claim for remediation relief is so vague as to be indeterminable, especially when read in conjunction with the extraordinarily broad scope of the class sought to be certified, both geographically and in terms of injury (issues addressed below). Certifying a class action that includes a claim for remediation relief is not in the best interests of justice.

OPT-IN V OPT-OUT: A wholly foreign opt-out class is impermissible.

[187] As stated, the applicants propose a bifurcated mechanism on the following basis: Stage one, in which the common issues of liability will be determined, will be conducted on an opt-out basis. Stage two, dealing with individualised matters and damages will be conducted on an opt-in basis.

[188] In order to participate in a class action, individual class members are required to take proactive measures under the opt-in class action regime. Simply put, class members are required to participate in and indicate their intention to join the class action; if they do not, they will not be held liable for the outcome of the litigation or be entitled to any benefits. The foundation of support for the opt-in regime lies in the notion that parties who are not informed about the litigation should not be obligated to abide by its results. Conversely, unless individual class members opt out of the class action, the opt-out class action regime automatically binds class members to the class

action and the outcome of the litigation. 'The opt-out regime is primarily supported on the grounds that the opt-in requirement could compromise the facilitation of access to justice, which is one of the primary goals of class action litigation'.¹⁰³

[189] Anglo contends that the opt-out mechanism is inappropriate for class actions in which the class plaintiffs are foreign *peregrini* as this court lacks jurisdiction over foreign *peregrini*. That is because there is no consent, express or implied, to jurisdiction from that absent foreign plaintiff.

[190] The applicants contend that the opt-out mechanism in relation to *peregrini* is appropriate and consistent with South African law.¹⁰⁴ In support of their argument that this court can exercise jurisdiction over foreign *peregrini* class members on an opt-out basis, simply on the fiction that they received notice and decided to take no action, the applicants rely mainly on two South African cases: *Ngxuza*, ¹⁰⁵ and *Nkala*. ¹⁰⁶

[191] In Ngxuza, the 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 held as follows:

'[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

¹⁰³ Professor Theo Broodryk. The South African Class Action Mechanism: Comparing the Opt-In Regime to the Opt-Out Regime (Vol 22) [2019] PER 5.

¹⁰⁴ 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.

 ¹⁰⁵ Permanent Secretary, Department of Welfare, Eastern Cape and Another v Ngxuza & Others 2001
 (4) SA 1184 (SCA).

¹⁰⁶ Nkala (n 19).

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. 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'. [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 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.'

[192] In *Nkala*, this court certified an opt-out class action that included tens of thousands of foreign plaintiffs, who were migrant mineworkers. The court nonetheless assumed jurisdiction over the foreign putative plaintiffs and certified the opt-out class action, *inter alia*, because those foreign plaintiffs would have no access to justice absent certification of the class action:

'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 portion 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 Africa, Mozambique, Malawi, Lesotho and Swaziland, and are in poor health.'107

[193] The applicants contend that the approach in *Ngxuza* and *Nkala* is binding and should be adopted in this case. I disagree. Neither *Ngxuza* nor *Nkala* disrupts the jurisdictional position in our law and is not authority for the proposition that a South African court can exercise jurisdiction over an opt-out class made up entirely of foreign *peregrini*.

[194] In Ngxuza all class members were incolae of South Africa, but some were local peregrini in relation to the Grahamstown High Court, where the matter was heard at first instance. South African law treats local peregrini completely differently to foreign peregrini. A division of the High Court with subject matter jurisdiction (for example, if the cause of action arose within the jurisdiction of that division) does not need to

¹⁰⁷ Nkala paras 100; 103.

confirm its jurisdiction in relation to a local *peregrinus* defendant, but it does need to do so in relation to a foreign *peregrinus* defendant. The concept of local *peregrini* is largely a historical anachronism and various statutes have done away with almost all the differences between *incolae* of a Division and local *peregrini*. Sections 166 and section 169 of the Constitution make it clear that there is a single High Court, split into different Divisions. Foreign *peregrini*, however, are not subject to the jurisdiction of this single High Court.

[195] Moreover, Cameron JA held in *Ngxuza* that the court's personal jurisdiction over the *incolae* justified the assumption of personal jurisdiction over the local *peregrini*. This case has no such anchor. The proposed classes are all foreign *peregrini*. In addition, all class members in *Ngxuza* had a connection with the Eastern Cape, given that the class definition was 'all people in the Eastern Cape Province who were in receipt of disability grants and who had such grants cancelled or suspended between the period 1 March 1996 and the date of this judgment'. None of the members of the proposed classes in this case have a connection to South Africa. The class members' only connection with South Africa is that Anglo is domiciled here.

[196] *Nkala*, likewise, can be distinguished from the present matter. Firstly, the jurisdictional point was not argued by the parties. Secondly, the court did not consider the issue. An issue that is not disputed by the parties and which the court is not called upon to decide does not constitute a *ratio decidendi* which can bind a court. Thirdly, the classes in that matter were only partially made up of foreigners and they all had a strong connection to South Africa—they had all worked on mines in South Africa for several years, as a result of which they contracted silicosis or tuberculosis. The evidence in that case was that they had kept these contacts throughout, for instance,

¹⁰⁸ Shenker v Levy 1997 (4) SA 260 (W) at 264 to 265.

ex-miner associations or trade union networks, through which notice would reach them. Here, the applicants have classes made up exclusively of foreign *peregrini*, all of whom have no connection to South Africa.

[197] The applicants also rely on foreign jurisdictions to support their argument that, despite the jurisdictional difficulties, an opt-out procedure best serves the purpose of a class action in this case. It is argued that Canada, the United States, and Australia have all recognized this by requiring class actions to be conducted on an opt-out basis. It is contended that these jurisdictions are in line with the 'conventional situation' and approach adopted in South Africa, namely that an opt-out procedure best gives effect to the constitutional right of access to courts. 109

[198] The applicants submit that similar considerations have been persuasive 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*. They contend that in this regard, 'it is significant that in jurisdictions where class actions are more established, there has been general endorsement of an approach favouring certification of an opt-out class action comprising foreign peregrini'. For example, in *Silver v Imax Corp*, ¹¹⁰ and *Ramdath v-George Brown College*, ¹¹¹ the Ontario Superior Court, and in *Airia Brands v Air Canada*, ¹¹² the Ontario Court of Appeal certified class actions where the vast majority of the class members were *peregrini*.

[199] In *Ramdath*, the 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

¹⁰⁹ CRC Trust para 29.

¹¹⁰ Silver v Imax Corp (2009) 86 C.P.C 6th 273 (Can.Ont.Ct.J) (Certification Decision).

¹¹¹ Ramdath v George Brown College 2010 ONSC 2019; See also Airia Brands Inc. v Air Canada 2017 ONCA 792.

¹¹² Airia Brands Inc. v Air Canada 2017 ONCA 792 at para 85.

judgment would not be recognised in India and China, where many peregrini were resident.

[200] In Airia Brands Inc. v Air Canada, 113 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.

[201] The applicants also refer to *Phillips Petroleum Company v Shutts*,¹¹⁴ in which 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* and 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:

'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

¹¹³ Airia Brands Inc. v Air Canada 2017 ONCA 792.

¹¹⁴ Phillips Petroleum Company v Shutts 472 USA 797 (1985).

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.'

[202] 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.'

[203] 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. It held that class actions confer benefits to absent peregrine plaintiffs, whose interests are protected by the class representative and court oversight. 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.

[204] I acknowledge that to establish jurisdiction over foreign class members, Canadian law does not require consent or presence. Of course, this court is not bound by Canadian law. It is also telling that even under the approach in *Airia Brands*, where one of the requirements for jurisdiction over absent foreign class members was stated to be a 'real and substantial connection between the subject matter of the action' and

the local jurisdiction, this court would not have jurisdiction. There is no such connection here.

[205] I am also not persuaded by the ruling in *Phillips v Shutts*. This court, once again, is not bound by US law. Second, Phillips did not involve foreign peregrine plaintiffs, and third, even under the *Phillips* approach, this court would be unable to exercise jurisdiction over members of the proposed classes, because the US Supreme Court in Phillips held that a class may only include foreigners on an opt-out basis if they receive 'minimal procedural due process protection.' This means that each foreigner 'must receive notice plus an opportunity to be heard and participate in the litigation, whether in person or through counsel'. In addition, each class member must personally receive a 'fully descriptive notice' over 'first-class mail'.¹¹⁵

[206] In the current case, the notice procedure followed by the applicants does not offer an equivalent level of robust due process protection. First-class mail will not be utilised to deliver letters addressed to class members in Kabwe. In this instance, the Phillips court would not have presumed jurisdiction.

Conclusion: Opt-out v Opt-in

[207] The opt-out classes the applicants seek to have certified are enormous. On their estimate, between 131 000 and 142 000 of the approximately 225 000 Kabwe district residents, including between 89 000 and 99 000 children will form part of the class action. The proposed classes are made up entirely of foreign *peregrini*: people who are domiciled and resident in Zambia.

[208] In *De Bruyn*, this court held that it is impermissible to certify an opt-out class made up of foreign *peregrini*. There, Ms De Bruyn sought to certify a class action on

¹¹⁵ Phillips (n 114) page 472 U. S. 812

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. There (like here), the applicant had sought to have certified an opt-outclass made up entirely of foreign peregrini (the 'Foreign Shareholders Class''). Unterhalter J held that this was impermissible:

'32. However, while certification binds incolae, it does not bind peregrini who are not, absent submission, subject to the jurisdiction of this court. This would permit peregrini who are members of the classes in the South African litigation to pursue litigation in multiple jurisdictions. An adverse outcome before the courts in South Africa would not be binding upon peregrini who would be at liberty to seek a different outcome in other jurisdictions. This is unfair, wasteful and potentially oppressive of respondents who would be required to defend the same action in multiple jurisdictions'.

[209] Ultimately, the applicant proposed fixing the problem by converting the Foreign Shareholders Class to an opt-in class. The court accepted this solution:

'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 into 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'.

[210] Unterhalter J's holding in *De Bruyn* is obiter. However, I find it persuasive for the following reasons: Submission to jurisdiction can be either express or implied. In ordinary litigation (i.e.,- non-class-action litigation), a foreign peregrine plaintiff expressly (or, if not expressly, by a clear and inescapable inference) submits to the

court's jurisdiction by bringing her action. 116 As held in *Mediterranean Shipping Co v Speedwell Shipping Co Ltd*: 117 '[A] plaintiff always submits to the jurisdiction of the court in which he brings his action and if he is unsuccessful in an action before a foreign court and costs are awarded against him an action can be brought in that court to enforce the judgment for costs'.

[211] In the case of implied submission, it must be shown that the party alleged to have submitted behaved in such a manner as to give rise to a clear and inescapable inference that she submitted to the jurisdiction of the relevant court. But one cannot apply this approach to members of an opt-out class made up of foreign peregrini, given that no member of an opt-out class submits to the court's jurisdiction in the same way that an ordinary foreign peregrine plaintiff does. A member of an opt-out class does not expressly submit to the court's jurisdiction, nor does she act in such a manner as to give rise to a clear and irresistible inference that she submitted. She in fact, does nothing. It is her inactivity that puts her in the class.

[212] It follows, as correctly held in *De Bruyn*, that a South African court cannot assert jurisdiction over a member of an opt-out class that is a foreign *peregrini*, because such member has not submitted to the court's jurisdiction, given that they take no action to be a member of the class. As a result, a South African court can only certify a class comprised entirely of foreign *peregrini*, on an opt-in basis.

[213] The applicants' attempt to distinguish *De Bruyn* on several bases in their heads of argument. The applicants' primary argument is that *De Bruyn* is distinguishable because the foreign class members were wealthy investors who could look after themselves. There is no support for the proposition that all the investors in that case

¹¹⁶ Du Preez v Philip-King 1963 (1) SA 801 (W) at 802H to 804G.

¹¹⁷ Mediterranean Shipping Co v Speedwell Shipping Co Ltd 1986 (4) SA 329 (D) at 333G to H.

were wealthy. In fact, the applicant in that case was a retired pensioner who bought R80,000 worth of shares. In any event, a litigant's wealth is plainly irrelevant to whether a court has jurisdiction over that litigant.

[214] The applicants also claim that *De Bruyn* is distinguishable because, there, a foreign class member 'could notionally have been bound by the outcome of litigation in South Africa without knowing'. But that is precisely the case here. It is well-recognised in foreign jurisdictions that opt-out notices are inevitably complicated and unfamiliar. Requiring classes made up of foreign *peregrini* to be opt-in prevents fictitious consent (and the need to prevent this is acute in class actions involving foreign *peregrini*). Professor Debra Basset succinctly summarises the unfairness to foreign claimants as follows:¹¹⁸

'It is with respect to the failure to opt out as constituting consent that an even greater danger lies for non-U.S. absent class members. Consent to personal jurisdiction is often a legal fiction under the best of circumstances. The hapless defendant who answers a complaint without challenging personal jurisdiction has consented to such jurisdiction without knowing he has done so — a far cry from an affirmative agreement. When consent is predicated upon a claimant's failure to respond to a lengthy legal notice generated by a far-away foreign court in connection with a potentially unfamiliar type of legal proceeding, the unfairness is apparent.'

.....

In reaching across national boundaries and attempting to bind foreign claimants, U.S. courts potentially take away legal rights from foreign claimants. Under such circumstances — with claimants from another country, who may speak another

¹¹⁸ Debra Lyn Bassett, U.S. Class Actions Go Global: Transnational Class Actions and Personal Jurisdiction, 72 Fordham L. Rev. 41 (2003) pp 74 to 75. See also Diane P. Wood, Adjudicatory Jurisdiction and Class Actions, 62 Ind. L.J. 597, 600-01 (1987) at 609-610: "An inference of consent to be sued from a failure to return an opt-out form is so far from the knowing, voluntary type of consent that the Court usually requires to support adjudicatory jurisdiction, and so contrary to normal assumptions about human nature in lawsuits, that an argument to the contrary is close to absurd."

language, who may be unfamiliar with the U.S. legal system, and who, depending on the country, may have had less formal schooling than most U.S. citizens — the notion of failing to respond to a lengthy legal notice as constituting consent falls'.

[215] In Professor Basset's view, the use of an opt-in procedure avoids these problems:

'When an opt-in procedure is provided, consent is no longer implied or fictitious. In order to bind foreign claimants in a class action, those claimants must affirmatively elect to join the existing class litigation, which eliminates the possibility of fictitious consent. This provides superior due-process protections, and avoids the loss of individual rights under circumstances where neither minimum contacts nor genuine consent exist'.

[216] Finally, the applicants argue that *De Bruyn* is distinguishable because some foreign class members in that matter had already sued the defendant in other jurisdictions. However, while this is significant as to whether the defendant may invoke the *res judicata* or *lis pendens* defence, it is not relevant to whether the court had jurisdiction.

[217] Foreign jurisdictions also follow the approach in *De Bruyn*. For example, under section 47B(11) of the United Kingdom's Competition Act, 1998 (implemented in 2015), a class action may be brought in respect of economic injury as a result of anticompetitive conduct in the UK. The class may be opt-out for class members domiciled in the UK, but the class must be opt-in for class members not domiciled in the UK. Similarly, in the European Union, the EU directive on representative actions for the protection of the collective interests of consumers, aimed at harmonising consumer class actions among EU member states, precludes opt-out class actions where some class members reside outside the member state in which the class action is brought.

In other words, if one or more class members live outside the member state in which the class action is brought, the class must be opt-in. The following was said:

'[I]n order to ensure the sound administration of justice and to avoid irreconcilable judgments, an opt-in mechanism should be required regarding representative actions for redress measures where the consumers affected by the infringement do not habitually reside in the Member State of the court of administrative authority before which the representative action is brought. In such situations, consumers should have to explicitly express their wish to be represented in that representative action in order to be bound by the outcome of the representative action.'

[218] In addition to following jurisdictional first principles, this is good policy. Anglo, in my view, is correct when it asserts that, in addition to avoiding fictitious consent, requiring a foreign class to be opt-in prevents foreign class members from re-litigating on similar facts in different jurisdictions (in other words, it ensures that the class action has 'preclusive effect' internationally; put differently, it prevents jurisdictional arbitrage). It is easy for foreign *peregrini* in an opt-out class action to argue that the results of the class action do not bind them because they did not submit to the foreign court's jurisdiction, and thus the matter is not *res judicata* for them. It is much more difficult to do the same thing if the class action is opt-in.

[219] Finally, the applicants argue that an opt-in class would be 'under- inclusive' and would deny class members access to justice because it would take ten years to take instructions from all the class members. This does not follow. To begin with, in these circumstances, this court cannot exercise jurisdiction over an opt-out class comprised entirely of foreign *peregrini*. It does not even reach the question of under- or over-inclusiveness. Further, if an opt-in class would be under-inclusive, it means that the applicants' notice procedure would be insufficient to draw people out who fall within

the classes. If this is the case, an opt-out class would effectively bind class members to the first stage without their genuine consent.

[220] Secondly, a person does not need to instruct or consult with the applicants' attorney to opt into the class. She merely needs to send a notice with her name, address and telephone number to the relevant email address or postal address. As this court held in *Nkala*, a class member's 'claim to membership is not determinative of [her] actual membership' and her 'actual membership would have to be proven'.

[221] This is why the applicants' repeated claim that opt-out classes are necessary to ensure access to justice is incorrect. If the applicants can provide sufficient notice to Kabwe residents to enable them meaningfully to opt-out, then it can provide them with sufficient notice to enable them to opt-in if they wish.

[222] If this court were to certify on an opt-out basis, it would result in over a hundred thousand Zambian nationals being bound by the class action without their informed consent, including tens of thousands of children.

[223] Precluding the certification of opt-out class actions made up of foreign *peregrini* furthers the interest of justice in class actions: Firstly, requiring classes made up of foreign *peregrini* to be opt-in prevents fictitious consent. Secondly, it ensures that any judgment has preclusive effect. This gives effect to our existing law on jurisdiction.

[224] For these reasons it would not be appropriate to certify the class action on an opt-out basis.

THE CLASSES

[225] The applicants seek certification of a class action, on behalf of two proposed classes: a) children and b) women of child-bearing age. The class of children consists of: children under the age of 18 on the date that the certification application was

launched, which was 20 October 2020; who reside in the Kabwe district, Central Province, Zambia; 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 who have been injured due to lead exposure. The class of women of childbearing age consists of women over the age of 18 and under the age of 50 on 20 October 2020; who reside in the Kabwe district; who have resided in the Kabwe district for at least two years between the ages of zero and seven; who have been pregnant or are capable of becoming pregnant; and who have been injured by lead exposure.

[226] The general requirements for a valid class definition are well-established: the class must be defined with sufficient precision so that class membership can be objectively determined, and it must not be overly inclusive. These requirements are not inflexible rules. They must be approached purposively because they are subordinate to the interests of justice. The primary functions of a class definition are to facilitate the notification of prospective class members, to determine who is bound by the outcome, and to identify who is entitled to relief. As stated in *CRC Trust*, the essential question will always be whether the class is sufficiently identified that it is possible to determine at all stages of the proceedings whether a particular person is a member of the class. 120

[227] As stated, 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. But the size alone of the potential classes does not render the class definitions over-broad.¹²¹ What would

¹¹⁹ Stellenbosch University Law Clinic and Others v Lifestyle Direct Group International (Pty) Ltd and Others [2021] ZAWCHC 133; [2021] 4 All SA 219 (WCC) paras 61 — 63; CRC Trust para 29. ¹²⁰ CRC Trust para 34

¹²¹ Nkala (n 19) endorsing the views of the Federal Court of Australia in Johnson Tiles Pty Ltd v Esso Australia [1999] FCA 636 para 16.

however make it overbroad is if there is a mismatch between the class definition and the triable issues.

[228] Anglo's alternative case before this court is that on the assumption that some class action should be certified, it should not be on the terms proposed by the applicants. It is contended that the classes are too broad and cannot be determined objectively. It raises three objections to the classes: First, the classes should be limited to the residents of Kasanda, Makululu, and Chowa (the 'KMC' townships) (the geographical scope argument). Second, only KMC residents who 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 (the range of injuries argument). Third, excluding any adult women whose claims have prescribed under Zambian Law (who suffered injuries prior to 20 October 2017) (the prescription argument).

[229] The applicants contend that narrowing the classes is unjustified and inappropriate and would result in the *arbitrary* exclusion of potentially thousands of individuals who share an interest in the determination of the common issues and will result in irreparable injustice. It is contended that 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. It is contended that Anglo's arguments in favour of these narrower boundaries are, in truth, disguised arguments on the merits of the prospective class members' claims and is conflating the merits of the prospective class members' claims, which will be determined at trial, with the question of an appropriate class definition. With reference to *CRC Trust*, ¹²² it is asserted that

¹²² CRC Trust (n 17) para 31.

the correct test for appropriate breadth 'is the existence of sufficient common issues of fact and law that may be resolved in the interests of all class members'.

[230] The test for an appropriate class definition is the same as it is for all aspects of certification: whether it is in the interest of justice to certify the specific classes proposed by the applicants. In determining the interests of justice (including in respect of class definition) the factors in *CRC Trust* must be weighed against each other, including whether a triable case has been made out that justifies the class definition requested. *CRC Trust* is no authority for the proposition that sufficient common issues is the sole determinant of an appropriate class definition. This would in any event be inconsistent with *Mukkadam*. The court merely stated that an over-inclusive class can have the result that there is insufficient commonality:

'An over-inclusive class also raises the question whether there are common issues of fact or law that can conveniently be resolved in the class action in the interests of all members of the class. The broader the class the less likely it will be that there is the requisite commonality.'

[231] As the court recognised in *De Bruyn*, ¹²³ 'the membership of a class should have an identity of interest. Furthermore, the heterogeneity of a class may impact upon the common issues capable of determination in a class action, the suitability of a class representative and the complexity of the proposed litigation..... [A] class may be overextensive and lack coherence which gives rise to other infirmities'.

[232] The applicants' attempt to separate the existence of common issues from the existence of a triable issue therefore falls to be rejected: The two are inextricably linked. Class litigation may be warranted due to sufficient common issues, as is the case in the present instance; however, that is only one of the considerations. The

¹²³ De Bruyn (n 23) para 27.

enquiry does not end there. The applicant is required to establish a prima facie case demonstrating its ability to prove those issues in its favour with regard to the entire class.

[233] This is illustrated by *Wal-Mart*, ¹²⁴ where a class action was sought claiming damages and interdictory relief for alleged systemic discrimination by Wal-Mart against female employees in all 50 states. The US Supreme Court refused to certify *inter alia* on the basis that the applicants had failed to provide sufficient evidence making out discrimination in respect of broad swathes of the class. The following is a quote from the syllabus, which makes it clear that one cannot make out common issues without making out a prima facie case in respect of those issue in relation to the class generally:

'(a) Rule 23(a)(2) requires a party seeking class certification to prove that the class has common "questions of law or fact." Their claims must depend upon a common contention of such a nature that it is capable of classwide resolution — which means that determination of its truth or falsity will resolve an issue that is central to the validity of each one of the claims in one stroke. Here, proof of commonality necessarily overlaps with respondents' merits contention that Wal-Mart engages in a pattern or practice of discrimination. The crux of a Title VII inquiry is "the reason for a particular employment decision," and respondents wish to sue for millions of employment decisions at once. Without some glue holding together the alleged reasons for those decisions, it will be impossible to say that examination of all the class members' claims will produce a common answer to the crucial discrimination question.

(b) General Telephone Co. of Southwest v. Falcon, 457 U. S. 147, describes the proper approach to commonality. On the facts of this case, the conceptual gap between an individual's discrimination claim and "the existence of a class of persons who have

¹²⁴ Wal-Mart Stores v Dukes 564 U.S. 338 (p 008-4070), referred to with approval in CRC Trust para 31.

suffered the same injury," ..., must be bridged by "[s]ignificant proof that an employer operated under a general policy of discrimination," Such proof is absent here. Wal-Mart's announced policy forbids sex discrimination, and the company has penalties for denials of equal opportunity. Respondents' only evidence of a general discrimination policy was a sociologist's analysis asserting that Wal-Mart's corporate culture made it vulnerable to gender bias. But because he could not estimate what percent of Wal-Mart employment decisions might be determined by stereotypical thinking, his testimony was worlds away from "[s]ignificant proof" that Wal-Mart "operated under a general policy of discrimination.".......

[234] In the body of the majority's opinion it was held:

'In this case, proof of commonality necessarily overlaps with respondents' merits contention that Wal-Mart engages in a pattern or practice of discrimination. That is so because, in resolving an individual's Title VII claim, the crux of the inquiry is "the reason for a particular employment decision," Cooper v. Federal Reserve Bank of Richmond, 467 U. S. 867, 876 (1984). Here respondents wish to sue about literally millions of employment decisions at once. Without some glue holding the alleged reasons for all those decisions together, it will be impossible to say that examination of all the class members' claims for relief will produce a common answer to the crucial question why was I disfavored." 125

[235] The majority held, that if the class wished to have certified a nationwide class, evidence of nationwide discrimination was required, and not merely evidence from a handful of states:¹²⁶

'Here, by contrast, respondents filed some 120 affidavits reporting experiences of discrimination — about 1 for every 12,500 class members — relating to only some 235 out of Wal-Mart's 3,400 stores. ... More than half of these reports are concentrated in

¹²⁵ Wal-Mart Stores at 352.

¹²⁶ Ibid at 358.

only 6 States (Alabama, California, Florida, Missouri, Texas, and Wisconsin); half of all States have only one or two anecdotes; and 14 States have no anecdotes about Wal-Mart's operations at all. ... Even if every single one of these accounts is true, that would not demonstrate that the entire company "operate[s] under a general policy of discrimination," ... which is what respondents must show to certify a companywide class.'

[236] Class definition provides the foundation for a class action. 127 As a result, it is critical that this court carefully examines any proposed class definition and ensures that there is no mismatch between the class definition and the triable cause of action. This is critical because class definition has a direct impact on the class action's complexity and manageability. If classes are too broadly defined, the classes become unnecessarily and unrealistically large — with an attendant increase in costs, issues, delays and so on. This is not in anyone's interests — not the true class members, not the defendant and not the courts.

[237] As a result, saying that any excess class members will be trimmed at trial is not an answer: Even removing excess class members during trial depletes judicial and party resources. It is better for the court to exclude class members with no claim at certification. The practical reality, as demonstrated by *Nkala*, is that class actions often settle after certification and before the trial even begins. But this means that the class must be properly defined at certification stage – not later.

[238] A failure to do so can imperil the truly deserving members of the class. Settlement may be more difficult to achieve if the class is unrealistically broad. Moreover, even if settlement is reached, if the class is overbroad, the members of the class who have no genuine claim will be taking away compensation that ought rightly

¹²⁷ De Bruyn para 27.

to go to the truly deserving members of the class. In addition, our courts have recognised that class actions must not be used to bully respondents into settling what is ultimately an unmeritorious claim.

[239] It is therefore not tenable to suggest that it will do no harm to include additional people in the class definition. On the contrary, a precise class definition that tracks the triable cause of action is critical. It is in the best interests of the class members who have legitimate claims, the respondent, and the court.

GEOGRAPHICAL SCOPE

[240] 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.

[241] Various academic studies confirm that the town of Kabwe has remained highly polluted to this date. By all accounts, the area immediately surrounding the Mine – including the KMC townships – is polluted by lead. 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).

[242] The applicants contend that residence in the Kabwe district was chosen as a pragmatic geographical limit to the proposed classes that will facilitate proper notification and ensure adequate commonality. They say there are four advantages to this geographic restriction: (a) The Kabwe district has an official, clearly demarcated boundary line; (b) It is well understood by prospective class members; (c) It allows for

¹²⁸ Yabe et al 2015 Annexure ZMX 18.

targeted class notification; (d) and it encompasses all of the areas that Anglo accepts are worst affected by lead pollution.

[243] The applicants first contend that Anglo's proposal to confine the classes to the KMC townships is likely to create significant uncertainty for both potential class members and the trial court. 129 This is because, as the applicant's attorney, Ms Mbuyisa explains, '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'.

[244] The applicants argue that residents will have difficulty in determining whether they are members of a class, and virtually impossible for a court to make an objective determination, particularly as the proposal does not account for the movement of residents within the Kabwe district. Equally, a definition based on a particular radius from the Mine would also cause 'incalculable confusion' among prospective class members and would be unworkable.

[245] This argument has no merit. In their founding papers, the applicants had no trouble delineating the KMC townships. Only once Anglo proposed in answer to limit the planned classes geographically did the applicants claim they did not know where the KMC townships began or ended. There are numerous maps and diagrams in the papers that show the boundaries of each township without qualification or reservation, and the body of the founding affidavit includes numerous references to the KMC townships with no indication that their borders cannot be identified. In fact, the applicants' experts, as well as the different studies on which they and the applicants depend, constantly refer to the KMC townships as identifiable entities.

¹²⁹ See Thompson 2020; Thompson 2022 paras 23-39.

[246] The founding affidavit also clearly states where each applicant resides. It is either in Kasanda, Makululu or Chowa (or, in the case of the fifth applicant, in Makandanyama, which is part of Kasanda). The applicants also know where each of the additional 1 058 people that Mbuyisa Moleele represents lives:

'In addition to the thirteen class representatives, Mbuyisa Moleele represents a further 1058 individuals in this action.... The majority of the individuals live in Makululu (479). 401 live in the community of Kasanda (including the communities of Maganda and Makandanyama) and a further 178 live in Chowa.'

[247] The applicants also briefed Professor Thompson to estimate how many children with particular BLLs live in Kasanda, Chowa and Makululu. She had no difficulty doing so for each district, drawing on the 'Kabwe Lead Stats report', which provides '2017 population sizes ... for [the] Chowa, Makululu and Kasanda districts.' Ms Mbuyisa, the applicants' attorney, belatedly claims in reply that the borders of the KMC townships cannot be determined. But such claim is not supported by a confirmatory affidavit from an applicant, or any resident of Kabwe. Ms Mbuyisa cannot explain how she may have intimate knowledge of what Zambians know or do not know about the KMC township limits.

[248] As a result, the KMC townships are not an insufficiently specific basis for defining the suggested classes. In any event, people living at the borders of the district would be subject to the same uncertainty. It is no reason not to define the classes appropriately at the certification stage.

[249] Second, the applicants assert that the question of whether lead contamination from the Mine spread across the Kabwe district, and to what extent, is a key issue in dispute, as it pertains to causation. They contend that Anglo is not permitted to 'use the class definition to deprive class members of adjudication of this issue.' The

applicants, it is argued, have presented compelling prima facie evidence of widespread contamination that is not limited to the KMC townships or a defined radius. [250] The evidence suggests otherwise. The applicants' case on causation in their founding papers was that the Mine caused lead pollution in the area immediately surrounding the Mine, namely Kasanda (located directly northwest of the Mine), Makululu (also immediately northwest of Kasanda), and Chowa (immediately southeast of the Mine). This is most evident in the founding affidavit: 130

'[W]ind patterns in Kabwe are dominated by winds from an eastern/south- eastern direction which, as Prof Betterton points out, aligns with global scale trade wind patterns known since the eighteenth century. Throughout the Mine's operations, these winds carried lead fames and dust from smelting and mining operations directly over Kasanda and Makululu, with occasional shifts in wind direction, particularly in summer, also carrying emissions to nearby Chowa. Due to the proximity of the townships of Kasanda, Makululu and Chowa to the Mine site, this airborne lead and windblown dust would have been deposited in the local environment continuously'.

[251] The research pertaining to lead pollution that was referenced in the founding affidavit also concentrated almost exclusively on the KMC townships: Firstly, the 1975 study by Dr A.R.L. Clark of the London School of Hygiene and Tropical Medicine focused on four townships within three km of the Mine. His research was prompted by reports of eight Kabwe children dying from suspected lead poisoning. 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. 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.'

¹³⁰ At paragraph 76.

[252] Dr Clark's own findings noted that his investigations showed that, 'of the four communities situated within a radius of approximately 3 000 metres of the Kabwe Mine smelter, only two, namely Kasanda and Makululu were exposed to a high atmospheric lead environment.' According to Dr Clark, Kasanda at the time covered 650 000 square meters (or 0.65 km) and the centre of Kasanda was 2.2 km from the smelter stack. Makululu was an area west of Kasanda and so it was also in the way of the prevailing wind.

[253] Secondly, the studies of Dr Lawrence and Ann and Connor Reilly. Dr Lawrence arrived in Kabwe in 1969. He became concerned about the children of the workers who lived in the neighbouring township (this is most likely Kasanda because it was the main dwelling place for mineworkers before they were evacuated to Chowa at the Mine's request following Dr Lawrence's inquiry). His research only concerned people living in the immediate vicinity of the Mine. The research of the Reillys likewise centred on 'the vicinity of the Broken Hill Lead and Zinc Mine, Kabwe' within a distance of approximately 1 km of the Kabwe smelter.

[254] Thirdly, the 2001/2002 study by the World Bank, the 2015 study by Dr John Yabe and the 2019 study by Bohdan Kiibek. The first study found that environmental lead pollution was greatest in Kasanda and Chowa. The second 2019 study produced contour maps illustrating 'a range or high topsoil concentrations ... across areas covering Kasande Chowa and Makululu'. And according to the 2015 study led by Yabe, high BLLs were identified in 246 children under the age of seven from Kasanda, Makululu, and Chowa. Dr Yabe's subsequent 2020 study found that '[a]reas where residents were most affected were Kasanda, and Makululu, ... followed by Chowa'. [255] Fourthly, all of the applicants' experts who examined the geography of lead pollution concentrated on the KMC townships: Professor Betterton was briefed to

'prepare a report dealing with mining practices and lead emissions from the Kabwe Mine ... during the period 1925 —1964/1974'. His report focuses on the KMC townships. He examined '[t]he key routes by which lead from the Mine has been transferred to the Kabwe community, in particular the villages of Kasanda, Makululu and Chowa'. He also considered 'whether the company should have foreseen the risk of lead poisoning to members of the Kabwe community, in particular residents of Kasanda, Makululu and Chowa'. He concludes that 'it was not safe for the residents of Kasanda or Makululu, which are 'downwind' of the smelter, or even for the residents of Chowa, which ... is in such close proximity to the plant that it too was contaminated with lead fume and lead-containing dust' and that the 'company must have known that they were subjecting the townships to lead pollution'. Finally, he deduces that lead discharged from the Mine from 1925 to 1974 'is likely to be a significant component of the lead in the environment to which residents of Kasanda, Makululu and Chowa are currently exposed'. Professor Taylor, similarly, was briefed to focus on the KMC townships.

[256] Fifthly, the applicants rely on a 'heat map' which was created by a team of Czech researchers led by Bohdan Kiibek. The map depicts information regarding the concentration of lead in topsoil and reference subsurface soil. As confirmed by Professor Taylor, this map clearly shows that the Mine, and not naturally occurring lead in the area, is responsible for the contamination of the surface soil. The darker areas represent the highest levels of lead contamination in the Kasanda, Makululu and Chowa communities. The map also depicts the extent of the contamination. Professors Harrison and Betterton, experts for the applicants, explain that during the Mine's operations, the prevailing winds carried lead fumes and dust over the townships,

where it settled, and they note that patterns of lead in soil are consistent with the prevailing wind directions and decrease with distance.

[257] In its answering affidavit, Anglo's experts affirmed that the applicants' emphasis on the KMC townships was suitable. Mr. Sharma (Anglo's expert) stated as follows:

'Multiple studies have demonstrated that potential mining and processing impacts are present in a certain area near the Kabwe Plant and that these operations have had a limited impact, if any, in far field areas within the Kabwe District, the Proposed Class Area. Areas up to 20 km from the Kabwe Plant have been investigated, and potential impacts (defined as areas with soil concentrations greater than 400 mg/kg) have been identified in less than 2% of the Kabwe District.'

[258] According to another expert, Dr. Beck, the median and mean BLLs in the KMC townships are significantly higher than those in the remainder of the Kabwe district. In the same vein, Professor Canning asserts that distance from the mine and directionality are the critical factors in determining BLLs. Those who live closer to the Mine have higher BLLs, specifically those positioned south-east (the direction of waterflow) and west-north-west (the prevailing wind direction) of the Mine.

[259] In reply, the applicants aver that whilst the KMC townships are among the most affected by lead contamination, it is not confined to these areas. They responded by submitting an additional expert report (referred to as 'the Betterton replying report'), authored by Professor Betterton, in an effort to establish causation for a district-wide class. This report utilised the 'AERMOD model' to demonstrate that emissions from the Mine might have extended beyond the KMC townships and into the entire Kabwe district.

[260] The applicants contend that the Betterton replying report is supported by further studies, which have shown widespread contamination and resulting lead poisoning

across the Kabwe district. For example: 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. 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). Professor 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'.

[261] The rival modelling exercises conducted by Anglo's experts and the applicants' experts have led to further affidavits and expert reports. Mr Sharma disputes the accuracy of the modelling, with Professors Betterton and Harrison filing further affidavits in defence. The applicants argue that such technical disputes between experts could hardly be resolved at the certification stage and are again a matter for trial and that the existence of such disputes is sufficient demonstration of a trial-worthy issue. It is contended that 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.

[262] It is not as straightforward as the applicants portray it. As repeatedly emphasised in this judgment, the applicants still have a duty to set out sufficient evidence that prima facie show a triable issue in respect of a district wide class. Concerning causation and the founding papers, the conclusions of Drs. Clark and Lawrence or the Reillys do not support the applicants' claim that the mine materially contaminated the Kabwe district, which covers 1,570 km². It demonstrates, at best for the applicants, that the soil in Makululu and Kasanda was contaminated. In addition, the heat map also does not support the applicant's case. The heat map depicts how

closely the contaminated areas correspond to the KMC townships. The applicants cannot argue otherwise, given that the heat map was described in their founding affidavit as 'illustrating a range of high topsoil concentrations (between 500 mg kg-1 and 20 000 mg kg-1) throughout areas covering Kasanda Chowa and Makululu.'

[263] The heat map further dispels any doubt that a district-wide class is grossly overbroad. It shows that the overwhelming majority of the Kabwe district has soil lead concentrations of less than 200 mg/kg, significantly less than the 'soil hazard standard for lead of 400 mg/kg in the US for bare soil where children play, set by the US Environmental Protection Agency (EPA)' relied on by the applicants in their founding affidavit.

[264] As a final effort to justify the certification of a district-wide class, the applicants rely on the Betterton reply report. The goal seems to be to demonstrate, using AERMOD modelling, that 'wind-borne emissions from the Mine/smelter could potentially reach the entire district'. However, even this evidence is insufficient to establish a triable issue of causation for the entire district. First, the issue is not whether *some* lead *could* have made it from the Mine to the ends of the district, but whether sufficient wind-borne lead emissions from the Mine were transported throughout the district to contaminate the soil across the entire district (requiring soil readings of no less than 400 mg/kg). Second, Professor Betterton's modelling is not based on real data. He openly admits that the 'the concentrations reported in these figures are fictitious'. Sharma points out numerous other deficiencies in Professor Betterton's AERMOD methodology, including that instead of using five years of representative meteorological data, as recommended by the US EPA, he attempted to simulate the air transport of lead particles in four discrete, short-term assessments of six hours each; and he did not account for wind frequency or intensity. As a result,

his AERMOD modelling produces results differ from other models and studies on the issue. Professor Betterton himself admits that his AERMOD modelling cannot itself be used to come to any sort of firm conclusion as to the extent to which the Mine could have polluted the entire district.

[265] Third, Professor Betterton admits that his AERMOD modelling does not prove 'whether residents in all areas of the Kabwe district were being exposed to lead pollution emanating from the mine': '[W]hile it is well-established that the area immediately surrounding the mining operations such as Kasanda, Makululu and Chowa are contaminated with lead, there have been relatively few studies documenting more widespread contamination.'

[266] Finally, the applicants claim that according to studies, children throughout the Kabwe district have dangerously high BLLs, and confining the class to the KMC townships would exclude children with high BLLs who do not live in the KMC townships, which would be 'plainly arbitrary.'

[267] This is incorrect. It would not be arbitrary to exclude those with high BLLs who live outside the KMC townships. They would be excluded for a good reason, which is that they are differently situated to those in the KMC townships. The applicants' case has never been that having an elevated BLL in and of itself constitutes a tortious claim against Anglo. The applicants' case is that the Mine contaminated the soil, and that class members have elevated BLLs from inhaling or ingesting that soil.

[268] As a result, the applicants must provide prima facie evidence that the Mine poisoned the soil of the entire district throughout the relevant period (and hence produced increased BLLs throughout the district) rather than only the KMC townships. They have failed to do so because there is no evidence of this from the only source available for that period – Dr Clark.

Conclusion on geographical scope

[269] The applicants argue in their heads that an extremely broad class would not prejudice Anglo, because even if the proposed classes are mostly made up of those with no claim, then those class members would 'obtain no relief at trial and Anglo will suffer no material harm by their inclusion'.

[270] This argument directly militates against the authority of the SCA as enunciated in *CRC Trust* and undermines the rationale of the class definition, which is to include only those with a triable claim against the prospective defendant. The rationale behind certification is (to the extent relevant for class definition) both to protect the interests of those on whose behalf the applicants litigate, *and* those of the defendant which is entitled to show at an early stage why the action should not proceed.

[271] In Hollick v Metropolitan Toronto (Municipality), 131 the court stated that:

'The representative need not show that <u>everyone</u> in the class shares the same interest in the resolution of the asserted common issue. There must be some showing, however, that the class is not <u>unnecessarily</u> broad – that is, that the class could not be defined more narrowly without arbitrarily excluding some people who share the same interest in the resolution of the common issue. Where the class could be defined more narrowly, the court should either disallow certification or allow certification on condition that the definition of the class be amended'.

[272] In addition to not establishing a triable issue, I am not persuaded that the applicants have made out a case in respect of the entirety of the Kabwe district. The class definition is thus overbroad. It would not be in the interest of justice to certify such class.

¹³¹ Hollick v Metropolitan Toronto (Municipality) 2001 SCC 68 para 21.

THE PRESCRIPTION ARGUMENT: ZAMBIAN LIMITATION LAW

[273] A tortious claim under Zambian law prescribes three years after the relevant cause of action accrued, regardless of knowledge of the claim. Section 2(1) of the Zambian Limitation Act¹³² 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.'

[274] This provision was later amended by the Law Reform (Limitation of Actions, etc) Act of Zambia, which replaced the initial six-year period in the Limitation Act with a three-year period, but without changing the essential character of the limitation. Section 22 of the Limitation Act (as amended by the Law Reform Act) provides that if a person is under a 'disability' at the time that a cause of action accrues, then the claim prescribes three years after the person ceases to be under the disability. Section 31(2) provides that a person is under a disability if that person is an 'infant', meaning that she has not yet reached the age of majority. In Zambia, the age of majority is eighteen. Thus, if a member of the second class suffered harm before she was eighteen, her claim would be time-barred three years after her eighteenth birthday.

[275] On that basis, Anglo contends that the second proposed class (the women class) is overbroad because it would include those adult women who suffered harm more than three years before the institution of this application (in other words before 20 October 2017) whose claims have long ago become time barred. Thus, they ought to be excluded from the proposed class.

¹³² The Zambian limitation law is a direct import of the English limitation law. 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.

[276] The applicants concede that if the Zambian statute of limitations applies, the women class would include many claims that have become time barred. They however argue that this is a complex, policy-laden matter, not suitable for determination at the certification stage, let alone through the fixing of a class definition. It is argued that it is a triable issue that must be properly ventilated and determined by the trial court.

[277] They further contend that Zambian limitation law will not automatically apply to any claims before this court since there are strong considerations of policy and justice that would favour applying our more permissive Prescription Act.¹³³

[278] In terms of section 12(3) of our Prescription Act, prescription only begins to run when a person has actual or constructive knowledge of the wrongdoer's identity and the other minimum essential facts from which their claim arises. ¹³⁴ The applicants submit that Zambian limitation law would have the unjust and unconstitutional effect of violating the fundamental right of access to a court in South Africa as thousands of women of child-bearing age, who may have suffered terrible injuries before 20 October 2017, would be entirely excluded from any claim. This limitation would apply regardless of whether these women knew of the facts underpinning their cause of action or Anglo's identity. The limitation would apply even though many of these women are poor and indigent, with no means to prosecute their claims in Zambia. This limitation would potentially apply even if the harm suffered by these women is ongoing and would not have prescribed.

¹³³ Act 68 of 1969.

¹³⁴ 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 Johannes G Coetzee 8 Seun and Another v Le Roux and Another [2022] ZASCA 47 (8 April 2022) 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.

[279] In CRC Trust the SCA stated there are certain questions of law that can be answered on the pleadings as they stand. Unterhalter J elaborated on this principle in De Bruyn¹³⁵, and made it clear that if there is a question of law that can be decided, 'the sooner it is decided the better':

When a court is asked to consider whether there are triable issues in a certification application and a novel question of law arises the court should decide the question of law if it can do so. A determination by the certification court of the question of law will then inform its consideration of whether there are triable issues. If the certification court cannot determine the question of law because it is best left to the trial court to do so, then that conclusion will also inform the consideration as to whether there are triable issues. It is in this situation that it may be said that if the point of law is arguable and is best determined at trial with the benefit of evidence heard by the trial court, then that will weigh in favour of the conclusion that there are triable issues for the purposes of assessing certification.'

[280] Determining the applicable limitation rules are not complex and does not depend on facts not before this court. There is sufficient information before this court to decide the issue and there is no reason to defer this issue to the trial court. As remarked in *De Bruyn*, 'there is little to be gained by triggering the procedural machinery of a class action, only to have a trial court pronounce on the matter and bring the process to a halt, upon a successful exception being taken'.

[281] 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*).¹³⁶ Our courts recognise

¹³⁵ De Bruyn (n 23) para 21.

¹³⁶ See Society of Lloyd's v Price; Society of Lloyd's v Lee 2006 (5) SA 393 (SCA) para 10.

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* (*Price*), ¹³⁷ 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. ¹³⁸

[282] Thus, a prescription statute which extinguishes a right is regarded as substantive, but one which merely bars enforcement of the right is procedural. In South African law, prescription extinguishes a right. Section 10(1) of our Prescription Act provides that: 'Subject to the provision of this Chapter and of Chapter IV, a debt shall be extinguished by prescription after the lapse of the period which in terms of the relevant law applies in respect of the prescription of such debt.' This means that prescription in South Africa is characterised or classified as a matter of substantive law. This position was confirmed by the SCA in *Price* and the Constitutional Court in *Food and Allied Workers Union obo Gaoshulwe*. 139

[283] In contrast, the Zambian Limitation Act, on its plain wording, is merely a procedural bar to an action, which is not destructive of the underlying rights. It is common cause that in this dispute, the *lex fori* is South African law, and the *lex causae* is Zambian Law. This classification would exclude the application of South African

¹³⁷ Society of Lloyd's v Price; Society of Lloyd's v Lee 2006 (5) SA 393 (SCA).

¹³⁸ 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.

¹³⁹ Food and Allied Workers Union obo Gaoshulwe v Pieman's Pantry Ltd [2018] ZACC 7; 2018 (5) BCLR 527 (CC) para 184.

prescription law to the dispute and point to the application of Zambian rules. However, because the Zambian statute of limitation is procedural this creates what is referred to in *Price* as a 'gap' in the choice of law rules. The resolution of the dilemma of the 'gap' involves making a choice between two competing legal systems. ¹⁴⁰ In such a case, a South African court 'must take into account policy considerations in determining which legal system has the closest and the most real connection with the legal dispute before it'. ¹⁴¹ The process is aimed at serving individual justice, equity or convenience by selecting the appropriate legal system to determine issues with an international character. As *Price* remarked, the selection of the appropriate legal system must, of course, be sensitive to considerations of international harmony or uniformity of decisions, as well as the policies underlying the relevant legal rule. ¹⁴²

[284] In *Price*, the SCA concluded that policy, international harmony of decisions, justice, and convenience demanded that the dilemma of the 'gap' in the particular circumstances of that case be resolved by dealing with the issue of prescription in terms of the relevant limitation provisions of the lex causae, English law, and that justice demanded that English law be applied to keep the contractual claim alive and to give effect to the expectations of the parties.

[285] The applicants argue that because 'Anglo was at all times in control of the Mine's activities from its headquarters in Johannesburg', that it is South African law that has the closest connection to the dispute.

[286] I disagree. Even if this factual dispute were assumed in the applicants' favour, it is evident that Zambian law has the closest connection to the dispute. Even if Anglo controlled the Mine from Johannesburg, (which is denied) the Mine was still located in

¹⁴⁰ Price (n 137) para 26.

¹⁴¹ Ibid para 26.

¹⁴² Ibid para 27.

Zambia and the mining occurred in Zambia. The alleged pollution occurred in Zambia. The alleged harm to members of the proposed classes occurred in Zambia. Every member of the proposed classes lives in Zambia. It follows that the Zambian statute of limitation is applicable. It bears emphasis that because Zambian limitation law clearly applies and subjective knowledge on the part of the claimant is irrelevant, such knowledge does not need to be tested at trial (as is often the case when South African prescription law applies).

[287] The applicants contend that our courts have repeatedly held that they may refuse to apply foreign laws where doing so would be contrary to public policy. ¹⁴³ They argue that the Zambian statute of limitation should not be applied because it would non-suit some class members with otherwise good claims. It is argued that in this context the s 34 constitutional right of access to court would be best advanced by allowing these women's claims to proceed.

[288] The point of limitation rules is to non-suit those with otherwise good claims because they took too long to bring them. This is not 'an objectionable infringement of the right of access to justice' or 'contrary to public policy'. This is just what time-bar rules do. The applicants moreover ignore the real-world negative consequences of certifying a class composed primarily of members whose claims have clearly prescribed: Court resources would be consumed considering the claims of class members who plainly have no claim. Additionally, class members with prescribed claims would believe they hold a claim with some prospect of success. They would probably plan around this belief, only to be disappointed and inconvenienced years later.

<sup>Sperling v Sperling 1975 (3) SA 707 (A): See further Weatherley v Weatherley 1879 Kotze 66 at 83
Seedat's Executors v The Master 1917 AD 302 at 307-308; Burchell v Anglin 2010 (3) SA 48 (ECG) para 127. See further Forsyth Private International Law (4ed) 109-115.</sup>

[289] A similar argument was raised in *Jalla v Shell International Trading and Shipping Company*.¹⁴⁴ In *Jalla*, Shell was faced with a class action for an oil spill that had occurred off the coast of Nigeria in 2011. Shell raised the defence that the claim had become time-barred. Counsel for the claimants argued that non-suiting class members through prescription was unjust and would result in the alleged polluter 'getting off'. The Court of Appeal rejected the argument:

'In my view, these submissions were misplaced. This appeal is not a question of anybody 'getting off; on the contrary, the judge found an arguable claim on the merits. It is instead a question of the operation of the applicable limitation period. That might be regarded as an artificial cut-off, particularly by those who may have failed to comply with the relevant statutory period, but it remains the law.'

[290] In addition, the applicants disregard the objective of limitation rules, which is to preserve the quality of adjudication and bring stability and certainty to social and legal affairs. In *Mohlomi v Minister of Defence*, the Constitutional Court upheld the legitimacy of these objectives by stating the following:

'Rules that limit the time during which litigation may be launched are common in our legal system as well as many others. Inordinate delays in litigating damage the interests of justice. They protract the disputes over the rights and obligations sought to be enforced, prolonging the uncertainty of all concerned about their affairs. Nor in the end is it always possible to adjudicate satisfactorily on cases that have gone stale. By then witnesses may no longer be available to testify. The memories of ones whose testimony can still be obtained may have faded and become unreliable. Documentary evidence may have disappeared. Such rules prevent procrastination and those harmful consequences of it. They thus serve a purpose to which no exception in principle can cogently be taken.'145

¹⁴⁴ Jalla v Shell International Trading and Shipping Company [2021] EWCA Civ 63 para 47.

¹⁴⁵ See also Road Accident Fund v Mdeyide 2011 (2) SA 26 (CC) para 8.

[291] Lastly, the fact that Zambian prescription law is somewhat more restrictive than some areas of South African prescription law does not make it contrary to public policy. This is illustrated by the recent King's Bench judgment of *Bravo v Amerisur Resources Ltd.* ¹⁴⁶ The court had before it a choice-of-law rule (article 26 of Regulation (EC) No.864/2007 on the law applicable to non-contractual obligations, or 'Rome II') that stated the following: The application of a provision of the law of any country specified by this Regulation maybe refused only if such application is manifestly incompatible with the public policy (ordre public) of the forum.' The court considered whether the application of article 47 of Law 472 of Colombia – a two-year limitation provision with no knowledge requirement or provision for condonation – could be disapplied for being 'manifestly incompatible' with English public policy. It concluded as follows:

If agree with the defendant that the contention that applying the two-year limitation period in article 47 of Law 472 would be "manifestly incompatible" is untenable. Article 26 of Rome II has to be read alongside Recital 32. The threshold for disapplication of a foreign rule of limitation is very high: ... In *Vilca* Stuart-Smith observed at [98] in relation to a two year limitation period:

"I must respect the balance struck by Peruvian law as its chosen compromise between the legitimate interest that claims should be fully explored and resolved and the separate legitimate interest in the finality of litigation. There are, of course, other elements of Peruvian law which differ from English law and which form part of that overall compromise. For example, the two-year limitation period under Peruvian law for non-contractual claims has no in-built flexibility such as exists under English law under the Limitation Act 1980, which allows the primary limitation period to be disapplied and extended in certain circumstances. That is not to be regarded by the English Judge who grapples

¹⁴⁶ Bravo v Amerisur Resources Ltd [2023] EWHC 122 (KB).

with Peruvian law as a deficiency: it is simply a fact and is part of the balance that Peruvian law has decided to strike between the interests of Claimants and Defendants."

Plainly, there can be no objection in principle that a two-year limitation period is contrary to public policy, still less manifestly so. If I had found that article 47 of Law 472 applied, that would have been because the claimants had expressly chosen that type of action or because the nature of the action is such that, as a matter of Colombian law, the court would determine that this action is by its nature a Colombian group action. It is impossible to see how an application of article 47 of Law 472 which reflected the claimants' choice of action, or which was made applying Colombian law, including the *pro homine* and reasonableness principles, could be said to be manifestly incompatible with English public policy.'

[292] Thus, the suggestion that the prescription argument can be rejected on policy or constitutional grounds is patently bad.

Conclusion on prescription

[293] The applicants have admitted that if the Zambian statute of limitations applies, the second proposed class consists primarily of time-barred claims. The Zambian statute obviously applies. As a result, the majority of the claims in the second proposed class are time-barred, making the class overbroad.

INJURIES AND BLOOD LEAD LEVELS

[294] Class membership is not determined by subjective beliefs, but by objective criteria. In *Nkala*, the court certified a class action on an opt-out basis. It held that the class definition must be 'defined with sufficient precision as to allow for a particular individual's membership to be objectively determined at some stage in the

proceedings'.¹⁴⁷ In the present matter membership will have to be determined during the first opt-in stage through medical examination.

[295] Anglo's primary complaint is that the requirement that class members must have 'suffered injury as a result of exposure to lead' is too subjective. The definition does not explain what constitutes an injury resulting from exposure to lead. The applicants contend that the definition 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.

[296] They argue that the benefits of this definition are two-fold: 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. Second, it is consistent with the medical evidence that there is a broad spectrum of conditions and illnesses that flow from lead exposure. Any need for prospective class members to undergo a blood test, potentially followed by medical examination, is therefore no impediment to the class definition. It is argued that 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.

[297] Anglo's case on the papers is that the classes should be confined to significantly elevated blood lead levels (above 45 μ g/dl or 80 μ g/dl) and just four conditions. The applicants, on the other hand, do not limit the class to a specific measurement of lead in the blood. The applicants contend that many members of the class will have suffered an injury directly attributable to lead exposure even at relatively low BLLs.

¹⁴⁷ Nkala (n 19) para 44.

[298] The applicants have pleaded three sets of actionable injuries and harm: 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. Second, the class members have suffered injuries *per se* where they have elevated BLLs requiring medical monitoring, including venous blood lead monitoring and intervention. 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.

[299] However, before discussing the three categories of actionable harm, it is necessary to examine the striking out application, which has ramifications for the ongoing discourse regarding the definition of an actionable injury.

Strike out application

[300] Anglo asks the court to strike out the new evidence of Professors Bellinger and Lanphear, introduced for the first time in reply. In essence, the evidence sought to be advanced by the applicants in reply is that injury is not only suffered at a BLL of 5 µg/dL and more, but also includes individuals with 'elevated' BLLs (in other words less than 5 µg/dL) *and* individuals with a non-zero BLL.

[301] In their founding papers, the applicants stated that there is no safe level of lead in blood, and their POC reflected this. In their founding affidavit the applicants produced a table of harms associated with different blood lead levels drawn from Professor Dargan's affidavit. In the answering affidavits, Anglo's experts, Doctors Beck and Banner, disputed the contention that there was no safe blood lead level. The

evidence of Professors Bellinger and Lamphear was seemingly adduced to rebut these contentions.

[302] The bulk of applicants' case, and the evidence in support thereof was, however, primarily focussed on the threshold of BLL of 5µg/dL at which point medical monitoring and action is required (thus the minimum BLL that constitutes harm). Anglo's complaint is that it was therefore called upon to only meet a case that those with a BLL over 5µg/dL may have suffered an injury for purposes of the class definition. [303] The first Bellinger affidavit contains the following evidence: (a) A summary of literature that purportedly shows that low BLLs, including BLLs of less than 5 µg/dL, are associated with various adverse and irreversible effects in in children; (b) An argument that these adverse effects are more pronounced in disadvantaged children; (c) Evidence for what Professor Bellinger calls the 'supra-linear dose- response relationship' for lead, which is the proposition that a 1 µg/dL increase in BLL has a greater adverse effect at a lower BLL (i.e., a BLL of less than 10 µg/dL) than a higher one; (d) That a person who grew up close to the Mine in Kabwe that currently has a relatively low BLL likely had a 'considerably higher blood lead concentration in early childhood' and that any maladies the person now suffers from, that could have been caused by lead, likely were caused by lead exposure in childhood.

[304] Professor Lanphear's evidence is to the same effect. In his first affidavit, he summarises evidence that purportedly shows that even BLLs below 5 µg/dL cause harm. He argues that this is supported by standards and guidance of the WHO and the US CDC, 148 and claims that lead can be attributed as 'a contributing risk factor' for maladies suffered by an individual child. In Professor Lanphear's second affidavit, he supplements Professor Bellinger's evidence on the supra-linear response curve. And

¹⁴⁸ Centers for Disease Control and Prevention.

supplements the applicants' case on the link between BLLs, even very low ones, and harm.'

[305] In Bayat v Hansa, 149 the following was held:

'[A]n applicant for relief must (save in exceptional circumstances) make his case and produce all the evidence he desires to use in support of it, in his affidavits filed with the notice of motion, whether he is moving ex parte or on notice to the respondent, and is not permitted to supplement it in his replying affidavits (the purpose of which is to reply to averments made by the respondent in his answering affidavits), still less make a new case in his affidavits'.

[306] It lies of course in the discretion of a court in each particular case to decide whether the applicants' founding affidavit contains sufficient allegations for the establishment of its case. ¹⁵⁰ In court proceedings, especially in proceedings such as the present, a court must approach alleged new evidence in reply with a practical common-sense approach, without the court being overly technical. ¹⁵¹ A party is entitled to introduce new corroborating evidence in respect of an issue that was raised in the founding affidavits and taken up in the answering affidavits. ¹⁵² And in certain circumstances, rebuttal of evidence and allegations raised in an answering affidavit is permissible. ¹⁵³

[307] Upon reviewing all available evidence on this topic, I am inclined to concur with the applicants' assertion that the reply dealing with elevated BLLs does not constitute 'new' information. It is a more (albeit much more) thorough discussion of a topic

¹⁴⁹ Bayat v Hansa 1955 (3) SA 547 (N) at page 533 C-D.

¹⁵⁰ Titty's Bar and Bottle Store (Pty) Ltd v ABC Garage (Pty) Ltd 1974 (4) SA 362 (T) at 369A—B.

¹⁵¹ Lagoon Beach Hotel (Pty) Ltd v Lehane NO and others 2016 (30 SA 143 (SCA) para 16.

¹⁵² eBotswana (Pty) Ltd v Sentech (Pty) Ltd and others 2013 (6) SA 327 (GSJ) para 28.

¹⁵³ Juta and Co v De Koker 1994 (3) SA 499 (T) at 510; Hidro-Tech Systems (Pty) Ltd v City of Cape Town and others 2010 (1) SA 483 (C) para 81.

brought up in the founding papers. In my discretion that evidence should be allowed.

Thus, the strikeout application for that portion of the evidence should be dismissed.

[308] The applicants' attempt to introduce a new case for non-zero BLLs and regular blood testing (the impugned evidence) is, however, impermissible, and the portions of the affidavits in reply referencing the impugned evidence should be struck out. There was no mention of such a case in the founding papers, and no exceptional circumstances exist, nor were any reasons provided by the applicants, to justify a departure from the default exclusionary rule.

[309] Considering the facts, it would be just to direct each party to pay its own costs in relation to the striking out application.

Sequelae injuries

[310] 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. The applicants' experts, including Professor Dargan, Professor Lanphear and Professor Bellinger, have addressed this issue in detail. Their research on the health effects of lead including at very low levels has been highly influential in formulating the internationally recognised standards and guidelines published by the WHO and USCDC. In their opinion, on balance, a child with a BLL as low as 5µg/dL will have suffered a cognitive impairment to which lead has materially contributed.

[311] On the other hand, Anglo's expert, Dr Banner, a United States based paediatrician and toxicologist in this regard, 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. The divergence between experts is self-evidently a matter for trial.

[312] The parties are further 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 English law expert, Mr Gibson, explains the principle as follows: 'Where 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.'

[313] 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. 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.

Injuries in pregnancy

[314] Children and young women who have been exposed to lead are at risk of developing serious injuries in pregnancy, including inter alia, Hypertension and pre-eclampsia; Pre-term delivery and reduced birth weight; Spontaneous abortion and

¹⁵⁴ See Evins v Shield insurance Co Ltd 1980 (2) SA 814 (A) at 835C-D.

pregnancy loss; Increased risk of giving birth to children with congenital abnormalities and adversely affected neurodevelopment; Remobilisation of lead stored in bone into the bloodstream, creating further risk of harm.

[315] 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. 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. Medical monitoring and nutritional interventions are also recommended from a BLL of 5 µg/dL. Chelation therapy is also recommended, before a woman falls pregnant, for those blood lead levels of 45 µg/dL and over. 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 interventions, as chelation therapy has the potential to cause birth defects if given during the first trimester of pregnancy. [316] 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. 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. 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.'

[317] 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. This argument is incorrect for three reasons.

only arise when they fall pregnant. This argument is incorrect for three reasons.

[318] 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 exposure to lead. The class is therefore not confined to those who may fall pregnant. 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.

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.

[319] Third, 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. Women of child-bearing age 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.

[320] As explained above, due to their nature and effects, undergoing chelation therapy entail actionable harm. 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.

[321] 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'. Whether the threshold is indeed met will, of course, depend on the facts and evidence that emerge at trial.

Elevated BLLs

[322] 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.

[323] The parties' experts hold opposing views on the causal link between elevated blood lead levels and the thresholds for actionable injury arising from Anglo's negligence — that is, harm that warrants an award of damages in tort. 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. In summary: 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. 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. Those with BLLs in the range of 20 µg/dL and above blood lead

testing every 1 to 2 months. Those who register BLLs of 45 μ g/dL and over require chelation therapy and further medical monitoring, including monthly blood testing (for 45 μ g/dL — 65 μ g/dL) and fortnightly testing (for 65 μ g/dL and above).

[324] Zambian law, following English law, recognises that negligence alone does not give a cause of action, damage alone does not give a cause of action, the two must co-exist. There is no precise definition of actionable personal injury in Zambian or English law. 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'.

[325] In support of their argument that elevated BLLs in itself satisfies the threshold of actionability, the applicants rely on *Dryden v Johnson Matthey Plc*,¹⁵⁷ a case concerning 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. 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'.¹⁵⁸ In reaching this conclusion, the court held that the first, primary question is whether there has been a bodily change that has left a person 'worse off' in respect of 'health or capability'.¹⁵⁹ Second, there is no bright line separating injuries that are actionable from those that are not, but the injury must be

¹⁵⁵ Michael Chiluya Seta v Zambian Bottlers (2003) ZR 1, citing Lord Reading CJ in Suffolk Rivers Catchment Board v Kent 1941 AC 74.

¹⁵⁶ Dryden v Johnson Matthey Plc [2018] UKSC 18 para 12; Hermer 2020 paras 34 -38; Mwenye para 6.29.

¹⁵⁷ Dryden v Johnson Matthey Plc [2018] UKSC 18

¹⁵⁸ Ibid para 47

¹⁵⁹ Ibid paras 24 and 27, citing Fair v London 8 North-Western Railway Co (1869) 21 LT 326, 327; Cartledge at 778.

more than *de minimis*. ¹⁶⁰ Third, actionable injuries can be asymptomatic, meaning that it is 'hidden and currently symptomless' and the individual is unaware that they suffer from it. ¹⁶¹

[326] Lady Black, writing for a unanimous court, distinguished the facts in *Dryden* from those in the House of Lord judgment *Rothwell*. ¹⁶² *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 change in behaviour. The existence of these plaques was thus held to be insufficient to establish actionable injury. ¹⁶³ 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. ¹⁶⁴

[327] The applicants argue that an elevated BLL means that a class member must change his or her behaviour in various ways to avoid lead exposure (such as by not playing outside, moving to a non-lead-contaminated area, etc.), and thus that an elevated BLL is a bodily change requiring behavioural change that leaves the class member worse off, and therefore that an elevated BLL constitutes an injury *per se*.

[328] Although the existence of actionable injuries remains a factual inquiry, to be decided in each case, Mr Mwenye explains, that the reasoning in *Dryden* would

¹⁶⁰ Ibid paras 15 and 25.

¹⁶¹ Ibid para 27.

¹⁶² Rothwell v Chemical and Insulating Co Ltd [2008] AC 281.

¹⁶³ Ibid paras 10-11.

¹⁶⁴ Dryden para 47.

nevertheless be regarded as highly persuasive by the Zambian courts, bound as they are by English common law principles.

[329] First, chelation therapy (required for people who register BLLs of 45 µg/dL and over) is clearly 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 in 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.

[330] Second, 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. It is argued that an elevated level of lead in the blood alone could therefore not be an injury. Anglo further contends that levels of lead in the blood are 'transient' and fluctuating, and when exposure to lead in the environment is removed, BLLs drop over time, resulting in no actionable injury.

[331] Both arguments are in my view unsustainable. Firstly, irrespective of whether a claimant with elevated BLLs has developed acute clinical injuries, she has suffered a clear physiological change, leaving her worse off: a poison has entered her bloodstream and is being absorbed by her organs and bone. This is no benign or *de minimis* change in physiology. She will have suffered a degree of impairment, which

constitutes actionable harm. Anglo's English law expert rightly accepted, that this issue ultimately 'turns on questions of fact and degree'. Such factual inquiries can only be resolved at trial.

[332] Secondly, although it is common cause that a person's BLL can be transient, the 'transient' 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 evidence produced by the applicants show that the extent of the Kabwe environmental disaster has resulted in a situation where high lead levels in Kabwe are not 'transient'. 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. Moreover, as Professor Dargan observes, children who have suffered chronic exposure to lead, over months or even years, will have developed 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. Even Anglo's 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.

[333] However, with regard to the classification of blood testing as an actionable injury, I am of the view that including such a 'injury' would result in the class being overbroad and vague. The applicants' argument in support of this proposition is that persons with elevated BLLs (and even with non-zero BLLs) require regular medical monitoring through blood sampling, and that blood sampling itself causes harm. The applicants rely on Professor Bergen's evidence to support their case. He explains that,

using a needle to draw blood from the veins can be a distressing experience, particularly for young children. The applicants contend that the pain of the initial needle puncture, the discomfort as blood is pulled into the syringe, and subsequent bruising are not de minimis. They argue that if blood was drawn from a child without consent, it would be a clear-cut case of assault and child abuse and 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. [334] The applicants' argument that the mere act of drawing blood constitutes an injury is fallacious and is not supported by any authority; it is founded solely on the opinion of Professor Bergen. The applicants' conception of 'injury' - by including persons with non-zero BLLs, and blood testing is thus overbroad. If the classes are certified as proposed by the applicants, it would include every child and woman of childbearing age in the district of Kabwe. In addition, the use of 'injury', without further qualification, means that the class definition is impermissibly vague, in that the classes are not 'defined with sufficient precision to ensure that membership of the class can be determined by reference to objective criteria'. 165

CONCLUSION

[335] In Mukkadam, 166 the Constitutional Court recognised that some class actions can set back the interests of justice (including access to justice):

'Courts must embrace class actions as one of the tools available to litigants for placing disputes before them. However, it is appropriate that the courts should retain control over class actions. Permitting a class action in some cases may, as the Supreme Court of Appeal has observed in this case, be oppressive and as a result inconsistent with

¹⁶⁵ De Bruyn (n 23) para 27.

¹⁶⁶ Mukkadam (n 160 para 38.

the interests of justice. It is therefore necessary for courts to be able to keep out of the justice system class actions which hinder, instead of advancing, the interests of justice. In this way prior certification will serve as an instrument of justice rather than a barrier tit.'

[336] In addition to the absence of a prima facie case, which disposes of the application, the trial would be unmanageable if the class definitions were certified on the broad basis sought by the applicants. According to the applicants' version, the proposed classes would total between 131 000 and 142 000 people. Every one of these people would have to prove, amongst other things, in the second stage of the class action, that they suffer from a malady that can be caused by lead exposure; that the malady has, as a matter of fact, been caused by lead exposure, rather than, for example, genetics or malnutrition; and that their lead exposure is due to soil contamination by the Mine during the relevant period, rather than, for example, artisanal mining.

[337] An unmanageable class action is one that would take an extremely long time to be completed, if it is completed at all. The applicants effectively concede unmanageability. The applicants claim in argument that it would take ten years for their legal team merely to take instructions from every member of the proposed classes. If this is so, it would take much longer for a South African court to assess the claim of each class member in the second stage. It bears emphasis that an unmanageable class action is not only adverse to Anglo's interests: It undermines the applicants' access to justice.

[338] In addition, the applicants seek to have certified classes that are plainly (and grossly) overbroad geographically; they do not seriously dispute that the women class is mostly made up of prescribed claims; they rely on a conception of 'injury' that is legally incorrect and which renders the proposed classes vague and misleading; and

they impermissibly ask this court to assert jurisdiction over an entirely foreign class on an opt-out basis.

[339] In this application the applicant seek permission to advance an untenable claim that would set a grave precedent. The precedent is that a business could be held liable half a century after its activities have ceased, to generations not yet born, as a result of being tested against future knowledge and standards unknown at the time.

[340] Under the circumstances it is proper and necessary to dismiss the certification application.

COSTS OF THE CERTIFICATION HEARING

[341] In *De Bruyn*, Unterhalter J refused certification and awarded costs to the respondents on two bases: Firstly, that the applicants had failed to make out a triable issue, and secondly, because the case was funded by commercial litigation funders. Both reasons exist here.¹⁶⁷

[342] The applicants argue that an adverse costs order would have a chilling effect on class actions raising human rights. The argument falls to be rejected. The prospect of an adverse costs order has had no effect on the applicants' funders. They have procured insurance to pay for costs in the event of an adverse costs order and are litigating with gusto. Neither the applicants, nor their attorneys, nor their funders would pay an adverse costs order out of their own pockets.

[343] In the result the following order is made:

The application is dismissed with costs including the costs of three senior and three junior counsel.

¹⁶⁷ De Bruyn para 302.



JUDGE OF THE HIGH COURT

GAUTENG LOCAL DIVISION, JOHANNESBURG

(Electronically submitted therefore unsigned)

Delivered: This judgment was prepared and authored by the Judge whose name is reflected and is handed down electronically by circulation to the Parties/their legal representatives by email and by uploading it to the electronic file of this matter on CaseLines. The date for hand-down is deemed to be 14 December 2023.

APPEARANCES

Attorney for the applicants:

Counsel for the applicants:

Attorney for the respondent:

Counsel for the respondent:

Mbuyisa Moleele Attorneys

Advocate G. Marcus SC

Advocate M. Chaskalson SC

Advocate G. Goedhart SC

Advocate M. Sibanda

Advocate C. McConnachie

Advocate T. Poe

Webber Wentzel

Advocate M. van der Nest SC

Advocate J. Babamia SC

Advocate S. Budlender SC

Advocate L. Sisalana

Advocate D. Smit

Advocate L. Zikalala

Advocate P. Olivier

Advocate K. Williams

Advocate A. Raw

Attorney for the first and second amicus curiae:

Centre for Applied Legal

Studies

Counsel for the first and second amicus curiae:

Attorney for the third to seventh amicus curiae:

Counsel for the third to seventh amicus curiae:

Date of hearing:

Date of judgment:

Advocate K. van Heerden

Legal Resources Centre

Advocate K. Hofmeyr SC

Advocate M. Mbikiwa

Advocate I. Cloete

20 January 2023; 23 January

2023 - 27 January 2023;

30 January 2023 - 31 January

2023

14 December 2023