Cape Town Office

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26th May 2015

Your Ref: 44534 Our Ref: A Andrews

20 May 2015 <u>ATT: SHARON JONES</u> SRK CAPE TOWN Private Bag X18 Rondebosch 7701

Email: smasson@srk.co.za and to sjones@srk.co.za

Dear Ms Jones

RE: SUBMISSION OF COMMENTS ON DRAFT ENVIROMENTAL IMPACT ASSESSMENT FOR CAPE TOWN INTERNATIONAL AIRPORT RUNWAY REALIGNMENT EIA / SRK PROJECT REF NO: 445354

We act for the Development Action Group (DAG). We thank you for allowing us until today to make these submissions on behalf of our client. Our instructions are as follows.

Our client was established in 1986, as a non-profit organisation (NPO), registered with the Department of Social Development (registration number: 0069-194 NPO) and incorporated as an association not for gain under Section 21 of the Companies Act,¹ (registration no: 1993/006859/08) operating in the housing and urban development sector in South Africa. It also operates globally via its membership in the UN-Habitat International Coalition (HIC) and other global networks. It is well-known to government, especially to the National Department of Human Settlements, Western Cape Department of Human Settlements and, Human Settlements Directorate in the City of Cape Town, as a key strategic partner and facilitator of affordable housing delivery and facilitation services in the housing sector. DAG is thus a well-known and respected non-profit organisation operating in the South African housing sector.

Our client's objective, as stated in its vision statement, is "the creation of sustainable human settlements through development processes which enable human rights, dignity and equity". Its mission statement commits it "to create, implement and support community-centred settlement development and advocate for and foster a pro-poor policy environment which addresses economic, social and spatial imbalances."

¹ Act 71 of 2008

In alignment with its vision and mission statements DAG has instructed us to submit the following comments on the DRAFT ENVIRONMENTAL IMPACT ASSESSMENT (Draft EIA report or "report") for the proposed CAPE TOWN INTERNATIONAL AIRPORT RUNWAY REALIGNMENT (runway re-alignment project or "the project").

EXECUTIVE SUMMARY

- a. The draft EIA report is not a basis for a lawful decision making. If its recommendations are adopted without substantial revision, any environmental authorisation granted stands to be challenged as violating the rights of thousands of residents to access to housing, and to an environment which is not detrimental to their health and well being (Constitution, sections 24 and 26).
- b. The report places irrelevant considerations before the decision maker and fails to place relevant considerations before it, in conflict with the mandatory requirements for lawful administrative action set out in section 6 of the Promotion of Administrative Justice Act.²
- c. The airport runway realignment and resultant increased air traffic will have a substantial negative impact on the health and well-being of significant numbers of low income and unemployed residents and their access to housing.
- d. The report fails to make cogent and consistent recommendations regarding health impacts of predicted noise levels, and places irrelevant and objectionable considerations before the decision maker, regarding the alleged adaptability of low income communities to noise impacts.
- e. The draft EIA report fails to adequately assess the impacts of likely increased noise and air pollution levels resulting from the proposed project, and also fails to recommend adequate and enforceable mitigation measures for such impacts, in violation of the requirements for environmental authorisations set out in sections 2, 23 and 24 of the National Environmental Management Act³.
- f. If not properly mitigated, the impacts of the proposed project will result in a violation of the rights of access to housing of hundreds of thousands of poor and vulnerable people.
- g. The report fails to consider reasonable and feasible alternatives or to make out a case based on the basis of independent and credible data and information that no alternatives are feasible.
- h. As such, if the recommendations of the report are implemented, the resulting decision will constitute a violation of the rights of hundreds of thousands of people to and environment that is not detrimental to their health and well-being.

I. Introduction

In 2014, the ACSA drafted plans to expand the Cape Town International Airport. As instructed by The National Environmental Management Act 107 of 1998 (NEMA), it has conducted an Environment Impact Assessment (EIA) before finalizing and pursing their building plans. The EIA of the Cape Town International Airport Runway Re-alignment and Associated Infrastructure Project (runway re-alignment project or "the project") was conducted in 2014 and published in March 2015.

² Act 3 of 2000

³ Act 107 of 1998

This submission argues that the draft EIA report for the runway re-alignment project fails to fully consider the gravity of the project's impact on the vulnerable and disadvantaged population in the vicinity of the project and on the South African housing crisis. If the runway re-alignment proceeds as planned, the resulting increased noise levels and decreased air quality will infringe upon citizens' right to adequate housing (Constitution, Chapter 2, S26(1)) and the right to live in an environment that is not harmful to their health or well-being (Constitution, Chapter 2, S24(a)). As the Airport is located amongst many poor communities, the rights of vulnerable and disadvantaged persons will be particularly affected.

With regards to mitigating the effects of noise on these persons, the draft EIA report does not put forth adequate alternatives or mitigation measures as required by sections 23 and 24 of NEMA. If the runway re-alignment proceeds as planned, increased noise levels will also render several areas unacceptable for housing, affecting plans for densification of existing zones and plans for new housing projects. While the draft EIA report acknowledges the project's effect on housing development, it does not articulate adequate alternatives or mitigation measures as required by section 23 and 24 of NEMA.

II. Increased Noise Levels

Increased noise level is identified as the most significant adverse effect of the project in the draft EIA report. The increased noise will occur in the short-term during the project's construction and will greatly increase in the long-term, both as the Airport approaches functioning at the new operational capacity proposed by the project and as population levels grow.⁴ The report identifies the effects of aircraft noise as a *high intensity consequence* both because of the large number of people who will be affected by the project and because noise levels are likely to affect their quality of life.⁵

The report argues that the most common effects of increased noise levels will be annoyance; this annoyance will greatly impact overall health and stress levels of residents and may cause hypertension.⁶ Noise will also interrupt sleep patterns and thus potentially affect focus and productivity, and disrupt learners at school and patients in healthcare facilities.⁷ Aircraft noise may also lead to an increased risk of cardiovascular disease resulting from long-term exposure to aircraft noise.⁸

Overall, the noise levels are projected to exceed the acceptable guideline levels of 55 dBA for urban districts, 60 dBA for urban districts with businesses and main roads, 65 dBA for central business districts, and70 dBA for industrial districts.⁹ If the runway is re-aligned and operating at maximum capacity (denoted Scenario 4 in the Socio-Economic Impact Assessment of the Cape Town International Airport Runway Re-alignment and Associated Infrastructure Final Report" (S-EIA) and EIA), there will be a significant increase (doubling) of individual noise events exceeding 70 dB(A) in communities below flight paths close to the runway; there will also be an increase in the size of the population and number of sensitive receptors affected.¹⁰ This increased noise level creates an intolerable and therefore inadequate housing environment and an environment that is harmful to the health and well-being of the citizens living in

¹⁰ EIA, pp. 196-211.

⁴ Kerryn McKune Desai, 2014, "The Socio-Economic Impact Assessment of the Cape Town International Airport Runway Re-alignment and Associated Infrastructure Final Report" (S-EIA),

⁵ S-EIA, p. 12.

⁶ S-EIA, p. 12.

⁷ S-EIA, p. 12.

⁸ S-EIA, p. 12.

⁹ SRK Consulting and Cape Town International Airport, 2015, "The Environmental Impact Report of Cape Town International Airport Runway Re-Alignment and Associated Infrastructure" (EIA), p. 85.

affected areas, violating S26(1) and S24(a) of the Constitution.

III. Air Quality

This draft EIA report is a rare example of the disclosure of serious adverse air quality impacts that would remain even after mitigation. See Table 6-13 of the draft EIA report on page 174.

	Extent	Intensity	Duration	Consequence	Probability	Significance	Status	Confidence
Without	Local	Medium	Long-term	Medium	0.1.11	urnun.	(nones)	1000
mitigation	itigation 1 2 3		6	6 Probable		- ve	High	
Key mitigati	on measur	es:						
Encours consum	age pilots to ption;	o shut down	as many eng	ines as possible	when idling an	d taxiing, to redu	ice air po	lution and fue
Encours	ege controlle	ers to limit the	length of the	course of taxiing, w	where feasible;			
 Minimis area ea beginnia 	e congestio rlier, or joi ng of the co	n and therefo n up in the m midor;	re the waiting hiddle of the	times in aircraft q corridor and take-	ueues by e.g. a off, while bigge	allowing small air ar aircraft are lini	craft to lea	ave the take-of take-off at the
Minimis	e the waitin	g time for airc	raft parking as	far as possible;				
Encours technole	age a progr ogy, as well	am for the ac as utilisation	tive conversion of alternative,	on of vehicle fleets less polluting fuels	and other aird with emission	raft-serving equi reduction targets;	pment to r	newer "cleaner
Use bat	tery powere	d ground sup	port vehicles a	and luggage handli	ng vehicles who	are possible;		
 Introductor transport 	e measure it to and fro	s and policie m the airport	s to reduce t	high levels of car	dependency b	y staff, and enco	ourage the	a use of public
Investig	ate the prov	ision of electr	icity and air to	r aircraft at termina	al gates, so as t	o minimise use of	the APUs	and GSE;
 Investig as on a gate but 	ate through rival and be t only when	engagement efore departur the aircraft re	with industry e. Alternative aches the gat	role players the uti ly, pilots should no e; and	lisation of APU t be allowed to	for only 5 minute start the on-boar	is whilst or d APU whi	n stand, as wel lie taxiing to the
 Investig 	ate the red.	uction of rever	se thrust use	during landing, red	ucing both nois	e and aircraft eng	ine emissi	ons.
With mitigation	Local	Medium	Long-term	Medium	Probable	MEDIUM	- V0	High
	1	2	3	6				

Table 6-13: Significance of increased air pollution during operation

The information presented in the report poses the question for decision-makers: can approval for a project be granted when the impact of the project on communities <u>even with</u> <u>mitigation</u> is expected to be HIGH? We submit that if approval is granted based on the recommendations of the current draft EIA report, the resulting authorization will be non-compliant with basic requirements set out in the National Environmental Management Act for such approvals, and stands to be set aside on review.

The project is projected to severely impact air quality. Based on the measurements referred to in the body of the EIA and from Appendix 6B, Air Quality Impact Assessment, it is unclear whether the modeled pollutant levels (presented in Table 6-12 and Figures 6-4 through 6-9) represent pollutant levels that would result from *airport emissions alone* (on the one hand) or a *combination of airport emissions and baseline pollutant levels from other sources* (on the other hand). It is important to note that, if these modeled pollutant levels only represent levels from airport emissions alone, then the overall impact of the CTIA expansion project has been underestimated in a manner that is contrary to best practice, such as the Draft Guideline to Air Dispersion Modeling For Air Quality Management in South Africa (2012).

The health effects that would result from the poor air quality are significant. If the runway, operates at maximum capacity as it presently is aligned (denoted as Scenario 2 in the EIA), the area subject to the risk of increased respiratory hospital admissions will increase by 4% - 6% around the runway, taxiways and the main airport gates; there will also be a 2% increase beyond the site boundary to the north and south, covering small sections of Bishop

Lavis and Crossroads.¹¹ If the runway is re-aligned and operating at maximum capacity (Scenario 4), the area affected by the potential increase in the risk of respiratory hospital admissions shifts towards the east; a 6% increase in risk extends to the site's northern boundary; and a 4% increase in risk reaches a small portion of the Bishop Lavis and Elsies River communities to the north of the airport and the Delft South community to the east.¹² Scenario 4 is also predicted to cause a 4 to 5% increase in the number of respiratory hospital admissions in the Delft South residential area.¹³ The report predicts a >1% increase in all-cause mortality as a result of short-term exposures (e.g. Figure 6-10), and a > 0.1% increase in all-cause mortality these predictions make the health impacts due to the deteriorated air quality highly significant.¹⁴

Several irrelevant considerations regarding air quality are put before the decision maker in the draft EIA report. The report's air quality assessment is based on the assumption that compliance with ambient air standards will suffice for the protection of health. This assumption is questionable, especially when there are multiple air pollutants present in an airshed, which have a cumulative and synergistic effect on health.¹⁵ The argument that ambient air quality standards will be in compliance after the project is completed (which is disputed) and adverse health effects caused by the project will thus not be significant is a fallacious submission and consequently an irrelevant consideration.

The report has also not placed relevant information before the decision maker as to the impact of ground level carcinogenic air pollutants from increased air traffic on the health of adjacent communities.

IV. Failure to make consistent recommendations regarding health impacts

The report refers to studies which show that there was a statistically significant linear trend of increasing risk of hospital admissions for and risk of mortality from stroke, coronary heart disease and cardio vascular disease due to higher levels of daytime and night time aircraft noise. Hypertension is the most biologically plausible effect of noise exposure. Noise can cause a number of biochemical and physical reactions, including temporary elevation of blood pressure which can also be associated with other environmental stresses¹⁶.

Notwithstanding these studies the draft EIA report attempts to downplay the likely impacts of increased noise levels on communities affected by the proposed project. It make observations which are in conflict with the degree of impact identified by noise in the report. The approach is also in conflict with the precautionary principle which governs the assessment

¹⁴ Ibid.

¹¹ Ibid., pp. 174-180.

¹² Ibid.

¹³ Ibid.

¹⁵ For example the air quality in areas surrounding the Cape Town International Airport are characterised by the presence of particulate matter (PM) often at high levels. The World Health Organisation (WHO) has determined that there is no safe level of particulate matter (PM) exposure. South African standards (NAAQS) for PM are substantially lower than the WHO's recommendation. The WHO Guidelines represent the most widely agreed and up-to-date assessment of air pollution's health effects, recommending air quality targets which significantly reduce these impacts. They were established after a worldwide consultation with more than 80 leading scientists and reviews of thousands of global studies. Applicable across all WHO regions, they are intended for worldwide use. On 29 June 2012, the PM2.5 standard was gazetted. In adopting the PM2.5 standard, the Minister confirmed the WHO evidence that there were no safe levels of exposure to ultrafine PM, and its recommendation to set increasingly stringent standards and track progress. SA is a member of the WHO. Its standards for PM10 and PM2.5 are far below the WHO Guidelines.

¹⁶ Para.6.8.3.1

of impacts under NEMA.¹⁷ In the absence of scientific certainty a precautionary approach should be adopted.

The draft EIA report states that while it is difficult to quantify the length to health concerns, increased noise levels could lead to an increased incidence of health concerns in a "small percentage of people in the surrounding areas". The report states "most people are unlikely to experience extreme health related symptoms exclusively resulting from the proposed project. The report then makes the following statement which our client submits is deeply concerning: "People living in closest proximity to the airport are impoverished and lack adequate housing (many informal settlements) and basic services. As a result of the extreme need people have adapted to the already degraded quality of life out of necessity. While this is not ideal, it is the current reality."¹⁸

The report states that noise impacts are generally experienced more negatively at night than during the day and that aircraft noise is significantly more disruptive at night. The airports current operating hours are 05h45 to 23h30. This allows a mere 6 hours and 15 minutes of silence in a 24 hour period. The report describes the airport as a 24 hour operational airport with no limitation on the hours during which they may operate. It also states that over time the frequency of flights will increase and there may be more demand for night time arrivals and departures. From this statement it can be concluded that the applicant intends to utilize the full 24 hours for operations should it deem necessary.

Table 6.57 shows that for scenario 4, 24% of the population i.e. almost 100 000 persons will experience 5 – 10dB(A) above the guideline level and 5% i.e. 21 000 will experience noise levels of above the guideline of 10dB(A) above the guideline. It is stated that specific noise impacts link to a sense of place and health cannot be quantified. However once runway 18 – 36 reaches maximum capacity, an estimated 387 535 will be affected by airport related noise exceeding guideline levels for residential areas.

The report states that the inhabitants of informal dwellings are likely to be more vulnerable than people living in formal houses. Inter alia informal housing structures do not offer any form of noise dampening and are therefore less likely to be able to adapt to the negative impacts linked to increased noise levels.¹⁹

In addition to the noise impacts referred to in the paragraph II of this submission above, the report states that the noise impact is considered to be of high intensity due to the large number of sensitive receptors e.g. informal dwellers, generally impoverished communities and community facilities. They do not have the means to alter their circumstances in order to improve their quality of life. This impact will persist for the long term (life of the operation).²⁰

Despite this statement there is no suggestion in the report that the hours of using the airport should be in any way reduced to allow residents living adjacent to it to a sufficient number of evening hours to undertake domestic activities including to sleep in silence.

V. Neglect of the Interests of Vulnerable and Disadvantaged Persons

While the report acknowledges these devastating effects of increased noise levels and decreased air quality, it does not acknowledge how these effects will disparately worsen the lives of disadvantaged and vulnerable persons. According to the principle outlined in Section 2 of NEMA, NEMA(s2)(4)(c): "Environmental justice must be pursued so that adverse

¹⁷ NEMA principle

¹⁸ EIA report page 247

¹⁹ EIA report page 250

²⁰ EIA report page 252

environmental impacts shall not be distributed in such a manner as to unfairly discriminate against any person, *particularly vulnerable and disadvantaged persons* [emphasis added]."

The Socio-Economic Impact Assessment of the Cape Town International Airport Runway Re-alignment and Associated Infrastructure Final Report (S-EIA) prepared by Kerryn McKune Desai in November 2014, upon which the draft EIA report is based, acknowledges that the people living in the areas surrounding the Airport are "highly marginalised" due to poor socio-economic conditions.²¹ Those living in these areas have been historically marginalised by apartheid legislation and continue to face disadvantage today; they have significantly low levels of income and education.²² The unemployment rate in suburbs surrounding the airport vary between 35 and 50% in the areas to the east and south and these areas have also 75% of households with a monthly income of less than R3200 compared to less than half of the population in the areas to the north of the airport.²³ Communities in these areas have inadequate community facilities and lack parks and recreational spaces.²⁴ Housing options in these areas are most often of poor quality and lack adequate space. As such residents of these areas are considered "socially, economically and environmentally vulnerable."²⁵

The S-EIA merely indicates this disadvantaged status and vulnerability of the residents in areas surrounding the Airport. It acknowledges that these residents will be most affected by the increased noise levels because of their proximity to the Airport. As stated in the previous paragraph of this submission, the report acknowledges that, due to the low-quality construction of the informal housing structures in the areas surrounding the airport, residents will be unable to seek any form of noise dampening from their housing structures, and will be less likely to adapt to the negative impacts of increased noise levels.²⁶ Along similar lines, the EIA report acknowledges that the high population density of these poor, disadvantaged areas will mean a substantial increase in the absolute number of premature deaths associated with the airport expansion even if the relative increases in all-cause mortality are low.²⁷

However, rather than protect these vulnerable persons and acknowledge that the project disparately affects them, in violation of NEMA (s2)(4)(c), the S-EIA report uses the already vulnerable state of these persons as a means to mitigate and excuse the consequences of the runway re-alignment project. In proposing that those living near the Airport likely will not experience extreme consequences of the heightened noise levels because they have already "adapted" to a vulnerable environment, Kerryn McKune Desai writes, "The people living in closest proximity to the Airport are impoverished, and lack adequate housing (many informal settlements) and basic services. As a result of the extreme need, people have adapted to the already degraded quality of life out of necessity."²⁸ This argument is wrongly put forth again in the EIA: "Low income communities (formal and informal) often have more pressing problems to deal with than aircraft noise. It is possible that despite the annoyance they may tolerate a noisy home/environment."²⁹ This argument is irrelevant, unreasonable and serves to further marginalise those already marginalised. Firstly, to assume that these people have "adapted" to this environment and will "tolerate" it is an unfair assumption. It is possible, rather, that they experience the daily negative effects of

²¹ S-EIA, p. 7.

²² Ibid.

²³ EIA, paragraph 4.2.2.5.

²⁴ <u>Ibid.</u>

²⁵ Ibid.

²⁶ EIA report page 250

²⁷ EIA, pp. 174-180.

²⁸ S-EIA, p. 11.

²⁹ EIA, p. 252.

noise and may be further aggravated by them. One cannot use vulnerability as a means to excuse further disadvantage. Furthermore, since society has not provided adequately for them, to say they have adapted to inadequate housing and services and will easily adapt to even greater inadequacy is unacceptable and constitutes the submission of an irrelevant and vexatious consideration to the decision maker, in conflict with the requirements for lawful administrative action set out in section 6(2)(e)(iii) of the Promotion of Administrative Justice Act, no 3 of 2000.

In her summary arguments in the S-EIA, Desai writes, "time has shown that people can, and do, reside in areas that are already exposed to these same negative impacts. Many of them are not thriving, but this is the combined result of a far more complex set of political, socio-economic, environmental, and psychological matters. In this context, the negative impacts could be considered acceptable."³⁰ This argument is wholly irrelevant. It cannot be reasonably and relevantly considered that these residents have adjusted to a state of vulnerability and will therefore be able to "acceptabl[y]" cope with added distress. For example, acknowledging that these areas have high crime rates and arguing that it is therefore "acceptable" to create a state project that increases the crime rate is neither acceptable nor reasonable. It is unacceptable to use a state of vulnerability and disadvantage to excuse the added effects of the project. Rather, the project must take responsibility for the effects on the vulnerable and take extra care to mitigate them. At present, none of the mitigation measures, identified below in section VIII of this submission, address the specific issue of mitigating costs to be borne by disadvantaged and vulnerable affected sectors.

VI. South African Housing Crisis

In addition to inadequately acknowledging and evading the responsibility for the potential disparate effects of the runaway re-alignment project on disadvantaged and vulnerable persons, the S-EIA 2014, upon which the draft EIA report is based, does not give adequate consideration to the housing crisis. The S-EIA acknowledges that the city of Cape Town is under "significant pressure" to provide housing in order to alleviate the existing housing backlog.³¹ The report, however, does not expand upon the gravity of the housing backlog.

Nationally, as statistics provided at the African Centre for Cities' City Desired exhibition in 2014 indicate, the national government faces a housing backlog that has inflated to 2.3 million units in 2014. This increase is striking, when considering the 1.5 million units backlog in 1994.³² In 2014, the housing backlog faced specifically by the Western Cape stood at 375,000, with expected growth to 833,000 by 2031.³³ In 2014, it was predicted that it would take 70 years to eradicate Cape Town's housing backlog.³⁴

VII. Housing Impacts of the Runway Re-alignment Project

The residential areas surrounding the airport have been crucial to past housing plans. These areas significantly contributed to access to housing for approximately 500,000 people over the last decade.³⁵ They remain integral to present and future housing plans that are

³⁰ S-EIA, p. 22.

³¹ S-EIA, p. 13.

³² Future Cape Town, "Why Cape Town Must Get Serious About Land," November 17, 2014,

http://futurecapetown.com/2014/11/why-cape-town-must-get-serious-about-land/#.VV2AL6YjTIY.

³³ IOL Property, "70 Years to Eradicate Cape Town Housing Backlog," February 19, 2014, http://www.iolproperty.co.za/roller/news/entry/70 years to eradicate cape.

³⁴ Ibid.

³⁵ EIA, section 4.2.2.3.

critical to the provision of access to housing for a significant number of persons seeking to live and work reasonably close to economic opportunities in the Cape Metropolitan area.

The S-EIA report examines the city of Cape Town's present and future plans to accelerate housing delivery and promote urban renewal in order to redress poverty, foster employment, encourage saving and improve socio-economic conditions for disadvantaged sectors of the population. Specifically, the report examines how the runway re-alignment project will affect the potential housing programmes outlined in the Integrated Human Settlements: Five-year Strategic Plan.³⁶ The S-EIA identifies a number of planned (short-term) and proposed (long-term) housing projects, as well as planned densification of development in two Integration Zones located along the main metropolitan railway lines that will be affected by the project and will ultimately need to be reconsidered as the projects render these environments unsuitable for residential developments according to the Government's housing regulations.³⁷

Specifically, within the areas that will be affected by increased noise levels, there are eight proposed government housing projects planned over the next five years. These projects create a total of approximately 5,000 housing units; of these, 4,573 units will be affected if the current runway's operation is increased to maximum capacity (Scenario 2 in the S-EIA and EIA) and 1,642 if the runway is re-aligned and operating at maximum capacity (Scenario 4 in the S-EIA and EIA).³⁸ In the long-term, there are a further seven government housing projects proposed to accommodate approximately 10,700 housing units. As currently proposed and predicted, Scenario 2 will affect 824 housing units and Scenario 4 will affect 10, 564.³⁹ While the S-EIA and draft EIA report acknowledge these adverse effects, they offer no alternatives to the two proposed scenarios and few mitigation measures, as identified below in section VIII of this submission.

VIII. Inadequate Alternatives and Mitigation Measures

According to the general objectives outlined in Section 23 of NEMA, NEMA (s23)(2)(b): "The general objective of integrated environmental management is to—identify, predict and evaluate the actual and potential impact on the environment, socio-economic conditions and cultural heritage, the risks and consequences and *alternatives and options for mitigation of activities*, with a view to minimising negative impacts, maximising benefits, and promoting compliance with the principles of environmental management [emphasis added]." Furthermore, according to provisions governing environmental authorisations outlined in Section 24 of NEMA, NEMA (s24)(4)(b)(ii): "Procedures for the investigation, assessment and communication of the potential consequences or impacts of activities on the environment must include, with respect to every application for an environmental authorisation and where applicable—*investigation of mitigation measures to keep adverse consequences or impacts to a minimum* [emphasis added]."

With respect to potential alternatives, the draft EIA report maintains that the realignment of the existing runway through counter-clockwise rotations is the "only operationally feasible alternative" to the existing runway alignment.⁴⁰ The report further maintains that it is not considered "financially feasible" nor within the Airports Company's mandate to develop a new airport at an alternative site when the current site has not yet been

³⁶ S-EIA, p. 13.

³⁷ <u>Ibid.</u>

³⁸ <u>Ibid.</u>

³⁹ Ibid.

⁴⁰ EIA, p. 7.

optimised.⁴¹ It does not give adequate consideration and care to alternative options, critically analyzing with supporting facts and figures what limitations exist, if any, regarding the feasibility of locating any other airport facility in the Cape Metropolitan area, even if merely to ease the burden on the current airport. It may indeed be possible that a second airport site could be built for overflow, functioning similarly to the Gatwick and Stansted airports in London. The latter option would constitute and important mitigation measure. In the absence of such analysis is disputed that there are no feasible alternatives. The report does not detail the costs of creating additional airport sites, evading the responsibility to consider alternatives outlined in NEMA (s23)(2)(b).

Most of the noise mitigation measures outlined in the draft EIA report refer to using the latest noise reducing technology.⁴² Others call for the development and implementation of a grievance mechanism to monitor and address citizens' concerns, and a noise monitoring committee to monitor the effects of noise mitigation.⁴³ These are very important governance measures, yet they primarily deal with addressing and monitoring concerns post project. They do not address design issues of the project at the front end, failing to seek to mitigate the effects of the project from the outset before it is implemented.

The mitigation measures then call for implementation of less noisy routes and take-off, departure, and approach procedures.⁴⁴ The report also advises to restrict the use of reverse thrust, intersection take-offs, and engine ground run-ups between 22h00 and 6h00.45 These mitigation measures are merely a step in the right direction. Cape Town could send overflow airway traffic to other airport locations and could more severely limit the functions of the Cape Town Airport between 22h00 and 6h00. Heathrow International Airport in London, England, for example, limits its nighttime airway traffic based on the number of movements and a quota count system, where a movement is either a take off or landing, and the quota system works based on allocation of points according to the noise produced by each aircraft.⁴⁶ Because of this system imposed at Heathrow, no more than 18 takeoff and landings occur during nighttime during the summer, and no more than 14 takeoff and landings occur during nighttime during the winter.⁴⁷ Charles de Gaulle Airport in Paris, France also has strict nighttime flight restrictions. The Airport prohibits all aircraft take-off between 00h00 and 04h59 if a departure time slot within this time segment has not been issued; and noisy aircrafts with a cumulative margin between 5 and 8 EPNdB or a certified noise level exceeding value of 99 EPNdB are prohibited to land and take-off between 23h30 and 06h15.48 The Frankfurt Airport in Germany has adopted the most comprehensive nighttime practices, banning all flights from 23h00 to 5h00; moreover, the number of flights between 22h00 and 23h00 and 5h00 and 6h00 are severely restricted.⁴⁹ The Cape Town Airport can and should

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/66837/consultationdocument.pdf.

⁴¹ Ibid.

⁴² Appendix A and EIA, pp. 215-216.

⁴³ Ibid.

^{44 &}lt;u>Ibid.</u>

⁴⁵ Ibid.

⁴⁶ Department for Transport, 2013, "Night Flying Restrictions at Heathrow, Gatwick and Stansted Airports," https://www.gov.uk/government/publications/night-flying-restrictions-at-heathrow-gatwick-and-stanstedairports.

⁴⁷ Department for Transport, 2013, "Night Flying Restrictions at Heathrow, Gatwick and Stansted Airports: Stage 1 Consultations,"

⁴⁸ 2012, "Night flight restrictions and airline responses at major European airports," p. 24.

⁴⁹ Friedrich Geiger and Jan Hromadko, "German Court Backs Frankfurt Night-Flight Ban," The Wall Street Journal, April 4, 2012, <u>http://www.wsj.com/articles/SB10001424052702303299604577323623035261232</u>.

adopt a system more similar to these European cities to ensure that nighttime noise is substantially limited as air traffic volumes increase.

Ultimately, the report admits that all the proposed mitigation measures will not significantly reduce the project's impact: "Although the mitigation measures to which Airports Company South Africa are able to commit are expected to reduce the footprint of the noise impact zones and reduce the number of people affected in each zone, the overall number of people affected is expected to remain large."⁵⁰

It is important to note that none of these noise mitigation measures address disadvantaged and vulnerable persons. There is no mention of how mitigation measures will specifically be catered towards these persons. The draft EIA report is also a rare example of the disclosure of serious adverse noise impacts that would remain even after mitigation. These serious impacts are disclosed in detail in Section 6.4.6.1 (Noise Impacts of the Re-aligned Runway and Increased Operational Capacity) in pages 196 to 211. The information presented in Section 6.4.6.1 poses a stark question for decision-makers: can approval for a project be granted when the impact of the project on communities <u>even with mitigation</u> is expected to be HIGH? We submit that if approval is granted based on the recommendations of the current draft EIA report, the resulting authorization will be non-compliant with basic requirements set out in the National Environmental Management Act for such approvals, and stands to be set aside on review.

With regards to housing matters, the mitigation measures outlined do not decrease the impact of the runway re-alignment project. The first measure the EIA proposes is to re-model the noise contours every five years to account for changes in noise due to new policies, improved technologies, altered flight paths and schedules etc. The second mitigation measure the draft EIA report offers, once noise contours have been revised, is to "encourage" the city of Cape Town to consider the predicted noise in future land use planning.⁵¹ Simply remodeling the noise contours and the areas rendered inadequate for housing by these contours is *not* a mitigating measure. The report does not consider the possibility of offering alternative areas for housing, nor does it consider shifting plans to decrease the size of the areas that will be rendered inadequate for housing. It is submitted that the applicant has a duty to mitigate the impacts of the project on access to housing and this necessarily involves making available additional appropriate land to persons whose access to housing will be detrimentally affected by the project.

IX. Conclusion

Overall this submission reveals that the draft EIA report for the runway re-alignment project does not adequately consider the gravity of the project's impact on the vulnerable and disadvantaged affected communities, and in the context of considering the South African housing crisis. The draft EIA report does not address how increased noise levels and decreased air quality will infringe upon the rights of such persons in particular. If anything, the report uses the vulnerable state of these persons to justify not addressing the project's potential impacts. This is a grave error. The runway re-alignment project also fails to adequately account for and mitigate the effects of the project on the present housing crisis in Cape Town and South Africa at large.

Yours faith fully

⁵⁰ EIA, pp. 196 to 211.

⁵¹ Appendix A and EIA, p. 257.

LEGAL RESOURCES CENTRE Per:

A ANDREWS

Appendix

Impact	Before	After	Key mitigation/optimisation measures		
	Mitigation				
Construction Phase Impacts					
Nuisance Effects of Construction Related Noise	VL	VL	 Notify residents and schools close to the site of construction schedule. Develop and implement a grievance mechanism. 		

Operations Phase Impacts				
Impacts on Quality of Life in Areas with Increased Noise Levels	VH	н	 Re-model the noise contours every 5 years to account for changed poli improved technologies, altered flight paths and schedules, etc. Submit revised noise contours to the CoCT. Keep stakeholder informed of changes to predicted noise levels. Continually identify new noise abatement measures, conside international trends and best practice for managing noise impacts. Develop and implement a grievance mechanism, integrated with the r monitoring system to correlate complaints and responses. 	
Noise Impacts of the Re-aligned Runway and Increased Operational Capacity	VH	н	 Maintain effective communication with affected public regarding noise. Integrate grievance mechanism with noise monitoring system to correlate complaints with noise events and report to authorities. Where possible design and implement noise preferential routes. Implement take-off, departure and approach procedures aimed at reducing noise (e.g. flying at higher altitudes, reduced engine thrust). Restrict the use of reverse thrust, intersection take-offs and engine ground run-ups between 22h00 and 06h00 unless required for safety reasons. Formally engage with the City of Cape Town to encourage airport compatible land use planning. Establish a noise monitoring committee to monitor the effects of noise mitigation. 	
Impacts on Future Housing Developments by CoCT	HIGH	нідн	 Re-model the noise contours every 5 years to account for changed policies, improved technologies, altered flight paths and schedules, etc. Submit revised noise contours and encourage the CoCT to consider the implications of predicted noise (contours) in future land use planning 	

Appendix A: Relevant spliced portions from Table 4 Summary of Impacts in EIA report, pages 9-10.