

'Stink, maar uit die verkeerde rigting':

Pollution, Politics and Petroleum Refining in South Africa, 1948-1960

By

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Declaration

This study represents original work by the author and has not been submitted in any form to another university. Where use has been made of the work of others it has been duly acknowledged in the text.

A handwritten signature in black ink, appearing to read 'Stephen Sparks', written over a solid horizontal line.

Stephen Sparks
December, 2004.

Abstract

‘Stink, maar uit die verkeerde rigting’:

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This dissertation analyses the history of the politics of pollution and petroleum refining in South Africa during the first decade of Apartheid, focusing on the country's first two oil refineries, both of which were built by multinational oil companies in Durban in the 1950s and 60s. It traces the origins of the development of environmental regulation in relation to oil refinery pollution. The dissertation outlines the development of a sense of disillusionment caused by the persistence of pollution problems associated with petroleum refining in the face of failed attempts at technological and expert interventions. The study identifies the existence of a civic culture amongst Bluff residents founded on ratepayer and landowner identities, through which they were able to exercise considerable purchase on the local State. Ultimately, the story of how two petroleum refineries ended up in the midst of residential communities in south Durban's represents a reiteration of the importance of race to the development of local urban landscapes during Apartheid.

¹ The quote is the title of a newspaper article from late April 1954 from an unknown Afrikaans language newspaper, which was included together with other press clippings in a Department of Trade and Industry file on the Wentworth refinery. SAB HEN 715 Vol. 5, Power Sprits and Oil Industry, Establishment of Industry, Standard Vacuum Oil Refinery, Wentworth, Natal.

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Sershen Naidoo: The world's greatest bullshitter. Who takes no bullshit.

Prinisha Badassy: I will never forget all that you are...

The non-elliptical Nafisa Essop-Sheik.

Abbreviations

Stanvac - Depending on context, used to refer to the Standard Vacuum Oil Refinery Company and the Standard Vacuum Oil Refinery itself.

Sapref - Depending on context, used to refer to the South African Petroleum Refineries (Pty) Ltd. or to the South African Petroleum Refineries (Pty) Ltd. Refinery.

CSO - Colonial Secretary's Office

C.S.I.R - Council for Scientific and Industrial Research

GES - Department of Health

HEN - Department of Commerce and Industries

NHD - Natal Harbour Department

NPA - Natal Provincial Administration

PAR - Pietermaritzburg Archives Repository

SAB - Central Archives Repository

TBD - Durban Archives Repository

3/DBN - Durban Town Clerk Files

3/PMB - Pietermaritzburg Town Clerk Files

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Foundation Stone Ceremony

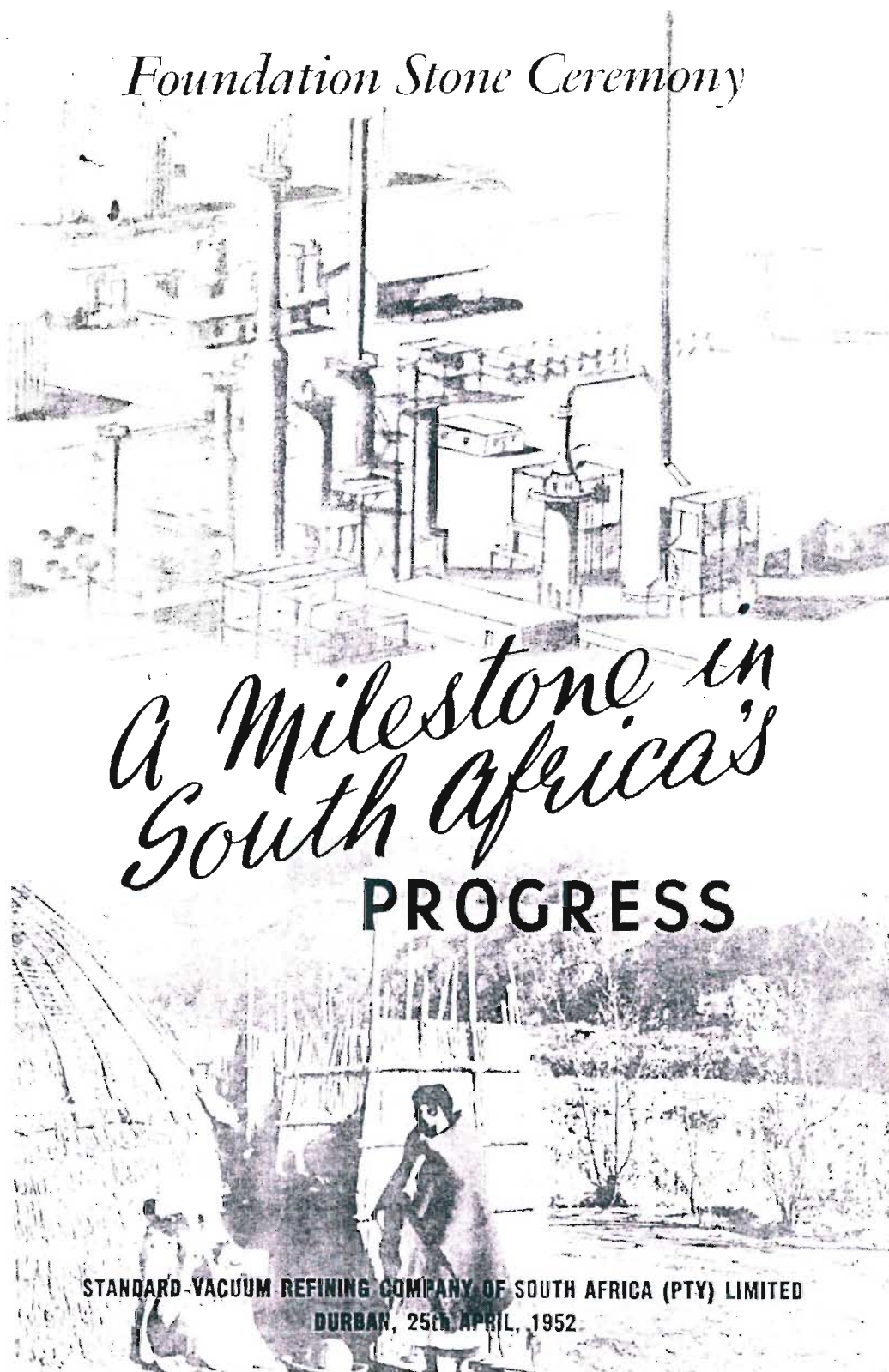


Image 1: Standard Vacuum Oil Refinery, Wentworth Foundation Stone Ceremony Brochure.¹

¹ From Engen Oil Refinery Library.

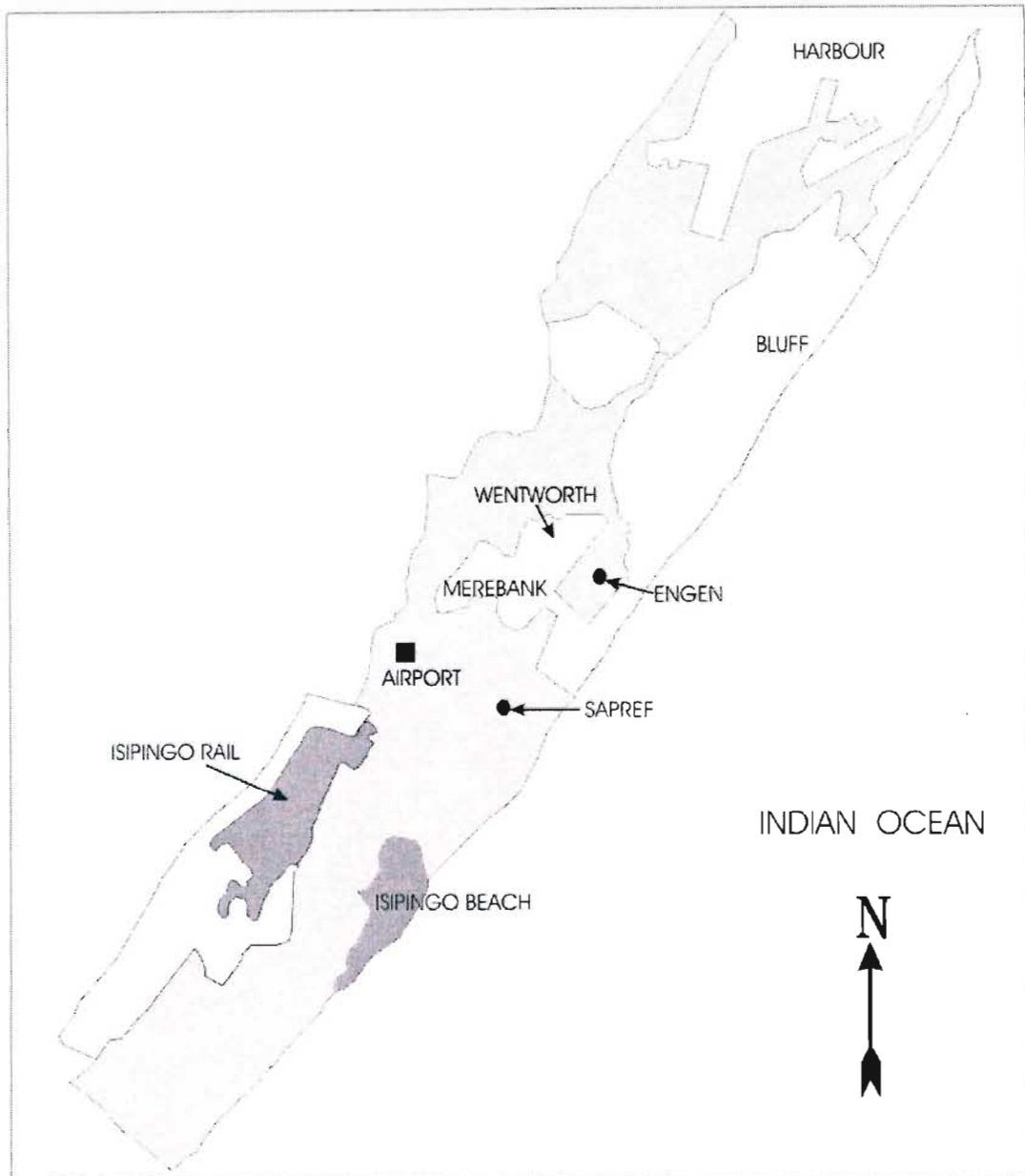


Image 2: Map of South Durban showing location of Engen and Sapref refineries and key residential areas

Introduction

Oil, Apartheid and the Environment: Historiographic Explorations

*'Under modern conditions, oil plays a vital part in the life of a nation, and in these uncertain times it is necessary that South Africa should be able to rely on its own refinery capacity for the provision of at least a substantial portion of its oil requirements.'*¹

South African Minister of Economic Affairs, Eric Louw, 1952.



Image 3: Standard Vacuum Refining Company Managing Director, Bryant Kenney and Minister of Economic Affairs, Eric Louw, Opening Ceremony, Wentworth refinery, May 1954.²

¹ Central Archives Repository (SAB) Department of Commerce and Industries (HEN) 715 92/2/32 Vol. 5, Power Spirits; Minister of Economic Affairs Eric Louw to Standard-Vacuum Refining Company of South Africa, 16 April, 1952.

² From Engen Refinery Library Photographic Collection

Environmental regulation has come to occupy a pivotal place in global discussions about balancing economic development imperatives and issues of social justice; in particular health and environment.³ This debate is chiefly framed in terms of the necessity of attracting foreign investment in what is characterised as an increasingly competitive 'globalised' world. It centres on what is assumed to be the negative impact of environmental regulation upon industrial productivity and potential investors.

The South African coastal city of Durban is no stranger to this debate.⁴ With the end of Apartheid-era import substitution and the country's at times bruising exposure to the turbulent winds of what has been dubbed 'neo-liberalism' or 'globalisation', a great deal of discussion has focused on how

³ P. Bond 'Economic growth, ecological modernization or environmental justice? Conflicting discourses in post-apartheid South Africa' in *Capitalism, Nature, Socialism*, 11, 1, 2000; S. Dasgupta et al 'Environmental Regulation and Development: A Cross-Country Empirical Analysis.' in *Oxford Development Studies*, Vol. 29, 2: 2001; J.A. List and C.Y. Co. 'The Effects of Environmental Regulations on Foreign Direct Investment.' in *Journal of Environmental Economics and Management*. 40: 1999; R. Lucas et al 'Economic Development, Environmental Regulation and the International Migration of Toxic Industrial Pollution.' Paper presented at the *Symposium on International Trade and the Environment*, Washington D.C, 1990; B. Smarzynska and S. Wei. 'Pollution Havens and the Location of Foreign Direct investment: Dirty Secret or Popular Myth?' The World Bank, Washington D.C, 2001; J. A. Tobey 'The Effects of Domestic Environmental Policies.' in *Kyklos*, 43, 2: 1990. D. Wheeler 'Racing to the Bottom? Foreign Investment and Air Pollution in Developing Countries' *Policy Research Working Paper* No. 2524. Washington, D.C. The World Bank, 2000.

⁴ See for instance 'Drive for clean air needs political support' *The Mercury*, February 26, 2003. Found at: <http://www.themercury.co.za/index.php?fSectionId=285&fArticleId=52807> Accessed on: December 3, 2004. Also see Address by Minister of Agricultural and Environmental Affairs, KwaZulu-Natal to Isipingo Rotary Club at the Umbogintwini Club, 21 February, 2001. Found at: http://agriculture.kzntl.gov.za/speeches/2001/21_feb.asp Accessed on: December 3, 2004.

the city can overcome the historical legacies of inequality produced by Apartheid and rising unemployment, without compromising on issues of social and environmental justice, such as labour standards and pollution control.⁵ And a third factor has entered the picture. Tourism has been held up as one of the ways in which Durban can gain an edge over its rival (local and international) cities, in terms of income generation for the city and its poorer citizens, who it is hoped, will be drawn into new service sector employment.

With varying degrees of enthusiasm and success the city's political and bureaucratic elite have been trying to juggle these three imperatives throughout the last decade. Although the stakes today appear to be higher than ever, this is not a new development. As this dissertation aims to show, during the 1950s, the city's municipal bureaucracy and its councillors, elected to the City Council by an exclusively white electorate, were engaged in a similar balancing act, though one which was obviously skewed by the racism of Apartheid. Two petroleum refineries, both funded by multinational oil companies, were fundamental to this. The municipality's negotiation of its financial and populist imperatives chiefly occurred in an attempt to straddle the city's role as an industrial port city, and its increasingly prominent

⁵ See M. Morris 'From Import Substitution Industrialisation to Globalised International Competitiveness' in *Durban Vortex: South African City in Transition* B. Freund and V. Padayachee (Ed.) Pietermaritzburg: University of Natal Press, 2002.

position after World War II as a tourist resort. The strategic importance of the refineries to the Apartheid State would be a major intervening factor in this process. The system of environmental regulation which began to emerge in the early 1950s, as part of a process which I characterise as the bureaucratisation of environmental politics, represented an acceptance on the part of the local state in Durban that petroleum refinery pollution could not be eliminated. It also signified the local state's disillusionment with the technocratic solutions (incorporating technological and expert interventions) which had failed to bring an end to persistent pollution problems. As James C. Scott has shown, the powerful, often naively fervent faith in scientific and technocratic solutions, with its concomitant reliance on 'expert' knowledge was typical of many of the major State driven interventions undertaken across the ideological and geographic spectrum throughout the twentieth century.⁶ This technocratic path was eagerly advocated by central government and petro-capital. Initially the local state in Durban also invested a great deal of hope in the same technocratic solutions to pollution problems, but as this study shows it quickly became disillusioned. Environmental regulation discourse in the 1950s initially reflected these 'high-modernist' roots in its more ambitious claims to providing complete solutions to pollution problems; but by the end of the decade this discourse would become far more hesitant.

⁶ J.C. Scott *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*. New Haven: Yale University Press, 1998.

Indeed the practical exercise of environmental regulation which emerged towards the close of the decade represented recognition of the limitations of technocratic solutions, and a pragmatic appreciation of the importance of balancing financial and populist imperatives in Durban. As such Durban's local state did not blindly pursue the prevalent high-modernist impulses of the time to their (il)logical extremes when it came to dealing with pollution. Indeed I would suggest that the belated emergence of a national legislative framework (however weak) to deal with atmospheric pollution in the mid 1960s indicated that the central state *also* recognised the limitations of the 'expert' knowledge possessed by engineers and scientists.

This regulatory regime, which would prove to be seriously deficient, established the unambitious, though *economically* practical (for both the local and central state) goal of pollution *minimisation*. This is the politics which lay behind environmental regulation discourse in South Africa during the first decade of Apartheid, and which found its fullest expression in the country's first two oil refineries. This study suggests that understanding the political discourse that underpinned environmental regulation in South Africa at the time requires us to analyse the intersection of the interests of the central *Apartheid* state, the local municipal state, international petro-capital and local communities living in the vicinity of the refineries. The outcomes of these interactions were not always as predictable or unambiguous as one might

perhaps expect. The study points us towards the importance of exploring the ways in which expert knowledge (and the experts themselves) can play a mediating role in political conflict. The particular breed of expert who played such an important role in the story told here served to deaden protest among residents concerned about the impact of petroleum refining on their communities. But the experts were not ultimately able to trump these political conflicts, as the central state, in particular may have hoped. Although the local state repeatedly looked to pollution experts to deal with persistent pollution problems, it ultimately refused to accept the proclamations and technocratic solutions advocated by these experts at face value.

South Africa's first crude oil refinery was built in the early 1950s on a 200-acre plot of land at Wentworth, stretching through the valley to the South of Durban between the southern headland to the Bay of Natal, popularly known as 'the Bluff', and the ridge at Wentworth further inland. In many ways it was a natural choice for the site for an oil refinery. It was characterized by a large expanse of flat land and close proximity to a major deep-sea harbour, local railway links and a potentially large pool of labour. But as this dissertation will show, because of the polluting impacts of petroleum refining, the site turned out, in other respects, to be less than ideal.

I first became interested in the history of south Durban in the year 2000, during the second year of my undergraduate studies at University, when my family moved to a house on the crest of the hill near the Wentworth hospital. Wentworth, a largely working class community to the South of Durban, was a product of forced removals under Group Areas legislation during Apartheid and is located alongside South Africa's first oil refinery, and within 5 kilometres of another major petroleum refinery, Sapref, which is jointly owned by British Petroleum and Royal Dutch Shell. Both of these refineries have been the subject of a large number of complaints about pollution from people living nearby. My family lived in Wentworth for a year, during which time I rarely opened the window in my bedroom because of the tightness I felt in my chest at night. I believed that it was caused by pollution from the Engen refinery in the valley below. I developed an awareness of the powerful sense of frustration felt by many people in Wentworth with what they perceive as the lack of change in the quality of their lives since the end of Apartheid. One of the reasons for this frustration relates to the continued experience of what are perceived to be unacceptably high levels of pollution from the petroleum refineries in south Durban.

Community environmental organizations have been pressurizing government and corporate officials for action to be taken to reduce the sulphur emissions and other pollution impacts associated with the refineries. With the opening

up of political space associated with the end of Apartheid, these groups have achieved some important gains, but a general climate of mistrust and suspicion remains in place. The dependence of residents in south Durban upon employment in the two nearby refineries has placed the local environmental organisations in a delicate position as they are often accused of holding an 'anti-development' stance because of opposition to refinery expansion plans. For this reason, in many ways the pollution issue in south Durban is a major test case for the way in which the balance between issues of social justice and subsistence needs must be negotiated in post-Apartheid South Africa, as it attempts to overcome the historical legacies produced by Apartheid.

Because of my conviction that there has been too much emphasis on environmental issues at the expense of important questions relating to livelihoods and labour in south Durban, I initially hoped to undertake a study of labour and technology at the Wentworth refinery for my Masters, incorporating analysis of the increased use of sub-contracted itinerant labour in the local petrochemical industry. I still hold this view. But as I began preliminary research, I found references in the Durban City Mayor's minutes to pollution problems associated with South Africa's first oil refinery at Wentworth, which were experienced within the first few months after it began operating in 1954. This sparked my interest because of the ongoing

contemporary controversy about pollution associated with the Engen and Sapref refineries in south Durban, particularly because I had not come across many allusions to this history in my reading of the literature produced by (and about) contemporary environmental organisations.

Since the end of Apartheid, the Wentworth refinery, now run by Engen, the South African subsidiary of the Malaysian multinational Petronas, has attracted a great deal of attention because of the high levels of pollution alleged to be caused by its operation.⁷ In October of 1996 Engen hired communications consultants Lowe, Bell and Mann to develop a

⁷ The Wentworth refinery was built by the Standard Vacuum Oil Company, which was a product of the U.S Supreme Court anti-trust action of 1911, which splintered the original Rockefeller oil empire – the Vacuum Oil Company – into a series of different (but similarly named) companies. The company was jointly owned by the Standard Vacuum Oil Company of New Jersey and the Socony-Vacuum Oil Company. Jersey-Standard had developed crude production and refining capacity in Indonesia, but had no marketing facilities in the Far East, while Socony had an existing marketing infrastructure in the area, but no refining or production facilities. With time, the Standard Vacuum Oil Company became responsible for overseeing the joint interests of Jersey and Socony's shareholders in the Far East, South and South-East Asia, and South and Eastern Africa. The refinery was initially operated by the Standard Vacuum Oil Refining Company (Stanvac), a company specially registered in South Africa in the 1950's to operate the refinery. At the end of 1960, Stanvac's parent company shareholders decided to dissolve the company. The reorganization of assets which resulted from this meant that all Stanvac assets in Southern Africa were transferred in early 1962 to the New York based Mobil Petroleum Company – which itself had been formed by Socony-Mobil (formerly Socony-Vacuum) to operate the Stanvac facilities allocated to it by the reorganization. The refining company which operated the Wentworth refinery became known as the Mobil Refining Company of Southern Africa. In 1989, after sustained pressure from anti-Apartheid campaigners, Mobil belatedly withdrew from South Africa, selling its assets to Gencor, an (ironically) largely Afrikaans-owned company, who duly established Engen Petroleum Ltd as the inheritor of Mobil's assets in post-Apartheid South Africa. In mid-1996, Petronas, the Malaysian state oil company purchased a 30% controlling share in Engen, finally becoming the sole owner in 1999. The Petronas takeover, symptomatic of the massive injection of Malaysian capital in South Africa since the end of Apartheid, seems to have had the overt support of the ANC government, which has historic links with the Malaysia government stretching back to the anti-Apartheid struggle.

'communications strategy and community relations programme' for the company's oil refinery at Wentworth because it had become 'the central target' in the controversy about sulphur emissions in south Durban. Their report stated that 'well-informed and articulate political and environmental activists' were 'ranged against' the company, while the media was 'sensationalising the issues.' Most significantly, it noted that the 'personal intervention' by President Mandela in 1995, after he had been confronted at the gates of the refinery by a group of protestors from Wentworth, during a ribbon-cutting visit, had 'raised the stakes.' Then Deputy Minister of Environmental Affairs, Bantu Holomisa, was tasked by Mandela to convene an indaba of the various 'stakeholders' from south Durban, and after drawn-out negotiations an 'agreement' was reached which required Engen to decrease its sulphur emissions.

Lowe, Bell and Mann drew the obvious conclusions from the episode, warning that the 'risk was that the issue would escalate to national political and public interest, threaten Engen's operations in Durban and damage the reputation of the company as a whole.'⁸ They defined the key aims of the

⁸ Engen Refinery Library Environment Files 5/3/P5 (xi) 'A Communications Strategy for Turning Adversity into Advantage' February 1997. For a detailed first hand account of the process which lead to the 'agreement' between Engen and environmental and community organisations from south Durban following Mandela's intervention, see Bobby Peek et al 'Conflict and Co-operation in Durban's Petrochemical Basin.' No longer available on the internet.

communications programme as being the prevention of 'unhelpful intervention from on high...to shift the issue from the national level...to provincial/municipal authorities' and 'sidelining the civics...' As this dissertation will show, fifty years ago, during the first year of the operation of the refinery at Wentworth, the operating company at the time, the Standard Vacuum Refining Company of South Africa (Stanvac) found itself at the heart of a very similar pollution controversy, though in very different political circumstances. Whereas Engen today finds itself dealing with a democratically elected post-Apartheid government, sensitive to community pressures at the same time as being eager to provide an attractive investment climate for multinationals, Stanvac could rely upon far greater special treatment because of its importance to an Apartheid government conscious of the strategic value of domestic refining capacity within the context of the Cold War.

In 1954, at the height of a very public storm about the effects of its operation, Stanvac asked for – and received – a helpful intervention from national government when officials from the Department of Trade and Industries stepped into the dispute between it and the Durban City Council, which resulted from the 'nuisance' which was being caused by pollution from the refinery. In contrast to the strategy suggested by Engen's consultants in 1996, Stanvac initially sought to nationalise the dispute by emphasising the

refinery's national importance. While in recent years Engen has had to contend with pressure from civic organisations and residents from the historically Indian and Coloured communities of Merebank and Wentworth, Stanvac had to deal with complaints about pollution by civic organisations and residents from the various largely white neighbourhoods on the Bluff.

With the later historical trajectory of south Durban and present pollution controversies firmly in mind, this dissertation analyses the politics of pollution associated with petroleum refining in Durban during the first decade of Apartheid. It tries to draw a connecting line between the earlier and later mobilisations – though not in an attempt to equate them – for the historical contexts and motivations behind the protests, despite some similarities, are in many ways very different. Rather than this, I argue that the mobilisations by residents on the Bluff against pollution from the Standard Vacuum Oil Refinery at Wentworth, and later in opposition to the proposed establishment of a second refinery by Shell at Salisbury Island in Durban Bay, ultimately led to a (partial) displacement of the polluting effects of petroleum refining onto the Indian and Coloured population living further to the South at Merebank and Wentworth. Of course, the Bluff has suffered high levels of pollution because of its proximity to the Wentworth and Sapref refinery's throughout the last few decades, at times, because of its altitude, to a worse degree than Merebank and Wentworth. But as we will see, by the time that

the first mounds of earth were bulldozed on the site of the Sapref refinery in 1960 it was clear that the welfare and property values of Durban's white residents, including those living on the Bluff had taken precedence over any consideration of the well-being of the residents living in the housing schemes at Merebank and Wentworth.

In addition to this, the dissertation engages with the large existent historiography focusing on the relationship between Apartheid and capitalism in South Africa's history. Studies have invariably focused on the nature of the State and its relationship to capital, though, as Nicoli Nattrass noted, they have primarily done so in relation to labour:

So far, the debate about the relationship between capitalism and apartheid has been dominated by a focus on government labour policy and the assumed relationship this has with profitability.⁹

⁹ N. Nattrass 'Economic Aspects of the Construction of Apartheid' in *Apartheid's Genesis, 1935-1962* P. Bonner, P. Delius and D. Posel (Ed.) Johannesburg: Witwatersrand University Press, 1993, 61. A selection of key texts from the historiography include: D. O'Meara *Volkskapitalisme: Class, Capital and Ideology in the Development of Afrikaner Nationalism, 1934-1948*. Johannesburg: Ravan Press, 1983; M. Legassick 'Legislation, Ideology, and Economy in Post-1948 South Africa' in *Journal of Southern African Studies*, 1:1, 1974; H. Wolpe 'Capitalism and Cheap Labour-Power in South Africa: From Segregation to Apartheid' in *Economy and Society*, 1: 4, 1972; M. Lipton '*Capitalism and Apartheid: South Africa, 1910-1986*' Cape Town: David Philip, 1985; D. Hindson *Pass Controls and the Urban African Proletariat in South Africa*. Johannesburg: Ravan Press, 1987; R. Davies *Capital, State and White Labour in South Africa*. Brighton: Harvester Press, 1979; H. Wolpe *Race, Class and the Apartheid State*. London: James Currey, 1988; B. Bozzoli 'Capital and State in South Africa' in *Review of African Political Economy*, 11: 1978; D. Posel *The Making of Apartheid 1948-1961: Conflict and Compromise*. Oxford: Clarendon Press, 1991.

We undoubtedly have a very sophisticated understanding of how Apartheid worked because of this historiography. Questions related to labour and influx control lay at the very foundation of Apartheid and represent its *raison d'être*. But there is room for new areas of exploration, such as in the environmental history of key industries in the energy complex at the heart of South Africa's economy. Analysis of the polluting impact of a major strategic industry such as an oil refinery, which came to represent the supposed sophistication of white South Africa's modernity within this context, offers exciting opportunities, because it raises important questions about the maintenance of legitimacy by the local and central state among key white constituents, in the face of often daily experiences of pollution 'nuisances'.

In addition to this, we have very little research on the relationships between the different levels of the state in South Africa. This is largely a reflection of the tendency to limit empirical research and analysis to the highest reaches of the South African State. This dissertation represents an attempt to overcome some of these failings, through two detailed industrial case studies, with particular emphasis placed upon the ways in which various different bureaucracies reacted to the polluting impact of petro-capital on the local white populace living on the Bluff, in the first decade of Apartheid.

The role of the local state in South Africa's history is, as a rule, poorly understood and little studied.¹⁰ The same goes for local municipal politics more generally. Some important work has been produced on the role of the local state, but, like the broader historiography on Apartheid it has tended to be restricted to racial segregation and labour.¹¹ Bill Freund has recently argued for the study of 'the self-activity of existing, historically shaped local actors' and of the 'internal administrative culture' of the local state.¹² In his own work Freund has outlined the increasingly technocratic basis of municipal governance in Durban in the twentieth century, highlighting the

¹⁰ Key exceptions include Hillary Sapire's work: 'African urbanisation and struggles against municipal control in Brakpan, 1920-1958.' University of Witwatersrand, PhD thesis, 1987 and 'Apartheid's Testing Ground': Urban 'Native Policy' and African Politics in Brakpan, South Africa, 1943-1948' in *Journal of African History*, 35: 1994 and P. Bonner 'Siyawugobha, Siyawugebhola Umbhlaa ka Maspala' ['We are digging, we are seizing great chunks of the Municipalities Land'] 'Popular Struggles in Benoni, 1944-1952.' Seminar Paper delivered to African Studies Institute, University of Witwatersrand, October 28, 1985.

¹¹ See for instance the work of Brij Maharaj including 'Urban Segregation and the Local State: Durban and the Group Areas Act in South Africa' in *Urban Geography*, No. 2, 1997; 'The historical development of the apartheid local state in South Africa: the case of Durban' in *International Journal of Urban and Regional Research*, 20, 1996; 'The Local State and Residential Segregation: Durban and the Prelude to the Group Areas Act' in *South African Geographical Journal*, Volume 77, No 1, April 1995; 'Segregation, Desegregation and De-Racialisation: Racial Politics and the City of Durban' in *Durban Vortex: South African City in Transition*. B. Freund and V. Padayachee (Ed.) Pietermaritzburg: University of Natal Press, 2002. See also R. Bloch and P. Wilkinson 'Urban Control and Popular Struggle: A Survey of State Urban Policy 1920-1970' in *Africa Perspective*, 20: 1982; J. McCarthy 'The Political Economy of Urban Land Use' in *South African Geographical Journal*, 65: 1983; D. Hemson 'Class Consciousness and Migrant Workers: Dock Workers of Durban' University of Warwick, PhD Thesis, 1979; A. Proctor 'Class Struggle, Segregation and the City: A History of Sophiatown, 1905-1940' in B. Bozzoli (ed) *Labour, Townships, and Protest*. Johannesburg: Ravan Press, 1979 and T. Lodge *Black Politics in South Africa since 1945*. London: Longmann, 1983.

¹² B. Freund 'City Hall and the Direction of Development: The Changing Role of the Local State as a Factor in Economic Planning and Development in Durban' in *Durban Vortex: South African City in Transition* B. Freund and V. Padayachee (Ed.) Pietermaritzburg: University of Natal Press, 2002, 11.

increasing emphasis upon 'expertise' within the municipal bureaucracy. This 'internal expertise' would however, be found seriously wanting when pollution problems first emerged from the Wentworth refinery. It was similarly lacking in the central state's bureaucracy, and still incubating in government affiliated research institutes like the C.S.I.R.

But despite this general trend towards technocratic governance in the municipal bureaucracy, for a large part of the first half of the twentieth century, it was the politicians on the City Council who exercised greater influence over decision-making processes, while the bureaucracy played a more quiescent role, rubber-stamping the decisions made by the city's politicians. This coincided with a period, starting in the depression after World War I when the make-up of the City Council reflected white lower-middle class and working class populist interests.¹³ In his key study of municipal politics in Durban, John Purcell argued that this ended in the late 1960s, when a shift in power occurred from the politicians on the City Council to the municipal bureaucracy. This change was primarily a result of investigations conducted during 1965 and 1966 by the Natal Provincial

¹³ B. Freund 'City Hall and the Direction of Development', 15. Jeff McCarthy paints a similar picture of white working class aspirations finding powerful political expression through the City Council in Durban from the 1920's and 1930's. See J. McCarthy 'Class, Race, and Urban Locational Relationships.' in *Apartheid City in Transition*, R. Humphries, K. Shubane and M. Swilling (Ed.) Cape Town: Oxford University Press, 1991. Brij Maharaj identifies its continuance in the 1950s in the form of racist discourse. See 'Segregation, Desegregation and De-Racialisation: Racial Politics and the City of Durban', 173.

Administration into municipal corruption, which had been initiated because of pressure from big business groups who had become increasingly frustrated with the apparent hostility of key politicians in the City Council to their interests.¹⁴ This power shift was reflected in a change from a politics based predominantly on patronage to a more bureaucratic style of politics. It is doubtful whether the events described in this dissertation, in particular with respect to the Shell project could have occurred in the later period, when, as Purcell shows, the municipal bureaucracy held sway in municipal decision-making.¹⁵ The change from a system based heavily on a politics of patronage towards a more bureaucratic style resulted in big business enjoying an enhanced ability to influence decisions. This bureaucratisation process would gradually extend to the development of a local regulatory regime marked by increasingly private interactions between petro-capital and the Durban municipal bureaucracy.

The historical geographer Dianne Scott has produced the largest, and most widely cited body of academic work on the history of south Durban. She has outlined a history of what she characterises as resistance to industrial modernisation and the defence of 'communal living space' by Indians living

¹⁴ J. Purcell 'Durban, South Africa: Local Politics in a Plural Society', University of California, Los Angeles, PhD thesis, 1974.

¹⁵ See also B. Freund 'City Hall and the Direction of Development' 16-17.

at Clairwood, stretching back to the 1920's and 1930's when the area was first earmarked for industrialisation.¹⁶ While the general contours of her argument are accurate, there is little room for actual politics in her teleological emphasis upon the role of blueprint modernist planning in shaping the physical landscape of south Durban. She fails to consider the role of political contingencies and struggles between the local and central state and industrialists in shaping the history of the area.

In an attempt to provide a more complicated picture of south Durban's history, this dissertation draws on various untapped government and corporate archival records, to write a history which has not yet been documented. I have been able to find just two allusions to the controversy surrounding the Stanvac refinery during the first year of its operation in the vast body of material that has been produced in the last decade by community and environmental organisations from south Durban, and elsewhere in South Africa's petrochemical landscape.¹⁷ The absence of the

¹⁶ See D. Scott 'Creative Destruction': Early Modernist Planning in the South Durban Industrial Zone, South Africa' in *Journal of Southern African Studies*, 29, 1: March 2003. See also D. Scott 'The Destruction of Clairwood: A case study in the transformation of communal living space' in *Urbanization in Contemporary South Africa: The Apartheid City and beyond*; D. Smith (Ed.) London: Unwin Hyman, 1992 and D. Scott 'Communal space construction: the rise and fall of Clairwood and district' University of Natal, Durban, PhD thesis, 1994. Also of relevance is B. Freund 'Brown and Green in Durban: The Evolution of Environmental Policy in a Post-Apartheid City' in *International Journal of Urban and Regional Research* Volume 25, 4 December, 2001.

¹⁷ See 'Complaint Concerning Violation of Constitutional Right to Environment with Particular Reference to Failure to Regulate by Chief Air Pollution Control Officer' Legal

story told in this dissertation from the historical narratives which have been produced by the various community environmental organisations concerned reflects the suppressive power of the 'environmental racism' discourse they have utilised as a part of their campaign for 'environmental justice' during the last decade.

Somewhat surprisingly, given the amount of energy that was committed to the campaign for the introduction of sanctions against oil imports to South Africa by anti-Apartheid campaigners, the historical literature on the South African oil industry is rather limited.¹⁸ Anti-Apartheid publications certainly did a sterling job of attempting to document the role of multi-national oil companies in supporting/prolonging Apartheid through sanction busting, and the part played by various Western governments in allowing this to

Resources Centre Submission for: South Durban Community Environmental Alliance and Table View Residents Association, 16 September 1999 and D. Wiley et al 'Contesting the urban industrial environment in South Durban in a period of democratization and globalization' in *(D)urban Vortex: South African City in Transition* B. Freund and V. Padayachee (Ed.) Pietermaritzburg: University of Natal Press, 2002, 238.

¹⁸ The few major works include: J. Giantsos 'The Effects of Trade Policy on the Development of the South African Petrochemical Industry' Rhodes University, M.A Thesis, 1995; J. Meiring 'Beplanning, Logistiek en Bedryfsaspekte van die Oliebedryf en die Invloed Daarvan Op Suid-Afrika' Randse Afrikaanse Universiteit, PhD thesis, 1986; R. Crompton 'The South African commodity plastics filiere: history and future strategy options' University of Natal, PhD thesis, 1994. For a rare labour study see G. Klerck 'Proletarianisation, unfree labour and the working class: a study of the nature and functions of unfree labour with specific reference to the use of subcontracted labour in the petro-chemical sector' University of Natal, M.A Thesis, 1991.

happen.¹⁹ Because of the emphasis which has been placed upon sanctions, our understanding of how the industry actually worked in terms of relationships with government at its different levels during Apartheid is limited to a vague malevolence. Environmental activists fighting what has come to be known as 'environmental racism' in pursuit of 'environmental justice' in the post-Apartheid era have added further cynicism to this picture; big oil's behaviour during Apartheid was odorous in every sense. As this dissertation will endeavour to suggest, it was not always quite so simple, though the net results – unacceptable levels of pollution for largely black communities living alongside heavy industry, and oil and fuel for the Apartheid machine – remain indisputable.

While landowner interests played an important initial role in sparking mobilisation against pollution in the predominantly white Bluff residential area, gradually that gave way, not so much to an ideology premised on a belief in the protection of the environment (a more recent development), but rather a concern with the effects of 'nuisances' and 'smells' on health and quality of life. It is this civic culture which lies at the heart of the story told in this dissertation.

¹⁹ See for instance: 'Oiling the apartheid machine' - *Sechaba* - 7 July 1974; 'Oiling the wheels of apartheid' *Sechaba* - 1 January 1977; 'Oil deals with apartheid exposed' - *Sechaba* - 4 April 1981.

During the first two years of the refinery's operation Durban's municipal bureaucracy and various major local newspapers were inundated with a remarkable volume of letters complaining about pollution. Many of these letters appealed to a civic identity, intertwined with references to the rights of ratepayers and landowners to protection by the Durban City Council. This was one of the reasons why the City Council and the Apartheid State could not simply disregard the concerns being expressed about the refinery, even as the Department of Commerce and Industries acted to protect the company from the more precipitous measures initially contemplated by the City Council.

The environmental historiography of South Africa is marked by a powerful rural bias. It is very hard to find any studies which could be characterised as urban environmental histories. While the larger South African historiography includes a large number of studies focusing on industrial settings, particularly in terms of labour, there is a remarkable paucity of studies looking at industrial pollution. By contrast the American and British environmental historiographies contain a great deal of useful work dealing with the polluting consequences of both countries' industrialisation and attempts to regulate them.²⁰ It is quite remarkable, given the radical changes wrought by

²⁰ See for instance C. Garwood 'Green Crusaders or Captives of Industry? The British Alkali Inspectorate and the Ethics of Environmental Decision-Making, 1864-95' in *Annals of Science*,

the mining revolution that we do not have a comparable environmental historiography dealing with the effects of industrialisation upon the populations, landscapes and natural resources in this region. There is also a growing international literature within the larger field of environmental history which analyses the role of what has been dubbed 'environmental racism' in the iniquitous experience of pollution by people of different colours.²¹ In the last decade the conceptual framework offered by this

61: 2004; R. MacLeod 'The Alkali Acts Administration, 1863-84: The Emergence of the Civil Scientist' in *Public Science and Public Policy in Victorian England* Aldershot: Variorum, 1996; C. Sellers 'Factory as Environment: Industrial Hygiene, Professional Collaboration and the Modern Sciences of Pollution' in *Environmental History Review*, Spring 18, 1994; J. Tarr 'Searching for a 'sink' for an Industrial Waste: Iron-Making Fuels and the Environment' in *Environmental History Review*, Spring 18, 1994; L. P. Snyder 'The Death-Dealing Smog Over Donora, Pennsylvania': Industrial Air Pollution, Public Health Policy, and the Politics of Expertise, 1948-1949' in *Environmental History Review*, Spring 18, 1994; A. W. Rome 'Coming to Terms With Pollution: The Language of Environmental Reform, 1865-1915' in *Environmental History* 1: 3, 1996; A. Hurley 'Creating Ecological Wastelands: Oil Pollution in New York City, 1870-1900' in *Journal of Urban History* May, 1994; C. Colten 'Creating a Toxic Landscape: Chemical Waste Disposal Policy and Practice, 1900-1960' in *Environmental History Review*, Spring 18, 1994; C. Rosen and C. Sellers 'The Nature of the Firm: Towards an Eco cultural History of Business' in *Business History Review*, 69 Winter, 1999; H.S. Gorman 'Efficiency, Environmental Quality, and Oil Field Brines: The Success and Failure of Pollution Control by Self-regulation' in *Business History Review* 73, Winter, 1999; F. Uekoetter 'Divergent Responses to Identical Problems: Businessmen and the Smoke Nuisance in Germany and the United States, 1880-1917' in *Business History Review* 73, Winter, 1999; D. Stradling and J. Tarr 'Environmental Activism, Locomotive Smoke and the Corporate Response: The Case of the Pennsylvania Railroad and Chicago Smoke Control' in *Business History Review* 73, Winter, 1999. C. Warren 'Toxic Purity: The Progressive Era Origins of America's Lead Paint Poisoning Epidemic' in *Business History Review* 73, Winter, 1999; C. Rosen 'Businessmen Against Pollution in Late Nineteenth Century Chicago' in *Business History Review*, 69, Autumn, 1995; R. Dale Grinder 'The Battle for Clean-Air: The Smoke Problem in Post-Civil War America' in Martin V. Melosi (Ed.) *Pollution and Reform in American Cities, 1870-1930* Austin: University of Texas Press, 1980; S. Schultz and C. McShane 'Pollution and Political Reform in Urban America: The Role of Municipal Reform Engineers, 1840-1920' in Martin V. Melosi (Ed.) *Pollution and Reform in American Cities, 1870-1930* Austin: University of Texas Press, 1980.

²¹ See for instance A. Hurley *Class, Race and Industrial Pollution in Gary, Indiana, 1945-1980* North Carolina: University of North Carolina Press, 1995; R. Bullard *Dumping in Dixie: race, class and environmental quality*, Westview: Boulder, 1993; R. Bullard *Confronting environmental*

literature has begun to gain considerable popular currency among those writing about and participating in community struggles for environmental justice in post-Apartheid South Africa.²² A recent piece argued:

South Durban's cauldron of pollution was created by an intertwining of the economic interests of industry, the security interests of the apartheid state, and the racial segregation interests of a major portion of the Durban white electorate. Interest in the health and well-being of South Durban's largely black communities was sacrificed.²³

The dissertation begins by providing a detailed case study of what happened when an American oil company found itself caught up in a major public

racism. Voices from the grassroots South End Press: Boston, 1990; D.E. Camacho (Ed) *Environmental Injustices, Political Struggles. Race, Class and the Environment*, Durham: Duke University Press, 1990; M. Pastor et al 'Which Came First? Toxic Facilities, Minority Move-In, and Environmental Justice' in *Journal of Urban Affairs*, Volume 23, No 1; 2001. M. Lynch et al 'Slippery Business: Race, Class, and Legal Determinants of Penalties Against Petroleum Refineries in *Journal of Black Studies*, Vol. 34, No. 3, 2004; B. Bryant, B (Ed) *Environmental Justice. Issues, Policies and Solutions* Washington DC and London, Island Press, 1995.

²² See for instance D. Wiley et al 'Contesting the urban industrial environment in South Durban', 238; P. Bond 'Economic growth, ecological modernization or environmental justice?'; J. Cock and E. Koch (Ed.) *Going Green: People, Politics and the Environment in South Africa* Oxford: Oxford University Press, 1991; D. McDonald (Ed.) *Environmental Justice in South Africa*, London: James Currey, 2000; Bobby Peek et al 'Conflict and Co-operation in Durban's Petrochemical Basin.'; D.Wiley et al 'Globalisation, Democratisation, and the Environment in the New South Africa: Social Movements, Corporations, and the State in South Durban' in W.L. Goldfrank et al (Ed.) *Ecology and the World System*, Westport, CT: Greenwood Press, 1999; R. D. Bullard 'Environmental Racism Shifts the Costs of Industry to the Poor' in *Daily Mail & Guardian*, August 27, 2001; The groundwork Report 2003 'Forging the Future: Industrial Strategy and the making of environmental injustice in South Africa' Accessed on 3 December, 2004. Found at: <http://www.groundwork.org.za/Publications/groundworkreport2003.pdf> Accessed on: December 3, 2004.

²³ D. Wiley et al 'Contesting the urban industrial environment in South Durban', 223.

controversy because of the alleged effects of its operation on a comparatively small group of white residents living on the Bluff.²⁴ It then moves on to an investigation of the ways in which the history of pollution from this refinery shaped responses to the proposed establishment of a second refinery by Shell in the Durban bay. Such an investigation, for all of its limitations, offers useful analytical opportunities for understanding the nature of the relationship between petro-capital and Apartheid, particularly in terms of the role of the local state, as well as the character of white civic culture in this city at the beginning of Apartheid. It offers us a window into the inner workings of the national and local state bureaucracies, of their interactions with key (white) constituents, and petro-capital at the beginning of Apartheid. One of the central arguments of this dissertation is that these interactions, though themselves marked by considerable contradiction, ultimately had led to a displacement of the environmental costs of petroleum refining onto the Indians and Coloureds living in housing schemes at Merebank and Wentworth.

Chapter one opens with an analysis of the extent to which pollution concerns were taken into account in the negotiations for the establishment of the

²⁴ It still seems possible to publish environmental history collections in this country without including studies on urban environments. See for instance S. Dovers, R. Edgecombe and B. Guest (Ed.) *South Africa's Environmental History: Cases and Comparisons* Cape Town: David Philip, 2002.

refinery, before analyzing the crisis which developed out of the dispute between the Durban City Council and the Standard Vacuum Refining Company, when pollution complaints from white residents on the Bluff started to emerge soon after the refinery started operating. The search for greater knowledge by the local and national bureaucratic elite of the effects of refinery pollution emerges as a striking feature of this period.

Chapter two takes up the story with the intervention of national government on the side of the oil company, in the form of a team of overseas experts who were seen as vital to the resolution of the dispute between the City Council and Stanvac, and, in particular, to secure the appeasement of the 'laymen' pollution complainants on the Bluff. 'Experts' played an important role in the first faltering attempts by various South African authorities to deal with the emergence of pollution associated with petroleum refining. Their authority was founded on claims to scientific veracity, objectivity and neutrality, which met their counterpart in lay discourses propagated by politicians and residents on the Bluff which emphasised *personal* experiences of pollution. Disputes over the scope of the refinery investigation and 'questions of fact' – the veracity of complaints about pollution – became one of the defining characteristics of the aftermath of the initial pollution controversy.

Chapter three shows how the history of pollution problems associated with the Stanvac refinery at Wentworth would prove to be a major reason for the Durban City Council opposing the proposal by the Shell Oil Company to build a major refinery at Salisbury Island in the Durban bay later in the decade. As a result of this, the refinery was pushed back from the northern end of the Bluff and the Esplanade which had been zoned as white residential areas in terms of the Group Areas Act, to Isipingo, in close proximity to the housing schemes at Merebank and Wentworth. Persistent pollution problems and the failure of experts at predicting and preventing produced greater scepticism on the part of the local state in Durban towards the expert assurances about pollution which were made with the Shell project.

Though I attempt to maintain a sense of the longer historical trajectory of the environmental histories of both the Wentworth and Sapref refineries, moving up to the present, with its concomitant controversies, this dissertation's cut-off point is the beginning of construction work on the Sapref refinery in 1960. I decided to limit myself to a self-contained study for my Masters dissertation, because the story told here of the emergence of complaints about pollution from the Wentworth refinery, and of Sapref being pushed back from the Durban bay to Isipingo allows us to develop a clear understanding of the politics of petroleum refining in Apartheid South Africa, while also placing present debates about south Durban in context.

This study is necessarily detailed. Partly this is a reflection of the fact that the story told here has not to date been properly documented. This is part of the reason why the dissertation is strongly narrative in its approach, and why, at times I have decided to incorporate large sections of quotations by some of the key protagonists involved in the events described here. I believe the story told here is a very interesting one which gives us a sense of the unpredictability, complexity and contingency which sometimes is lost in studies which address the debate about the relationship between Apartheid and Capitalism. But this story has analytical use beyond these more local confines. As I have suggested, it also resonates with contemporary global discussions about environmental regulation and its relationship with development, the quest for social justice in the face of alleged environmental racism, and the role of expert knowledge in shaping the political discourses and policies that emerge in response to pollution.

A number of key themes emerge. These include the role of letter writing by white residents living on the Bluff, specifically targeted at the local state, and published in local newspapers, in first generating and then fuelling the discursive power attached to pollution complaints. The chaotic responses of the local and central state bureaucracies to the emergence of the pollution problem at Wentworth are particularly striking. So too is the tension implicit

in the Durban municipality's attempts at balancing the city's purported twin functions – its tourist and industrial appeal. Most impressive though is the power of foreign industrial investment, as embodied by the Stanvac and Sapref projects, in restraining and ultimately determining the extent to which the local state in Durban was able to exercise any real autonomy in its interactions with petro-capital in the 1950s.

The common strand running throughout the thesis is the role played by experts. The dissertation outlines the development of a sense of disillusionment and growing popular scepticism caused by the inability to prevent pollution associated with petroleum refining and highlights the naïve, and increasingly desperate faith in technological interventions and 'expert' knowledge as a solution. Despite some areas of undoubted progress, technological solutions were not able to fully overcome the negative polluting impacts of petroleum refining during the 1950s. So too, experts were repeatedly looked to as a source of potential solutions, particularly when the refinery's own efforts at pollution abatement failed. As refinery pollution problems became increasingly intractable, the turn towards 'experts' became a reflex resort for the local state in Durban. But they were also frequently found wanting. In the absence of any real solutions throughout the 1950s, these experts increasingly concluded that refinery pollution could not be *eliminated*, which necessitated the establishment of a local regulatory regime to *minimise*

refinery pollution. The larger (national) legislative framework for this regulatory system would only emerge in the mid 1960s and it would be marked by major flaws in its implementation and conceptualisation, betraying the political roots of environmental regulation discourse in South Africa at the time. I trace the beginnings of the bureaucratisation of the pollution problem, at the same time as emphasising the (enduring) importance of close personal interactions between petro-capital (and industry more generally) and officials of the local state, to the regulatory regime which begins to emerge in the late 1950s.

I attempt to delineate the differing priorities of national government and the Durban municipality. But while the story told here suggests the power of contrary (white) civic pressures in relation to strategically important industries during Apartheid, it also points towards the overriding importance of the oil refineries in south Durban to the financial coffers of the local state. The study identifies the existence of a civic culture amongst Bluff residents founded on ratepayer/landowner identities, through which they were able to exercise considerable purchase on the local State, in stark contrast to the Coloured and Indian people living at Wentworth, and particularly Merebank, where many had been engaged in struggles over access to land, housing and basic civic amenities for much of the 1950s. This civic culture incorporated critiques of corporate greed and employed layman discourses which betrayed

some of its roots among white railway and municipal workers on the Bluff. Because of the elevated status enjoyed by white residents during Apartheid, this civic culture possessed important (though not unlimited) power in terms of its ability to extract favourable responses to its demands from the local and central state. Ultimately, the story of how two petroleum refineries ended up in the midst of residential communities in south Durban's is a reiteration of the importance of race to the development of local urban landscapes during Apartheid.

Chapter One

'The dogs may bark but the caravan moves on': Pollution, Knowledge and Politics in the Starvac Story, 1948-1954



Image 4: Durban Mayor Percy Osborn looks at a model of the Standard Vacuum Refinery at Official Opening Ceremony, May 1954.¹

South Africa had no history of domestic petroleum refining before the establishment of the Wentworth refinery in the early 1950s. Of course, both nationally and in Durban other polluting industries had been a cause for concern throughout the first half of the twentieth century, stretching back to

¹ From Engen Oil Refinery Library Photographic Collection.

the late nineteenth century.² But local petroleum refining was a quite different proposition for the bureaucrats in central and local government who were responsible for negotiating with the American oil company that planned to establish an oil refinery in the Union. Part of the reason for this appears to have been the ways in which the technology and processes of oil refining were generally poorly understood and yet, paradoxically, in their incomprehensibility, they came to be viewed as the embodiment of modernity. Importantly, there appears to have been a willingness to accept technocratic claims about pollution at face value, while claims relating to new technological inventions which would increase productivity were treated with scepticism because they impinged upon the financial position of the National Treasury.³ This reflected the primary interests of the central state in the project. As becomes clear in this chapter, at the close of the 1940s and

² Pietermaritzburg Archives Repository (PAR) Colonial Secretary Office (CSO) 867 1882/2964 2964/82; Petition of Committee appointed at a meeting of Mill Owners, with reference to the Pollution of Streams Bill; PAR Pietermaritzburg Town Clerk Files (3/PMB) 4/4/2/256 2624/44 Committee of Enquiry: Bacterial and Chemical Pollution of water supplies; PAR, Natal Harbour Department (NHD) II/1/128 HDE 656/1908, Smell at Bluff; PAR Natal Provincial Administration (NPA) Provincial Secretary Files, Post War Works and Reconstruction Commission: Eighteenth meeting: Durban, 10/8/43 Evidence of South African Chemical Institute. See also 'Why pick on Refinery among so many others?' Letter to the Editor in *Natal Daily News*, 19 April, 1954. Please note that the Natal Provincial Administration records of the Provincial Secretary at the Pietermaritzburg Archives are largely unsorted. There is a 'finding aid' available but it is by no means exhaustive. Many of the files I made use of relating to my research were not indexed and were only located after extensive physical searches through the volumes.

³ SAB HEN 714 92/2/32 Vol. 1, Power, Spirits and Oil Industry, Establishment of Industry, Standard Vacuum Oil Refinery, Wentworth, Natal. Board of Trade and Industry Memorandum on the Standard Vacuum Oil Company's revised project as contained in its proposals submitted on the 30th June 1950 and amended on the 8th August 1950. See Appendix: 'Detailed Analysis of the Standard Vacuum Oil Company's Project'.

during the early 1950s, before the Stanvac refinery started operating at Wentworth, bureaucrats in both the central and local state in Durban undertook a tentative search for greater knowledge about the possible polluting effects of petroleum refining. 'Expert' knowledge, almost exclusively sourced from overseas was critical to these preliminary investigations. Blinded by the gleaming promise of petroleum refining, and unable to draw on any local first-hand experience, the assurances of these overseas experts together with those of the company itself were initially largely accepted uncritically. The actual emergence of pollution, not long after the refinery started-up would quickly lead to disillusionment. More frustration would follow with the persistence of pollution problems in the face of failed technological and expert interventions. South Africa's modernist march to progress could not escape the nuisances caused by refinery smells. But the bureaucratic and political elites in Pretoria and Durban would still look to experts and technology for solutions.

The Standard Vacuum Oil Company (Stanvac) first made investigations into establishing a refinery in South Africa in 1946, as part of its attempt to increase its production capacity throughout the Eastern hemisphere by establishing refineries in India, Indonesia, Australia and Japan, at a time of

the increasing expansion of American capital after World War 2.⁴ By the late 1940s the advantages of having a local source for refined petroleum products were becoming increasingly hard for the South African government to resist. Almost all of the petroleum requirements of the country had to be met from imports, which was a considerable drain on the South African treasury in terms of foreign exchange.⁵

Formal negotiations began in 1948 shortly after the Afrikaner Nationalists came to power, but did not go entirely smoothly, breaking down because of the degree of protection that the Company demanded from the South African government. The Board of Trade and Industry (BTI) undertook a thorough interrogation of Stanvac's plans, which it viewed with scepticism. The BTI deliberations reveal a tangible suspicion of 'big oil' and reluctance on the part of the South African government to have to carry the burden of the degree of protectionism that Stanvac demanded, when the global oil industry was, in its view, so obviously 'oligarchical'.⁶ Strategic considerations, primarily rooted at this stage, in concerns about the stability of the Middle East and Cold-War tensions, were the deciding factor, together with the project's economic value,

⁴ Engen Refinery Library Files 'Brief History of Durban Refinery Project.'

⁵ See 'Treasury to Benefit from S.A Petrol' *The Friend*, 8 October, 1953 and 'Strategic Significance of new Durban oil refinery' *Forum*, 2 March, 1951.

⁶ SAB HEN 714 92/2/32 Vol. 1, Board of Trade and Industry Memorandum on the Standard Vacuum Oil Company's revised project as contained in its proposals submitted on the 30th June 1950 and amended on the 8th August 1950.

in the Nationalist Cabinet's acceptance of a second proposal to build a smaller refinery.⁷ Out of this decision would spring a discourse (later legally entrenched through a Parliamentary declaration) which singled the refinery out as an industry 'in the national interest' and therefore entitled to special treatment.

The negotiations for the establishment of the refinery were cloaked in a veil of secrecy for a period of almost three years, primarily because of the large amount of property that Stanvac needed to acquire in south Durban. Securing this land proved to be one of the trickiest aspects of the project in its pre-construction stages, and Stanvac relied heavily on the assistance of the bureaucracies of national government, the Natal Provincial Administration and Durban's municipality to smooth its passage through the potentially choppy waters of expropriation. This assistance was embodied by the passing of the Expropriation (Establishment of Undertakings) Act in 1951 which was specially designed to give Stanvac power to expropriate land which it needed.⁸ Senator Edgar Brookes argued that financial compensation for

⁷ SAB HEN 714 92/2/32 Vol. 2, Power, Spirits and Oil Industry, Establishment of Industry, Stanvac Oil Refinery, Wentworth; Secretary for Commerce and Industries to Secretary for Public Works, 13 November, 1950.

⁸ The Provincial and Local Authorities Expropriation Ordinance of 1945 had to be amended to make this possible, and the Durban Corporation and Natal Provincial Administration worked closely with the Government to help the Company manoeuvre through the legal minefield associated with expropriating land. See 'Ordinance Amendment Gazetted' in *Natal Mercury*, 21 May, 1951.

Indians living in south Durban who would have their land expropriated was inadequate because, since the passing of the Group Areas Act, finding sites for resettlement had become extremely difficult. As he put it in a Senate debate: 'there is nowhere else for them to go.'⁹

The majority of the most important financial and legal details of the project were settled through close consultation between Stanvac and officials and bureaucrats from the Department of Commerce and Industries.¹⁰ While there had been signs of growing concern overseas about pollution associated with petroleum refining, in the light of the smog experiences in Los Angeles,

⁹ Union of South Africa Senate debate, 23rd May, 1951. The close co-operation of various authorities to secure land for the Company is revealed in SAB HEN 714 92/2/32 Vol. 2, D.G. Shepstone to Eric Louw, 12 December, 1950.

¹⁰ Many of the key bureaucrats from the Department of Commerce and Industries involved in the negotiations predated the Afrikanerization of the civil service which built up momentum in the opening years of Apartheid. The powerful Secretary for Commerce and Industries, David de Vaal Meyer was a career bureaucrat stretching back to the late 1930's when he was an accredited government trade representative in Canada, through to his selection to the Immigrants Selection Board in 1947 and his appointment as Secretary of the Department of Trade and Industries, a post from which he was intimately involved in securing the establishment of the Wentworth oil refinery. His Minister, Eric Louw was a similarly seasoned civil servant before his rise to political prominence. He served in various posts throughout Western Europe and North America as a special government representative focusing on trade and diplomacy from as early as 1918. It was during his stint as Foreign Minister that he experienced the beginnings of international hostility towards South Africa's domestic policies at the United Nations in 1946 when India led criticism of the South African government's legislative discrimination against Indians. He gained a notorious reputation for his belligerent defence of South African policies and 'sovereignty' at the United Nations. His lengthy posts as a trade commissioner, which included New York and Washington, appears to have served him well during the negotiations with the Standard Vacuum Oil Company of New York, by which time he had been appointed Minister of Economic Affairs. For an analysis of the civil service during Apartheid see D. Posel 'Whiteness and power in the South African civil service: paradoxes of the apartheid state' in *Journal of Southern African Studies* 25, 1: 1999.

pollution questions did not occupy a central place in the negotiations. This reflected the prioritisation of the strategic and economic benefits of the project by the central state and its bureaucracy, which committed most of its energy to capturing the refinery and securing the financial position of the national treasury. But it would be inaccurate to suggest that pollution was not given consideration.

During the negotiations period the extent to which key government officials *were* concerned about possible pollution from the refinery appears to have been partly shaped by departmental priorities in relation to the project. Writing in November of 1950 B. Romoff, the Secretary for Public Works refracted the pollution question through the prism of anxiety about the effect of the refinery on 'neighbouring public property' in the area that fell under his department's ownership. The Wentworth Camp (previously known as Assegai Camp), which had been built in the valley, housed a couple of hundred largely white families, including ex-volunteer servicemen, the South African Police and the married quarters of the South African Naval forces. Romoff was concerned about whether the establishment of the refinery 'in the immediate vicinity of these places' would 'introduce conditions which might depreciate the value of the Government's property.' It was not, in other words, simply about *health*. Stanvac had not been able to give him a 'categorical assurance' that there would be 'no possibility' of air pollution, but

had pointed to recent projects which had seen the construction of refinery's in England (Fawley near Southampton and Coryton on the Thames) and the USA 'in fairly close proximity' to residential areas without 'serious complaint' about pollution. Romoff suggested that the Department of Commerce and Industries, (the hub department in the negotiations), ask the Council for Scientific and Industrial Research (C.S.I.R) to provide 'some authoritative reassurance on the aspect of atmospheric pollution.'¹¹ The increasing utilisation of expertise nurtured within the C.S.I.R was characteristic of the Apartheid state during the 1950s. It was a powerful feature of the way in which refinery pollution would be dealt with during the period covered by this dissertation reflecting the general faith in technocratic solutions typical of interventions by states throughout so much of the twentieth century.¹²

One of the most important government figures during the negotiations was David de Vaal Meyer, the Secretary for Commerce and Industry who viewed the pollution question in largely legal terms. Writing in December of 1950, almost three years before the refinery started operating he admitted that 'gases may possibly constitute a health hazard problem' but pointed out that 'experts have thus far failed to agree on this point.' This comment reflected a

¹¹ SAB HEN 714 92/2/32 Vol. 2, Secretary for Public Works to Secretary for Commerce and Industries, 28 November 1950.

¹² J. C. Scott *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*. New Haven: Yale University Press, 1998.

wider faith in the rule of experts within the Apartheid state. He conceded that it was 'nevertheless desirable' that any sales agreement entered into 'should provide for the Company taking the necessary precautionary measures to prevent damage to property and health that may be caused by the effluents of the refinery.'¹³

But getting hold of land in south Durban proved difficult because of the determined opposition of a number of Indian landowners. They had been forced to sell their land to the City Council, for the purposes of the establishment of a new housing scheme in the area. But then the Council proposed to sell the land to Stanvac for construction of the refinery. Writing in November 1950 H.A Smith, the Durban City and Water Engineer, self-consciously departed from the avowedly apolitical world of engineering, and suggested a solution to what he termed 'the political aspect of this project' which he admitted would 'require careful handling if racial differences between the City Council and the Indians, for whom this Housing Scheme was designed, are to be avoided.' As a short-circuit he recommended that the government make an official request to the Council to change the boundaries of the Housing Scheme to allow the establishment of the refinery on the chosen site. Smith argued that this should be accompanied by 'some form of

¹³ SAB HEN 714 92/2/32 Vol. 2, Secretary for Commerce and Industries De Waal Meyer to Secretary for Lands, 11 December 1950.

rigid undertaking' by the Company that 'it will ensure, at all times, that its manufacturing processes meet the requirements of the City Council and cause no nuisance to the abutting areas.'¹⁴ This represented clear recognition that the position of the refinery alongside long planned housing schemes could later prove problematic.

A year later, when Stanvac needed further land for the construction of a railway siding to the refinery, it suggested a similar solution, which it hoped would protect the Durban City Council from the wrath of Indian landowners in the area. It had learned 'from a reliable source' that 'a number of previous Indian owners' from whom the Durban Corporation had purchased land were 'awaiting an opportunity to embarrass the City Council.' Stanvac asked the Minister for Economic Affairs, Eric Louw, to include the land in its application for expropriating powers.¹⁵ In this way Stanvac and the bureaucracies of the national, provincial and local government operated within tightly insulated channels of power, which Indians living at Merebank and Wentworth had little access to, though, as this letter from P.Raidoo, Hon Secretary of the Durban Combined Indian Ratepayers Association illustrates, the landowning Indian elite certainly tried:

¹⁴ Durban Archives Repository (TBD) Durban Town Clerk Files (3/DBN) 4/1/4/130 39C Volume 1 Proposed Oil Refinery at Wentworth; H.A. Smith City and Water Engineer to Town Clerk, Durban, 23 November, 1950.

¹⁵ TBD 3/DBN 4/1/4/130 39C Vol. 1, R.G. Pomeroy to Durban Town Clerk, October 11, 1951.

At a meeting of my association held on Friday, 22nd February, 1952, I was directed to lodge a most emphatic protest against the Durban City Council's proposal to sell expropriated land at Merebank to the Vacuum Oil Company of S.A Ltd. We, Sir, are reliably informed that this land that is being sold was once owned and occupied by Indians. Their land was expropriated for the purpose of starting a Housing Scheme for the Indians. On this understanding the people were compelled to sell their land to the Durban Corporation. Now, we regret to learn that this very land is being sold to the Vacuum Oil Company without in anyway honouring the promise made by the previous Council decision to expropriate this Indian land. It is this situation that we view with great alarm. What assurance is there that such a precedent will not be repeated in the future? We feel that this shatters the confidence of our people in the Durban City Council.¹⁶

Indeed Indian landowners from Merebank and Wentworth became increasingly cynical about the intentions of the City Council in south Durban. Expropriation of land and demolition of homes in the name of new housing and healthier living conditions came to be seen as a cover for increased

¹⁶ TBD 3/DBN 4/1/4/130 Vol. 2, 39C P. Raidoo Hon Secretary Durban Combined Indian Ratepayers Association to Town Clerk, Durban, 27 February, 1952.

industrial expansion in the area.¹⁷ With access to land and housing emerging as increasingly burning questions during the 1950s the refinery became an important symbol of the negligence of the Durban City Council amongst Indians living at Merebank and Wentworth.¹⁸

The newness of oil refining to South Africa meant that the Government's bureaucracy looked overseas for guidance about the possible effects of petroleum refining on health. Initially these primarily occurred in the form of enquiries through government appointed Scientific Liaison Officer's based in London and Washington.¹⁹ D.R. Masson, South Africa's Scientific Liaison Officer in Washington, corresponded with a range of authorities in the US and reported to the Secretary for Public Works in March of 1949 that while refineries in the USA were generally located in 'purely' industrial areas, 'even in some places', such as Los Angeles, refineries can 'create problems of

¹⁷ 'Dismay at Demolitions' *The Leader* April 15, 1954; 'Merebank Meeting: Expropriation Fears' *The Leader* October 12, 1956; 'Objection to New Industry: Merewent has had enough of unpleasant odours' *The Leader* October 16, 1964.

¹⁸ 'Indian homes demolished' *The Leader* March 5, 1954.

¹⁹ SAB HEN 714 92/2/32 Vol. 2: D.R. Masson (S.A Scientific Liaison Officer, Washington to Secretary for Public Works, 11 March, 1949; D.R. Masson, SA Scientific Liaison Officer in Washington, to Secretary for Public Works, 4th April, 1949; D.R. Masson (S.A Scientific Liaison Officer, Washington to Secretary for Public Works, 16 Feb, 1949; D.R. Masson (S.A Scientific Liaison Officer in Washington) to Secretary for Public Works, 5 Feb, 1950; J.P. de Wit (S.A Scientific Liaison Officer, London) to Dr P.J. du Toit, President C.S.I.R, 4th January, 1951.

atmospheric pollution over considerable distance'.²⁰ But where expert advice struck a more cautionary tone, such as here, the strategic and economic benefits of the refinery which lay behind the central state's endorsement of the project took overriding precedence.

While various government officials and bureaucrats were trying to come to grips with the possible polluting impact of petroleum refining, on the rare instances during the negotiations when Stanvac was asked to address pollution concerns, it presented a generally assured case, invariably pointing to examples of overseas refineries operating in densely populated areas but causing little complaint. In early 1951, Bryant F. Kenney, Stanvac's American Managing Director assured Dr F.W. Cluver of the Union Health Department that he was satisfied that 'the establishment of the refinery at Wentworth will not constitute a hazard to health or property...'²¹ Significantly, internal correspondence within the Department of Commerce and Industries in June of 1951 reveals a deliberate policy of avoiding strong language in the drafting of the refinery land sales agreement clauses vis-à-vis pollution.²²

²⁰ SAB HEN 714 92/2/32 Vol. 2, D.R. Masson (S.A Scientific Liaison Officer, Washington) to Secretary for Public Works, 11 March, 1949. Emphasis in original.

²¹ SAB HEN 714 92/2/32 Vol. 2, B.F. Kenney to Dr F.W. Cluver, March 15, 1951.

²² SAB HEN 715 92/2/32 Vol. 3, Power, Spirits and Oils Industry, Stanvac Oil Refinery, Wentworth, Durban; See Minute of 15 June 1951.

The final sales agreements included pollution conditions which were markedly ambiguous in their language, incorporating references to 'adequate measures...to the satisfaction' of the Union Department of Health and the Durban City Council.²³ In November 1951 when key municipal bureaucrats and the Durban based representative of the National Department of Health, Dr G. Murray met with Stanvac representatives they had emphasized the 'urgent necessity' of the pollution question 'receiving very close attention.' Stanvac promised that 'every endeavour' would be made 'to render any gaseous or liquid outgo innocuous.'²⁴ Crucially, few concrete standards were laid down.

For its part the Department of Transport was chiefly concerned with the impact of the refinery's operation on the safety of airplanes operating at the Reunion airport. In addition to more general commitments to ensure 'acceptable' visibility, Stanvac agreed to limit the height of the refinery's smoke stacks to a maximum of 280ft, a restriction which today is regarded as a major reason for the severity of pollution associated with temperature

²³ SAB HEN 714 92/2/32 Vol. 2, H.G. Andrews Provincial Representative Department of Lands to Managing Director, Vacuum Oil Company of SA Ltd, 24 January 1951.

²⁴ SAB HEN 714 92/2/32 Vol. 2, Acting Town Clerk to Secretary for Commerce and Industries, 19 November, 1951.

inversions in south Durban.²⁵ All told, the evidence suggests that despite their exposure to information from the United States about the likely emergence of pollution problems, key officials throughout the national and municipal bureaucracies, including those concerned with health, were 'satisfied' with the measures that Stanvac promised to take to minimize pollution.²⁶ The opinions of American and British based 'experts' who generally identified the *nuisance* rather than *health* hazards of refinery pollution had proven critical to ensuring this.

When the project was made public in early 1951 the Durban City Council welcomed it as 'a tremendous step forward' in the industrialization of Durban and pointed to assurances it had received from Stanvac during negotiations about fire safety and industrial effluent.²⁷ While pollution concerns had not caused particular anxiety during private discussions, there were also very few prominent public expressions of opposition or alarm at the *prospect* of pollution from the refinery. The few allusions to it by Stanvac officials were

²⁵ SAB HEN 714 92/2/32 Vol. 2, B.F Kenney to Secretary for Transport, March 15, 1951 and SAB HEN 715 92/2/32 Vol. 3, Secretary for Transport J.Krige to Secretary for Commerce and Industries, 16 April, 1951. For the impact of stack heights on pollution see 'Engen works to clean up its act' *Business Report*, June 18, 2004. Found at: <http://www.businessreport.co.za/index.php?fArticleId=2116958&fSectionId=612&fSetId=304> Accessed on December 3, 2004.

²⁶ See for instance SAB HEN 714 92/2/32 Vol. 2, B.F. Kenney to Dr F.W. Cluver, March 15, 1951; B.F. Kenney to Dr J.J. de Pre le Roux, March 15, 1951 and B.F. Kenney to Dr English, City Health Department, Durban, March 16, 1951.

²⁷ 'Tremendous step, says Mayor' *Natal Daily News*, 23 February 1951.

marked by what would later be revealed to be at best naïve confidence, at worst wilful dishonesty.²⁸

It did not take long for white landowners living in the vicinity of the refinery site to start expressing concern about the effect of the project on property values.²⁹ Bluff based City Councillor Elwyn Leighton Black was one of the few officials who expressed public concern about the refinery from the earliest stage, warning that houses had been allowed to develop 'with no more than a road' separating them from existing oil storage tanks at Island View.³⁰ Like the Indian landowners at Merebank, he criticised the City Council's decision to approve the construction of the refinery in an area set aside for post-war housing estates, within what would ultimately be a built up area, as a 'crass folly.'³¹ Significantly, his critique related chiefly to the fire hazard represented by the refinery, reflecting the greater attention this aspect received at the time. The assurances of Stanvac, government officials and a retired British fire safety 'expert' who advised the Home Office during the Second World War

²⁸ 'No Pollution from the oil refinery' *Sunday Tribune*, 25 February 1951 'Assurance that Durban oil refinery will not pollute the air' *Natal Daily News*, 26 February 1951.

²⁹ 'Wentworth Fears Of Oil Refinery' *Natal Mercury*, 22 May 1951.

³⁰ 'Move Oil Tanks or risk fire disaster, warns councillor.' *Natal Mercury*, 29 March 1951.

³¹ 'By-laws attacked in Council' *Natal Mercury* 20 November 1951.

appear to have allayed fears amongst white landowners and residents on the Bluff about the effect that the development of this new industry would have.³²

The first major mobilization against the project by white landowners on the Bluff was prompted by the construction of an oil pipeline from the Island View storage tanks, along Lighthouse Road to the refinery, which many feared would result in depreciation in property values. Landowner interests founded on a widely held conception of the Bluff as a natural leisure space with a high standard of amenities informed the character of mobilizations from the beginning and would continue to be a motivating factor behind protests by residents from the Bluff in the coming years, though health concerns became increasingly prominent.³³

Media articles during this period focused on the refinery's strategic value and reinforced the powerful discourses which emphasised the refinery's technological sophistication. In some cases, invited journalists were enthralled to the point of fantasy:

Wentworth Refinery is a futurist sight, a maze of pipes, coils, towers and tubes and tanks. It is as modern as Marilyn Monroe and has a sinister beauty of its

³² 'Refinery Should Be No Hazard-Expert' *Natal Mercury*, 22 November 1951.

³³ 'Oil Pipeline will not spoil beauty of roads' *Bluff News Letter*, 13 June 1952.

own...the whole plant is a mass of magic eyes and electronic brains installed to operate with robot-like efficiency. There are even robots, I have no doubt, to chase and catch any stray smells and put them to work – the ultimate refinement.³⁴

The larger space of south Durban (excluding the 'white' Bluff) was repeatedly depicted in newspaper articles as a snake-infested, thinly peopled swamp, which had to be tamed before the new, modern oil refinery could be built.³⁵ On the rare instances when people did make an appearance on this pre-industrial landscape they were, quite literally, in the way:

At first the tall, thin Indian farmer couldn't understand what the European had said about a railway cutting across his small field of ginger. Then the European scooped some wet mud from a lettuce bed and with quick deft fingers made a model of the Indian's small holding. Through the ginger field he drew a line representing the railway. The Indian understood, but shook his head. The European tactfully explained that a great oil refinery was to be built near the Indian's farm and it must have a railway to the main Natal South Coast railway at Clairwood, seven miles south of Durban – a railway which would be a vital link with the hinterland. Then the Indian spoke. He didn't mind the railway, but what about the ginger plants? The European, alert and keen, was

³⁴ 'Wentworth-Without Chlorophyll' *Natal Daily News*, 14 November 1953.

³⁵ 'Americans Find Snake Catcher Necessary on Bluff Refinery Site' *Natal Daily News*, 31 July, 1952.

ready for the question. 'Every one will be transplanted for you. If they can't be transplanted, we'll sow new plants. You will be fully paid for the land the railway uses and we will build you gates,' he replied. The Indian nodded agreement. 'So long as the ginger plants are transplanted it will be all right,' he said.... A Native's wood-and-iron house stood squarely in the path of the pipeline's route as it cut through bush country towards Durban Bay. Joseph Sitole and his wife lived there. Proudly he showed the oil Company officials his home – the pictures on the walls, the buck's head in the hall and the tidy kitchen and sitting room. Joseph was crestfallen when he heard the pipelines would go through his house. He had no title deeds for the property and no claim. But today Joseph smiles again. The officials have rebuilt his house clear of the pipelines' route and he salutes them daily as they drive past in their jeeps...it is sandy bush country, dotted with shanties. A car cannot travel along it because of the sand, but the Company men drive down it in jeeps.³⁶

The areas' subjugation to industrial modernisation continued apace, and as construction neared completion media articles reflected anticipation of the refinery's benefits.³⁷ It started up on January 2nd, 1954 and the first reports of complaints about smells emanating from the refinery were made at the

³⁶ 'Bluff Oil' *The Outspan*, 3 October 1952.

³⁷ See 'Durban's £7, 000, 000 oil refinery takes shape' *Natal Mercury* February, 21, 1953; 'Oil Refinery Begins to Rise above ground' *Natal Mercury*, January 8, 1953; '\$22, 000, 000 Petroleum Refinery Rising in South Africa' *New York Times*, June, 14 1953; 'Petrol from Wentworth Shortly' *Natal Mercury*, 29 July, 1953; 'Wentworth Refinery Nears Completion' *Natal Mercury*, 2 November, 1953.

beginning of February. Initial investigations by officials from the City and Water Engineers Department were inconclusive. They did however take special note of the heat coming from the refinery flare, which was situated near land which the Council had set aside for development as part of the Merebank-Wentworth Indian and Coloured Housing Scheme. The officials reported that 'any houses within say 200 yards of the stack would be affected, particularly by the continuous flare.'³⁸ Remarkably, they were only referring to the visual impact.

Bluff Labour Councillors Spanier Marson and Jimmy Bolton brought up the complaints at a meeting of the City Council.³⁹ The municipal bureaucracy had begun to receive letters from residents describing being woken up ('chocking') in the early hours of the morning by an 'obnoxious' and 'evil-smelling stench.'⁴⁰ Stanvac's response to these first complaints was to trot out the familiar refrain about the refinery's sophistication. There had simply been a plant breakdown which could be put down to the 'teething troubles'

³⁸ TBD 3/DBN 4/1/4/131 Vol. 4, 39C Proposed Oil Refinery at Wentworth; Acting City and Water Engineer to Town Clerk, 3rd February, 1954.

³⁹ 'Alleged Smell from refinery' *Natal Daily News*, 16 February 1954.

⁴⁰ SAB HEN 718 Power, Spirits and Oil Industry. Standard Vacuum Oil Refinery, Wentworth, Durban. Complaints Investigation; G.E. McGilvray to Acting City Medical Officer of Health, 17 February, 1954.

experienced by new refineries.⁴¹ Replying to queries by G.H. Gunn, the City Medical Officer of Health on February 19th, Stanvac's Managing Director, Bryant Kenney gave a similar reiteration, and questioned the validity of complaints.⁴²

Gunn's deputy in the City Health Department, G.D. English adopted a pragmatic stance, arguing that 'the sooner we all realize that no refinery in the world can operate without creating this type of smell the better...' and that 'all concerned should exhibit a spirit of forbearance' and 'place their trust in the refinery officials' as the refinery was going through 'a stage of teething troubles.' He argued for careful consideration of 'the siting and efficient management' of any additional plants which might establish in the area 'to minimize smell nuisances.' Significantly, he recommended that the Council obtain 'expert advice' from the USA and UK because 'unless adequate safeguards are introduced...a decision may have to be made as to whether Durban should become fully industrialized or remain the premier health and holiday resort of the Union.' His closing warning, laden with historical irony in the light of south Durban's development and current debates about the importance of tourism to Durban's future, was stark: 'beyond a certain stage,

⁴¹ TBD 3/DBN 4/1/4/131 Vol. 4, 39C, J.K. Harris to Town Clerk, 19 February, 1954.

⁴² SAB HEN 718, Complaints Investigation, B.F. Kenney to Dr G.H. Gunn, 22 February 1954.

the reconciliation of these conflicting interests may well be beyond even the genius of our town-planners to solve.⁴³ The local state relied heavily on a diet of experts to provide it with guidance, be they town planners or authorities on pollution, but neither would prove themselves unable to reconcile these 'conflicting interests'. As we will see this would necessitate the establishment of a system of environmental regulation to minimise pollution.

In early March G.H. Gunn, the City Medical Officer of Health took a pessimistic view of the controversy:

It is likely that some degree of unpleasant smell will always be associated with oil-refining. Should this prove to be the case, the question will be 'Will the Bluff residents put up with it, such as it is?' Judging by some of their reactions to date, one might think it most unlikely.

Despite these indications of the limits of the Bluff's patience, the Durban City Health Department's approach to the pollution question was framed by a policy of 'following precedent and custom'. In practice this meant Stanvac would be given 'reasonable time' to implement its undertaking to 'abate the nuisance.' Gunn admitted that if Stanvac failed to 'mitigate the nuisance to

⁴³ TBD 3/DBN 4/1/4/131 Vol. 4, 39C, Memo by G.D. English (Deputy City Medical Officer of Health) to Town Clerk, 24 February, 1954.

the satisfaction of the Bluff residents concerned', they might then 'take the matter further', when 'it will have become too complicated for this Department to handle unaided'.⁴⁴

On the 11th of March the refinery's managing director Bryant Kenney, met with the Mayor Percy Osborn, and a deputation of White residents from Brighton Beach, Wentworth and Fynnlands. After being presented with a six hundred signature protest petition, he promised that the smell would be overcome within a month as Stanvac started to use excess gas for by-product.⁴⁵

In early April however, the refinery started a twenty-four hour pollution watch.⁴⁶ Shortly after its introduction the Mayor Percy Osborn called an emergency meeting of the City Council because of what he starkly referred to as: 'poison laden air coming from the oil refinery at Wentworth.'⁴⁷ The Town Clerk and the City Council's legal adviser had been contemplating the powers the Corporation possessed to deal with the pollution. It had emerged that Stanvac's management had decided to deny that the refinery was the source

⁴⁴ TBD 3/DBN 4/1/4/131 Vol. 4, 39C, G.H Gunn to Town Clerk, 4 March, 1954.

⁴⁵ 'Going Soon' *Natal Daily News* 11 March 1954 'Bluff Deputation to Mayor on smell' *Natal Mercury*, 12 March 1954.

⁴⁶ 'Refinery Fights Air Pollution' *Natal Mercury*, 9 April 1954.

⁴⁷ 'The Smell' leads to Protest *Sunday Tribune*, 11 April 1954.

of the trouble, which meant the municipality would have to prove that the refinery was the *sole* source of the smells. The Town Clerk knew full well that if the Council pushed for an interdict against Stanvac 'a dispute on questions of fact' would arise which would result in a prolonged legal battle.⁴⁸

Mounting anxiety associated with the seeming inability of Stanvac to deliver on its promises culminated in a meeting of the (white) ratepayers associations of Fynnland, Brighton Beach and Wentworth during which the Bluff Amenities Protection Association was formed. This organisation was partly a result of what were at this stage still rather vaguely articulated concerns about possible health effects, together with alarm at the impact of the pollution on property values.

Continued complaints that the pollution was causing irritation, coughing and bouts of nausea and vomiting set the municipal machinery turning at an unusually rapid pace, culminating on the 14th of April in the City Council voting to give Stanvac an ultimatum, which demanded that it bring an end to the smell within twenty-four hours, or face a court injunction forcing its

⁴⁸ TBD 3/DBN 4/1/4/131 Vol. 4, 39C, Town Clerk to Councillor G. Vernon Essery, 20 April, 1954; Legal Adviser to Town Clerk, 12 April, 1954.

closure.⁴⁹ Much of the rhetoric of City Councillors at this time alluded to the importance of protecting the interests of the city's ratepayers – which included their health and property values.⁵⁰

Stanvac desperately asked the Department of Commerce and Industries for help to stave off the Council's threat. Both officials of the Department of Commerce and Industries and, somewhat more surprisingly, the Secretary for Health were unsympathetic towards the Council's position, citing warnings which had been given to the City Council about pollution during negotiations. For this reason, the Secretary for Health argued, the City Council 'cannot say that they were unaware of what could happen at Wentworth.'⁵¹

The Minister of Economic Affairs Eric Louw and Secretary of Trade and Industries David de Waal Meyer, who had played key roles in the

⁴⁹ 'Greatest Public Outcry in Durban History' *The Star*, 15 April 1954. Immediately after the Council-in-Committee meeting which saw the Council resolve to give the Company an ultimatum, the letter from the Town Clerk containing the ultimatum was delivered to the Company by a City Police motor-cyclist. TBD 3/DBN 4/1/4/131 Vol. 4, 39C, Town Clerk to Councillor G. Vernon Essery, 20 April 1954.

⁵⁰ 'Stop refining till new plant can stop smell': Issue by Bluff people' *Natal Daily News*, 14 April, 1954.

⁵¹ SAB HEN 715 Vol. 5, Power Sprints and Oil Industry, Establishment of Industry, Standard Vacuum Oil Refinery, Wentworth, Natal. Telegram from Principal Officer to Under Secretary 15 April 1954. My thanks to Catherine and Gys Dubbeld for translating the original document.

negotiations to establish the refinery, were on a tour of fishing centres when the news of the interdict broke. In their absence the Department made it clear that it was concerned about the possible effect of the City Council's decision on overseas industrialists contemplating the establishment of similarly large industries in South Africa, in addition to the probable costs of any shutdown and its affect on oil distribution. Behind these public pronouncements was alarm at the prospect of a local authority shutting down a major industry, which was regarded by national government as a strategic asset. In the meantime, Stanvac called an emergency late night Directors' meeting in Durban to respond to what the *Natal Daily News* described as 'the biggest industrial sensation in South African municipal history.'⁵²

Speaking to the sound of what was described as 'enthusiastic cheering' at a meeting of Bluff residents after announcing the Council's ultimatum to the refinery, Mayor Percy Osborn promised:

If the pollution thrown out by the refinery cannot be eliminated or abated, and there has to be an evacuation, you can rest assured it will not be the residents

⁵² 'Refinery Asks for time-Directors Meet' *Natal Daily News*, 15 April 1954. The Standard Vacuum Oil Company of New York viewed the situation with sufficient seriousness to send legal experts from its headquarters in the U.S.A to Durban to draft press statements. (Personal Communication by author with former Process Engineer, Wentworth Refinery, 22 November 2003)

of the Bluff who will go. You will stay here in peace and happiness, and the refinery must die.

At the same meeting, the Bluff's Labour Party stalwart Councillor Sidney Smith (at one time the Mayor of Durban) responded to the Department of Trade and Industries' argument that the refinery was 'in the national interest' (a discourse first employed in 1951) by thundering: 'where lies the country's national interests – the making of profits by an oil company, or the health and homes of its citizens?' Councillor Spanier Marson drew upon historical notions of civic service: 'many of us here tonight fought in one or other of the World Wars to safeguard our homes. We intend to fight as strenuously now to protect our homes as we did then.' His comment was greeted with 'uproarious applause.'⁵³ Civic mobilisation on the Bluff had developed a momentum all of its own which for the moment at least was driving the course of events because of the pressure it placed on the local state.

As the deadline for the ultimatum neared an official from the Department of Trade and Industries telephoned William Howes, the Town Clerk, informing him that Eric Louw was 'perturbed' by the short notice that had been given to

⁵³ "'We will fight in the highest courts if need be" says Councillor' *Natal Daily News*, 15 April 1954.

the Company by the City Council.⁵⁴ The deadline for the ultimatum passed while the Stanvac Board of Directors were still deliberating at midnight of the 15th April, and the refinery continued operating into the next day, when Eric Louw spoke publicly for the first time about the controversy, urging the City Council that 'calm discussion between the parties' and not 'threats or precipitate action' were the 'correct' way to deal with the situation, reiterating what had earlier been emphasised by the government about the economic and strategic importance of the refinery. Significantly, Louw added that there were doubts about whether the pollution was 'actually...harmful to health.' He suggested that the Council 'check the accuracy of complaints' that were being made about the refinery in the press.⁵⁵ This scepticism was also evident in the in-house statement issued by the refinery's managing director Bryant Kenney: 'situations such as this are breeders of unfounded rumours, and we ask you all to assist us in combating any unfounded allegations.'⁵⁶

With the government's intercession on behalf of Stanvac, the City Council postponed its threatened interdict. The Town Clerk was privately perturbed by the implications of the Government's intervention for the dispute:

⁵⁴ 'Louw intervenes in refinery row' *E.P Herald*, 16 April 1954.

⁵⁵ 'Louw urges Durban to avoid hasty action in oil dispute' *Cape Argus*, 17 April 1954.

⁵⁶ 'Refinery Appeals to Staff' *Sunday Tribune*, 18 April 1954.

...the Government's interest and concern in the matter...introduce a further factor into the general situation – namely the possibility that the Minister might intervene on the side of the Oil Company in any application for an interdict made by the Council. Such a development would put the Council in a very difficult position, for it would not be able to rebut what the Minister would say.⁵⁷

One of the striking features of the controversy was that interventions by national government occurred through officials and 'experts' from the Ministries concerned with economic issues and *not* health. This appears to reflect the priorities of national government, which were chiefly economic and strategic, rather than being rooted in a genuine concern about the health of residents affected by the refinery. The part played by 'experts' in the government's interventions is particularly important. Eric Louw sent two 'technical experts' to Durban to help resolve the dispute, including Dr B.Gaigher, former Secretary for Commerce and Industries and Chairman of the New Industries Committee, and one of the department's senior economists Pieter Vermeulen, both of whom had been involved in the earlier negotiations. Their expert credentials vis-à-vis petroleum refining were doubtful, but they served the purpose for which they were sent to Durban –

⁵⁷ TBD 3/DBN 4/1/4/131 Vol. 4, 39C, Cited in Town Clerk to Councillor G. Vernon Essery, 20 April, 1954.

as a temporary salve in the dispute. Their directive was to investigate the dispute 'from a scientific point of view' and this approach prefigured the emphasis upon technocratic solutions which would be a hallmark of the refinery pollution controversies throughout the remainder of the decade.⁵⁸

During a gap in the marathon closed-door meetings with the Government's 'experts', Mayor Osborn criticized the refinery's management for denying that it was the source of the pollution, in the light of its earlier admittance that there was a problem when complaints first emerged. More crucially, he pointed out that during preliminary negotiations Stanvac had given the Council an undertaking that there would be no 'nuisance' once the refinery began operating.⁵⁹ Nonetheless there were signs of a compromise; the intervention by Louw's emissary's, together with the City Council's cognizance of the significant financial benefit of the refinery to its coffers, produced a more conciliatory approach to the dispute.⁶⁰ In private discussions

⁵⁸ 'Refinery's Fumes: Talks Go On Tomorrow' *Natal Daily News*, 20 April, 1954. An incident during Gaigher and Vermeulen's Durban trip served to confirm their belief in the importance of scientific objectivity in the face of political controversy. Reg Pomeroy, one of Bryant Kenney's deputies and an engineer by training detected an unpleasant smell when he was showing them around the refinery. Pomeroy was convinced that the smell emanated from the refinery. But Gaigher and Vermeulen insisted that it didn't. Their investigations ended with them tracing the smell to an outflow pipe of a sugar mill further to the South of the refinery. Pomeroy's reaction, they argued, was evidence of how scientists could be influenced by what they termed 'agitation'. See SAB HEN 715 Vol. 5. 'Verslag oor die geskil tussen die Stadsraad van Durban en die Standard Vacuum Oil Company insake lugbesoedeling.'

⁵⁹ 'Refinery's Fumes: Talks Go On Tomorrow' *Natal Daily News*, 20 April, 1954.

⁶⁰ 'New approach to Durban oil refinery dispute' *The Star*, 21 April, 1954.

with the government representatives, Mayor Osborn was far less strident, admitting that his public bluster was partly to appease Council members and Bluff residents, and that he was less than sure whether the interdict threat would be carried out.⁶¹ The outraged response to the apparent easing of the situation among the residents living on the Bluff who had helped bring the issue to a head was immediate.⁶² But despite such pressures an agreement was reached, in the form of the appointment of a panel of 'independent overseas experts' to investigate the refinery and the establishment of a twenty-four hour office to deal with pollution complaints.⁶³ The expert panel would set an important precedent for the way in which pollution would be dealt with in the future. Experts offered the possibility – however naïve – of a technical solution, and most significantly, they provided legitimation for both the local and central state, and could act as a balm to some of the more fractious elements from the Bluff and in the City Council.

⁶¹ SAB HEN 715 92/2/32 Vol. 5, 'Verslag oor die geskil tussen die Stadsraad van Durban en die Standard Vacuum Oil Company insake lugbesoedeling.'

⁶² 'Bluff Residents "Up in Arms" with Council' *The Star*, 22 April, 1954.

⁶³ 'Bluff 'Smell'-in the end they agreed' *Natal Daily News*, 22 April, 1954; 'Durban's 'Little Abadan' over: Compromise agreed on' *E.P Herald*, 23 April 1954; 'The Refinery Dispute' *Sunday Tribune*, 25 April 1954. The pollution hotline continued operating until 1955. Engen began operating its own complaints hotline in the 1990's under pressure from the communities living around the refinery.

One of the most interesting aspects of the controversy is the role played by middle class white women living on the Bluff, almost all of them housewives, as some of the chief complainants about pollution, both individually and in civic organizations such as the Brighton Beach Women's Institute. Many employed language rich with metaphoric references to the invasion of the space of the home by smells and to the negative effect of these smells on children. On the 28th of April the President of the Brighton Beach Women's Institute wrote to the Town Clerk complaining of continued smells, revealing the subtle racism characteristic of the civic culture shared by many Bluff residents at the time:

...another member advises that her servants are leaving to seek employment in another area. Even the poor native does not have to sleep, eat and work under such unpleasant conditions.⁶⁴

Rather more powerful in its consequences for the shape of the urban landscape, one of the most striking expressions of bureaucratic racism from this period was made by the Municipality's Medical Officer of Health G.H. Gunn:

⁶⁴ TBD 3/DBN 4/1/4/131 Vol. 4, 39C; President Brighton Beach Women's Institute to Town Clerk, 28th April, 1954. Underlined in original.

A large gas flare always visible close at hand would tend to discourage the highly imaginative European from settling on land in its proximity. The phlegmatic non-European would not, however, be thereby discouraged to anything like the same degree, if at all, more especially in view of the extreme shortage of urban land available for non-European settlement.⁶⁵

We should not lose sight of the importance of such views to the larger story of south Durban's development with which this dissertation is concerned. The compromise had been reached just in time; the refinery was officially opened in early May. Two City Councillors had not supported the agreement, including Elwyn Leighton Black, who voted against the motion because he felt that the agreement could not be legally enforced and that it relied too heavily on the Company's 'goodwill'.⁶⁶ At the root of the issue was the reality that the City Council had no real legal power to prevent atmospheric pollution, both because of the inadequacy of municipal by-laws and the lack of a national legislative framework to control or prevent atmospheric pollution.⁶⁷ There was considerable dissatisfaction among Bluff residents with the functioning of the complaints office set up at the

⁶⁵ TBD 3/DBN 4/1/4/131 Vol. 4, 39C, City Medical Officer of Health G.H. Gunn to Town Clerk, Durban, 27 April 1954.

⁶⁶ 'Why Mr. Black opposed ratification' *Natal Daily News* 8 May, 1954.

⁶⁷ This would continue until the mid 1960's with the passing of the South African Atmospheric Pollution Prevention Act in 1965, which was deeply flawed and unevenly enforced.

refinery primarily because of the length of time taken by members of the complaints office team to arrive at the homes of complainants.⁶⁸

But none of this was to be allowed to impinge upon the official celebration of the refinery's establishment. Eric Louw used the opportunity to launch a defiant counter-attack in response to what he termed a 'sustained campaign of hostility' that had been directed against South Africa since the Afrikaner Nationalists had come to power:

South Africa has been much maligned in overseas countries, particularly at international gatherings. The anti-South Africa campaign has particularly been directed towards undermining confidence and prejudicing foreign investors. It says much for the economic strength of South Africa that she has not only been able to weather this storm of malice and slander but that the country's economic position today is as good and strong as any country in the world.⁶⁹

Clearly the establishment of the Stanvac refinery and the subsequent intervention in the dispute by national government must be viewed against this backdrop. In a similar manner, an editorial in the staunchly Afrikaner Nationalist daily *Die Transvaaler* shortly after the disputes' resolution argued:

⁶⁸ TBD 3/DBN 4/1/4/132 Volume 5, G.E. McGilvray to Town Clerk, 7th May, 1954.

⁶⁹ 'Campaign against Union Says Louw' *Natal Mercury*, 12 May 1954.

The great new £7, 000, 000 oil refinery in Durban is indeed one of the outstanding trio of new industrial undertakings in which Natal now rejoices, the other two being the rayon factory at Umkomaas and the paper factory on the Tugela. Together they will help Natal's economy reach astronomical heights...that this progress has been initiated in the very province which has set itself most relentlessly against Nationalism, is further proof that the economic factor totally overrules politics. The dogs may bark but the caravan moves on.⁷⁰

In many ways the final sentence encapsulates the story of the Stanvac pollution controversy, though in this case the 'economic factor' (i.e. foreign investment) overruled a local politics far less concerned with opposition to Afrikaner Nationalism than it was with maintaining civic amenities. Though the refinery may have been viewed by sections of the Afrikaner Nationalist elite as the first of many strategically important pet projects, at this stage it was also imbued with meanings which appealed to broader modernist discourses of progress. The refinery's importance to the Apartheid state is clear, but the larger picture of the nature of local politics in Durban is crucial to bringing the question of the relationship between Apartheid and Capitalism down into the reality of historical contingency. What emerges is the power of the civic culture among white residents on the Bluff, which was

⁷⁰ Editorial from *Die Transvaler* 16 May, 1954 quoted in *P.E Evening Post*, 17 May, 1954.

premised upon the heightened prestige of white citizens during Apartheid. But as we will see, this did not exclude them from the short-circuiting effect of the interactions between bureaucrats, experts and petro-capital. Within this context, the importance of the parade of experts detailed in this dissertation becomes clear. Because of the knowledge which they were assumed to possess, and the power of the legitimacy and quiescence which they were thought to ensure for both local and central government these experts became exceedingly important to the development of the petroleum refining industry in South Africa in the 1950s. But they would not be able to provide solutions to persistent pollution problems. Instead, in time, they would themselves argue for the establishment of a system of environmental regulation which would minimise, if not bring an end to pollution, which coalesced with the Durban municipality's attempts at balancing its pressing populist and financial imperatives.

Chapter Two

'Questions of Fact' – Expert Knowledge, Technology and Disillusionment in the Stanvac Story, 1954-1958

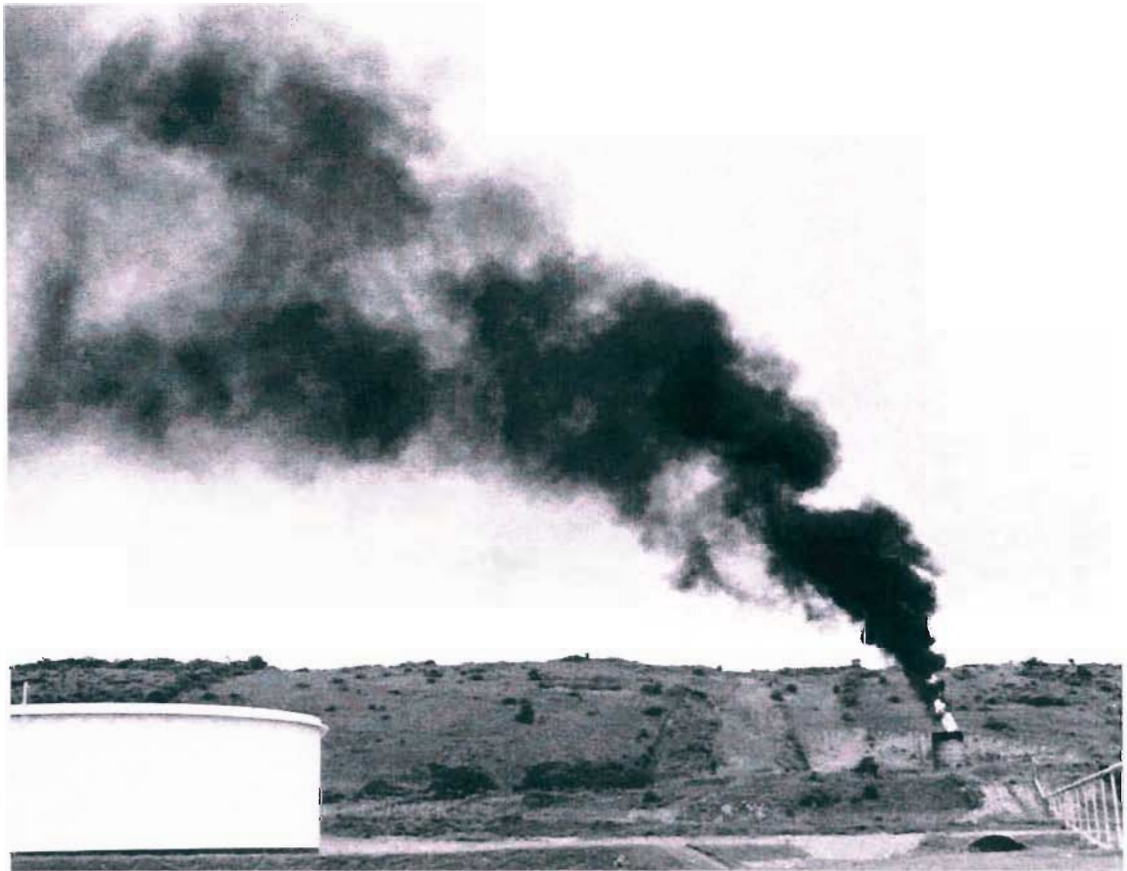


Image 5: Pollution from the Standard Vacuum Refinery flare at Wentworth, 1954.¹

From its conception a great deal of nationalist rhetoric was invested in the Stanvac project. The Afrikaner Nationalist government viewed the project as a major feather in its cap, though the rhetoric emphasising the *national* importance of the refinery appealed to a broader (white) South African nationalism. This was twinned with a discourse which portrayed the

¹ From Engen Refinery Library Photographic Collection

refinery's gleaming pipes and towering stacks as monuments to the increasing modernity and economic independence of the Union.² These discourses were slowly disrupted at the local level by persistent pollution problems in south Durban. Technocratic solutions to pollution, whether in the form of expert knowledge or technological innovation, became vital to the attempted resolution of political conflict that arose out of the refinery pollution controversy. The failure of technological and expert interventions to overcome pollution problems produced a profound disillusionment. But the faith in technocratic solutions proved remarkably resilient nonetheless.

Just a day after the refinery's high-powered opening ceremony, a report by the City Medical Health Officer Dr. G.H. Gunn outlined the extent of the complaints received by the special office set up at the refinery to investigate complaints of pollution. Seventy-three complaints had been received over the first eight days of its operation.³ In the interim period before the arrival of the team of overseas experts to investigate the refinery, the debate about the controversy continued, fuelled by further reports detailing complaints.⁴ While

² For a similar argument about nuclear power projects in post World War II France see G. Hecht *The Radiancance of France: Nuclear Power and National Identity after World War II* MIT Press, 1998.

³ 'Report on Durban refinery 'smells'' *Natal Daily News*, 11 May 1954. 'Oil panel got 73 complaints' *Natal Mercury*, 12 May 1954. The report did not include complaints made to the City Council or the refinery itself.

⁴ See for instance '25 'Smell' Complaints' *Natal Daily News*, 5 June, 1954.

the Government finalized the make-up of the team of experts, Bluff residents were becoming increasingly impatient, collecting funds in case of any future legal action.⁵

In early June the controversy surfaced in Parliament, when Labour MP for Umlazi, Norman Eaton and United Party MP for Pinetown Arthur Hopewell quizzed Eric Louw about the controversy. Louw fingered what he described as 'political influence', supposedly linked to the upcoming provincial elections, as being behind the mobilization on the Bluff against pollution. Brandishing photographic evidence (passed on to him by Stanvac) he alluded to posters put up on the Bluff promoting Sidney Smith as a provincial candidate, which referred to pollution from the refinery.⁶ The extent of the conviction within the Department of Trade and Industries that there were ulterior local political motives behind the controversy is revealed in a memo prepared for Eric Louw, which portrayed the various key Bluff protagonists, including Sydney Smith, and the Durban Mayor Percy Osborn as desperate political has-beens, trying to turn the publicity of the pollution controversy into political capital. In the Department's view, Smith had employed his charisma and orator skills to 'take along the masses' who were easily

⁵ TBD 3/DBN 4/1/4/132 Vol. 5, Telegram from Town Clerk to Pretoria, 20 May, 1954.

⁶ *Hansard* Union of South Africa House of Assembly Debates, 4 June 1954. See also 'Mr Louw Tells of 'Campaign'' *Natal Daily News*, 4 June 1954; "Durbanse 'Stank' in Politiek Gesleep' *Die Volksblad* 5 June 1954.

'captivated' by his 'agitation' and 'rabble rousing'. He had been joined by other Labour Party politicians, with histories of trade unionism who had jumped on the 'bandwagon'. It was 'this minority' of Bluff based politicians together with the (desperate) incumbent Mayor Percy Osborn which had 'totally overwhelmed' the City Council with 'grossly exaggerated evidence' which gave rise to the Council's original decision to give the refinery an ultimatum. Under these circumstances, the memo concluded, the refinery 'and its tastes and smells' were 'a gift from the gods.'⁷

There is no question that the Bluff-based City Councillors tried to benefit politically from the pollution.⁸ Because of the prominent position occupied by both Percy Osborn and Sidney Smith on the City Council, they appear to have been able to exert considerable influence over other councillors, and the municipal bureaucracy, who, as Purcell has argued, were largely quiescent until the mid-1960s.⁹ But there was undoubtedly a serious pollution problem.

Remarkably, it quickly emerged that the refinery did not yet have a municipal

⁷ SAB HEN 715 Vol. 5, Power Spirits and Oil Industry. Establishment of Industry. Standard Vacuum – Oil Refinery. Wentworth, Natal; 'Politieke Afergrond waarteen die gebeure tussen die stadsraad van Durban en die Standard Vacuum Oil Company gedurende Maart/April 1954 afgespeel het.'

⁸ See SAB HEN Vol. 5, 'Verslag oor die geskil tussen die Stadsraad van Durban en die Standard Vacuum Oil Company insake Lugbesoedeling.'

⁹ J. Purcell 'Durban, South Africa: Local Politics in a Plural Society' University of California, Los Angeles, PhD thesis, 1974. According to Mayor Percy Osborn, Sidney Smith was given 'carte blanche' by the City Council to 'act as was necessary'. See '1,000 at Bluff meeting Cheer Council Move' *The Natal Mercury*, 15 April, 1954.

license to operate. The question of whether the refinery would be granted a license rapidly became one around which the controversy pivoted. The Bluff Amenities Committee made it clear that it would oppose Stanvac's belated application for the license because once it was granted, the national government could be expected to wash its hands of the issue, so that responsibility would 'devolve' to the City Council, whose reputation had deteriorated amongst a number of Bluff residents since it had 'back-pedalled' by ratifying the agreement with the refinery.¹⁰ This devolution of responsibility for environmental regulation to the local state was precisely what would happen from the late 1950s.

But the relationship between the Council and Stanvac was still marked by considerable tensions, such as their disagreement over the scope of the refinery investigation. Stanvac insisted that the dossier compiled by the Town Clerk for the experts placed too much emphasis on the actual details of the complaints. Stanvac argued that the experts were coming to 'report upon the design, construction and operation of the refinery' and not to decide 'whether it constituted a nuisance.'¹¹ Of course this was ridiculous: if there were no 'nuisance' there would have been no need for an investigation at all.¹² More

¹⁰ 'Licence to refinery opposed' *Natal Daily News*, 15 July, 1954.

¹¹ TBD 3/DBN 4/1/4/132 Vol. 5, See Goodricke & Son to Town Clerk, 25 August, 1954.

¹² 'Oil Company and Council Disagree' *The Natal Mercury*, 10 September, 1954.

revealingly however, the instructions from the Department of Commerce and Industries were that the dossier should *not* be made available to the Bluff Amenities Committee because it felt that the investigation should 'be kept on specialist level without possible interference from layman.'¹³ This was a clear indication of the central state's preference for using experts as a bulwark against popular pressure on the Bluff. Wary of the pressure being placed on the City Council, the Town Clerk went against this, arguing that providing the committee with a copy represented 'important public relations.'¹⁴

The gap between the appointment of the team of overseas 'experts' and their arrival in September gave the Company important breathing space, but it also represented an opportunity for the Bluff Amenities Protection Association to solidify its claims about the pollution through the formation of a 'Technical Sub-Committee'. This body employed the language of science, chemistry and meteorology to support its argument that the appeals by Bluff residents did not 'arise from hysteria as had sometimes been alleged but from honest and real complaints.'¹⁵ This shift in discursive strategy illustrated the power attached to expert driven scientific discourse. In a similar vein the Association

¹³ TBD 3/DBN 4/1/3/132, Vol. 5, Telegram to Town Clerk, Durban, 14 August 1954.

¹⁴ TBD 3/DBN 4/1/3/132; Vol. 5, Telegram from Town Clerk, Durban August 14, 1954.

¹⁵ TBD 3/DBN 4/1/4/132 Vol. 5, Statement by Technical Sub-Committee of Bluff Amenities Protection Association, 21 August 1954.

also strove to bolster the complaints by drawing on the 'medical' opinion of a local Doctor, which was nonetheless brimming with the sort of vitriolic metaphorical language typical of many of the letters written by residents about the pollution:

...there must be few if any of us on the Bluff who have not had the unpleasant experience of inhaling the evil, vile and filthy fumes which pour unabated from the Stanvac Oil Refinery Company. Has this cloud of dense, heavy, nauseous fog which settles so charmingly over our air, homes and gardens an effect on our health? Without doubt, without fear of contradiction, the health of the population is and will suffer as long as this menace continues. Apart from the mere unpleasantness the smell has brought with it a strain of symptoms which are both disturbing and demoralizing. As a Doctor I was at first tempted to regard the complaints of my patients in respect to the odour as 'mass oil refinery hysteria' but I was soon shocked to know that the complaints were very real and that the residents health would suffer to a marked degree...these are not isolated cases but in truth the reactions of people on the Bluff to the evil smelling smog...these are facts which I am able to prove and I challenge anyone to contradict or question the authenticity of the above remarks. For the sake of health and the necessary good living conditions something must be

done to prevent this ever present pollution and to stop the vomiting up of this murky monstrous mist.¹⁶

Stanvac did not succeed in its attempts to prevent the inclusion of the details of pollution complaints in the memo, but in early September, shortly before the arrival of the experts its lawyer Charles Friedman again pleaded the company's case with the Town Clerk. Stanvac were alarmed that the enquiry might 'develop into a trial on questions of fact.' It admitted that the experts *were* 'technical men' but they were 'not qualified to go into questions of fact' which in its view were 'seriously disputed.' Stanvac feared that the Amenities Association's would use the cover of respectability represented by the 'technical sub-committee' to help it secure a meeting with the experts, from which it would launch a 'mud-slinging attack'. The company wanted the investigation to be limited to a 'technical examination' of 'technical considerations.' It was only an awareness that the Town Clerk was 'anxious to prevent a feeling getting around' that the technical committee were being marginalised that prevented Stanvac from objecting to it meeting the experts.¹⁷ The Town Clerk was, as he described it, subject to 'pressure from opposite sides at the same time' and had decided:

¹⁶ TBD 3/DBN 4/1/4/132 Vol. 5, A Short Criticism of the Smell from the Refinery (Stanvac) approved from the Medical Viewpoint.

¹⁷ TBD 3/DBN 4/1/4/132 Vol. 6, C.Friedman to Town Clerk, 2nd September 1954. Underlined in original.

...to follow a line which will be sound from the angle of public relations. To leave the Bluff Committee with the feeling that it had been stifled would be a serious mistake. From the public relations angle it could undo all the good the investigation might do, and might leave behind it more hostility than there is at present.¹⁸

Though it publicly spoke the language of co-operation, the long-awaited visit by the overseas experts was clearly viewed with scepticism by Stanvac.¹⁹ In public discourse the experts were portrayed as the embodiment of English scientific neutrality and impartiality. Their expertise was seen as key to bringing about a resolution to the pollution problem. The Department of

¹⁸ TBD 3/DBN 4/1/4/132 Vol. 6, Town Clerk to C.Friedman, 13th September 1954

¹⁹ Personal Communication by author with former Process Engineer, Wentworth refinery, 22 November 2003. The team of 'experts' included Liverpoolian H.G. Howson, who spent the first few years of his career in the chemical industry in South Africa, before returning to England where he worked in the petroleum industry, before joining the staff of the Alkali Inspectorate (the UK body responsible for controlling industrial pollution) in 1929 until his retirement in November 1953. He had considerable experience of dealing with air pollution from oil refineries; the large Stanlow refinery in Cheshire and the Manchester oil refineries and other petrochemical plants which fell under his control in the Alkali system. He was joined by Professor F.H. Garner, the Director of the Department of Chemical Engineering at Birmingham University, which had a reputation as the leading chemical engineering department in the U.K. He had lengthy experience from working for the Anglo-American Oil Company and the ESSO Laboratories before leaving the oil industry for academia. The third member of the overseas panel was Mr. E.S. Sellers, the least experienced of the three, who lectured chemical engineering at Cambridge University after spending a few years in the petroleum refining industry. It is worth noting that at least one of the leading young South African chemical engineers employed at the refinery at the time of the investigation had been taught by Sellers at Cambridge.

Commerce and Industries regarded the experts chiefly as a tool to pacify the Bluff residents and secure the government's local political legitimacy.²⁰

When the results of the experts' study were released in December, the 'design and construction' of the refinery were described as 'satisfactory' except for certain areas which would need modification. The report agreed that there had been unquestionable grounds for 'odour complaints' in the early months of the refinery's operation, but asserted that steps had been taken to improve the situation. Betraying a racist conception of space, the report confirmed that the refinery's location meant that in certain weather conditions, smells would be carried towards 'the residential area' (i.e. the Bluff).²¹ The report reinforced the impression that both the city and the country at large were in serious need of the development of new powers to deal with pollution. There was an

²⁰ SAB HEN 715 92/2/32 Vol. 5, Verslag oor die geskil tussen die Stadsraad van Durban en die Standard Vacuum Oil Company insake Lugbesoedeling.

²¹ SAB HEN 716 92/2/32 Vol. 2, Power Spirits and Oil Industry. Establishment of Industry. Standard Vacuum – Oil Refinery. Wentworth, Natal. Report of Commission of Enquiry. concerning the Durban Refinery of Standard Vacuum Refining Co (Pty) Ltd and see also 'Wentworth Refinery found satisfactory by experts' *Natal Daily News*, 14 December 1954. The Bluff Amenities Protection Association was critical of the secrecy that surrounded the report. Final copies of the report were given to the Durban Town Clerk and the Manager of the Standard-Vacuum Refining Company while the Town Clerk issued a short summary to the press, which set out some of the findings and recommendations. The primary justification for the tight control exercised over the report was that it contained 'trade secrets' precious to the Standard Vacuum Refining Company and its competitors. See 'Why This Secrecy About Refinery? - Ask Bluff Residents' *Sunday Tribune*, 19 December 1954.

increasing appreciation among Durban's bureaucratic elite that this was particularly important because of the city's growing tourist industry.²²

While the various municipal, provincial and central government authorities had worked largely in concert during the negotiations to capture the refinery when the negative effects of the project emerged it was the Durban City Council, as the refinery's host, and the authority nearest to the ground, which had to deal with the immediate wave of what the Town Clerk aptly described as 'disillusionment'.²³ This was part of the reason why Stanvac continued to enjoy an especially close relationship with the highest levels of national and provincial government, and could still rely on preferential treatment.²⁴ The refinery had been operating without a license for over a year when it emerged in February of 1955 that Stanvac had asked the provincial authorities in

²² 'Inspector for Gases Suggested' *Natal Mercury*, 18 December 1954; See also 'Expert Explains How Smog Menace Can be Beaten'; *Natal Mercury*, 9 November, 1955.

²³ See TBD 3/DBN 4/1/5/835 Vol. 1, Oil Refinery Shell Company of South Africa, W.L. Howes to R.T. Douglas, 25th February 1960. The City Council, in contrast to the Provincial and Central government authorities had to deal with the daily operation of the refinery, and the daily complaints it caused.

²⁴ At this time big business enjoyed far greater access and influence at the provincial level than it did with the City Council and the municipal bureaucracy. This was partly because of the power of City Councillors such as Sidney Smith and Percy Osborn who held positions at times hostile towards big business. This changed from the mid-1960s after the James Commission enquiry (initiated by the Natal Provincial Administration) which fingered the likes of Osborn for corruption. See J. Purcell 'Durban, South Africa: Local Politics in a Plural Society' University of California, Los Angeles, PhD thesis, 1974. For Stanvac's perceptions of anti-big business hostility among City Councillors at the height of the initial pollution controversy see SAB HEN 715 Vol. 5, Urgent Telegram from Standard Vacuum Refining Company to David de Waal Meyer.

Pietermaritzburg for the promulgation of legislation exempting it from the need to obtain a municipal manufacturers license, because it was an industry established with special parliamentary approval.²⁵ It was an obvious attempt by Stanvac to escape municipal control over its operations, something that the City Council clearly could not countenance, particularly in the light of the recent controversy, which evidently weighed powerfully on the minds of key municipal bureaucrats and the refinery's management.

The Provincial Executive had indicated its willingness to do Stanvac's bidding. However, opposition from various key elements within the City Council was, once again, spirited. Councillor E. Leighton Black, who occupied the important position of Chairman of the Council's General Purposes Committee, commented (with a remarkable lack of self-awareness) that 'it would seem that equity for the majority is of less concern than protection for the rich' arguing that 'to remove the refinery from all control' would mean there was no reason for Stanvac to comply with the recommendations by the

²⁵ See 'Refinery and license exemption' *Natal Daily News*, 12 February 1955. 'Move for Refinery License Exemption' *Natal Mercury*, 12 February 1955. The refinery was declared an industry 'in the national interest' with the passing of the specially drafted Expropriation (Establishment of Undertakings) Act of 1951 which gave the State the power to expropriate land for the establishment of the oil refinery. The refinery had initially submitted an application for a license to operate but this had then been retracted because of a technical flaw in the advertisements devised by the Company to publicize that it had made such an application in the local media. The application had not been re-submitted since then, for reasons that appear to have related directly to the Company's dispute with the City Council. For details of the Provincial Executive's attempts to help 'dispose of the difficulty' with which the Company was faced see PAR NPA Provincial Secretary Files 37/3/11781, Memorandum for Executive Committee, 10 March 1955.

experts.²⁶ Stanvac insisted that it was merely attempting to 'remove the incongruity' of an industry which had been approved by Parliament remaining dependent on a local licensing authority for its operation.²⁷ Its experiences in the recent dispute had left their mark. After a meeting between City Council and Stanvac officials the refinery withdrew its request to the Provincial Executive and made a formal application to the Municipal Licensing Officer for a license to operate, an application which the Bluff Amenities Protection Association initially signalled its opposition to.²⁸ For some residents on the Bluff, such as Irene Mathew, there seemed little hope of respite from pollution:

A feeling of despondency is creeping over the residents of the Bluff. All our efforts and agitations get us nowhere. Is there any point in continuing with complaints? Is there any point in continuing to inform your department of this nuisance? Should any neighbour create an offensive smell, say through a fowl run or a garbage heap the City Health Department would soon be around to put things right yet this foreign industrial concern is allowed to spew its waste products into the atmosphere. Because we misguidedly chose Brighton Beach

²⁶ 'Refinery licence move criticised' *Natal Mercury*, 15 February 1955. The bracketed word is my own addition.

²⁷ See TBD 3/DBN 4/1/4/951 39/3 Vol. 1, Standard Vacuum Oil Refining Company Wentworth; J.B. Hanna to Town Clerk, February 15th, 1955; 'Oil Co's Assurance to Council' *Natal Mercury*, 16 February 1955.

²⁸ 'Refinery Asks for Licence' *Natal Daily News*, 29 March 1955.

as a place to live in, must we, consequently, be prepared to suffer this nuisance. Is there no redress? Is there no law which can protect the individual? I'd like an answer to these queries. They are not purely rhetorical! I want to know how I stand. I want to know if I must pull out of this while the going is good and move to one of those far less attractive, but 'safer' suburbs.²⁹

The prominent role played by female pollution complainants during the controversy was a source of irritation for Stanvac's management who saw no need for the continued operation of the special complaints office which had been set up at the height of the controversy, 'to deal with complaints made by Mrs. Schneier etc, who rings three times a day as a matter of course and because probably they have nothing better to do.'³⁰

The bureaucratic wheels had long since returned to their sluggish pace. The hearing for Stanvac's operating license was only held in September 1955 when H.G Howson, who had led the team that investigated the refinery twelve months previously testified before the Durban licensing officer. He was back in Durban to conduct a follow-up investigation at the behest of the City Council. During his evidence he alluded to changes that Stanvac planned which he believed would ensure there were fewer complaints from Bluff

²⁹ TBD 3/DBN 4/1/4/951 39/3 Vol. 1, Irene Mathew to Town Clerk, 17th March, 1955.

³⁰ TBD 3/DBN 4/1/4/951 Vol. 1, C. Friedman to Town Clerk, 14th April, 1955.

residents. Non-specified technological interventions held the answer. The license was granted, signifying the successful negotiation of months of stormy controversy by Stanvac.³¹ Howson's follow-up report on the refinery praised what he characterized as a 'sincere' effort by the Company to overcome its operating problems, noting, once again, that some success had been achieved, but that the location of the refinery meant that it was 'impossible' to guarantee the total absence of smells 'under certain meteorological conditions' and that this was an expected by-product of petroleum refining.³²

In the light of this advice, in private discussions with the Town Clerk, Howson reiterated the importance of the development of a regulatory regime to deal with pollution.³³ Indeed the Stanvac controversy gave added impetus to the drive for the creation of a national legislative framework to deal with industrial pollution. Smarting from its experience with the Wentworth refinery, the municipal bureaucracy had been pushing for more powerful measures to counter the increasing smog problem in Durban and pollution of

³¹ 'Pollution Expert Foresees End to all Bluff Smells' *Natal Daily News* 29 September 1955; 'Bluff Objections to Refinery Withdrawn' *Natal Mercury*, 30 September, 1955.

³² 'Fewer Smells from refinery, says expert' *Natal Daily News*, 17 October 1955; TBD 3/DBN 4/1/4/951 39/3 Vol. 1, Report on Follow-Up Enquiry On the Standard Vacuum Oil Refinery at Durban.

³³ TBD 3/DBN 4/1/4/951, 39/3, Vol. 1, Town Clerk Memo 29th September, 1955.

the Bay, two issues which were both taking up a growing amount of space in the letter pages of major Durban newspapers.³⁴

In addition to continued concerns about pollution from the refinery at Wentworth, alarm at oil and petrol leaks from the Stanvac Island View storage installations ensured that Stanvac and the municipal authorities dedicated continued lengthy meetings and correspondence to minimizing the effects of the company's operations in the city.³⁵ Crucially, however, these discussions remained largely private. The contrast between the bitter, accusatory public controversy surrounding the first months of the refinery's operation and the general tenor of these interactions between the company and the municipality is unmistakable and prefigures the relationship between Stanvac and the municipality's air pollution officer which developed in the late 1950s.

These were the first signs of what can perhaps best be described as the 'bureaucratization' of the pollution problem, so that the power to influence the course of developments with respect to pollution was largely confined to

³⁴ See 'Agreement on 'Smog' Problem' *Sunday Times*, 9 October 1955; 'Expert Explains How Smog Menace Can be Beaten' *Natal Mercury*, 9 November 1955; 'Quadruple Fines For Oil in Bay?' *Natal Daily News*, 8 February 1956. H.G. Howson was employed by the City Council after completing his investigations of the refinery to study the smog problem in the city.

³⁵ 'Durban Peril: 75, 000 Galls. Petrol Floods Tank Site' *Natal Witness*, 8 January 1957; 'The Danger from Petrol' *Natal Mercury*, 10 January 1957.

the company and the local state, while (white) landowners on the Bluff, were no longer able to extract the sort of responses from the municipal political machinery which they had enjoyed when the pollution controversy began. The story had moved from being one that played itself out on the front pages of the national media for successive weeks in 1954, to an intermittently prominent *local* one. After the intervention by the Government, the issue had been localized, despite its obvious national dimensions, so that the company and the municipality dealt with it through close, private interactions that rarely surfaced in public.³⁶

But this trend did not necessarily reflect decreased intensity in pollution incidents. In April 1956 there were further serious problems. Stanvac was penalized by the City and Water Engineer's Department of the Municipality for running 'trade waste' into the Council's sewers and tried to secure its exemption from the municipal trade waste by-laws by reminding the Corporation, rather prosaically of the 'contributions which the refinery makes to the civic life of Durban.' It was a veiled reference to the financial value of

³⁶ Interview by author with former Managing Director of Wentworth Oil Refinery, undated tape, August 2003.

the refinery to the city but their appeal was rejected.³⁷ Yet again the municipality called on its English expert Howson.³⁸

After his arrival in Durban at the end of April, during a private lunch meeting with the Town Clerk, Howson characterized the lack of progress by the refinery since the follow-up report as 'most disappointing.'³⁹ But there *had* been a definite warming of relations. After this meeting, the Town Clerk wrote a letter notable for its empathy, to Walter Arnold the refinery's Managing Director about his meeting with Howson:

...some of our conversation was on the subject of the troubles you have been having recently at the refinery...I was very sorry, from several points of view, to hear about the extent of your troubles... I do urge you in the interests of both of us, to pay careful regard to the advice he [Howson] gives you. I am sure that this will pay dividends in the maintenance of those good public relations with which you and I are probably equally concerned tho' our angles of approach may be different. If there is anything I can do to be of help to you, you know that nothing would please me more than to be asked. I am fond of saying that

³⁷ TBD 3/DBN 4/1/4/951, Vol. 1, Goodricke & Son to Town Clerk, 9th April, 1956.

³⁸ TBD 3/DBN 4/1/4/951 Vol. 1, Town Clerks Notes of Conversation with Mr Howson; TBD 3/DBN Town Clerk Files 4/1/4/951 Vol. 1, Cited in Town Clerk Memorandum, 29th May, 1956.

³⁹ TBD 3/DBN 4/1/4/951, Vol. 1, Town Clerks Notes of Conversation with Mr Howson.

it is of no use having friends if they do not ask for your help when they need it!⁴⁰

Arnold's reply reflected both his gratitude for Howes' sympathy and renewed optimism, as reflected in a promise that recurrences of problems would be 'eliminated.'⁴¹ The Company had taken to seducing newspaper reporters by inviting them on tours of the refinery, which appears to have had the desired effect, provoking more fervent eulogising about the wonders of automation:

All lit up like a Christmas tree and humming and hissing industriously, it the most highly 'automated' factory in South Africa...all operations at this giant processing plant are controlled by a few men sitting in front of instrument panels in the little brick building in the foreground.⁴²

Despite the refinery's sophistication, Arnold's confidence about eliminating pollution proved to be foolhardy. In September of 1957 complaints spiked yet again.⁴³ W.A. Doble, who had lived on the Bluff for twenty five years longed for the day when:

⁴⁰ TBD 3/DBN 4/1/4/951 39/3 Vol. 1, Town Clerk to Walter Arnold, 3rd May, 1956.

⁴¹ TBD 3/DBN 4/1/4/951 Vol. 1, W.A. Arnold to Town Clerk, 7th May, 1956.

⁴² 'Night-and lights blaze in 'push-button' factory' *Sunday Tribune*, 20 May, 1956.

⁴³ TBD 3/DBN 4/1/4/951 Vol. 2, W.A. Doble to Town Clerk, 1 September, 1957; Ada Kent to Town Clerk, 2nd Sept, 1957; F.G. Love to Town Clerk, 2nd September, 1957; Mrs Olive Daymond to Town Clerk, 3rd September, 1957; D.B. Glasson to Town Clerk, 3 September, 1957; E.Asp to Town Clerk, 5th September, 1957; J.Gordeur to Town Clerk, 6 September, 1957;

...one could open all the windows at night and breathe the beautiful clean, fresh, invigorating air that once was one of the chief, if not the chief attraction that in the short space of 10 or 12 years has brought 4,000 householders to enjoy this beautiful suburb.⁴⁴

On the 9th of September the Town Clerk wrote to Walter Arnold, warning that if the 'nuisance' of the preceding days was not 'abated' the City Council would consider legal action.⁴⁵ The chief cause of the problem appears to have been a change in the type of crude oil that Stanvac had been forced to refine since the closure of the Suez Canal during the Suez Crisis, in addition to 'unexpected' failures in the operation of 'key pieces in our anti-pollution facilities'. Once more Stanvac promised that after modifications, the refinery would again be in 'adequate physical condition' and that new refinery expansion plans incorporated a 'special emphasis' on anti-pollution measures. For this reason, Arnold was confident that pollution problems associated with the refinery would 'automatically disappear.' This was a remarkable statement, founded on a striking faith in technological invention, which like many similar claims about pollution throughout this time period, would be

Patrick F. Scully to Town Clerk, September 7, 1957; J.R. Ellis to Town Clerk, 11 September, 1957.

⁴⁴ TBD 3/DBN 4/1/4/951 Vol. 2; W.A. Doble to Town Clerk, 1 September, 1957.

⁴⁵ TBD 3/DBN 4/1/4/951 Vol. 2; Town Clerk to W. Arnold, 9th September, 1957.

shown to be highly optimistic.⁴⁶ A. Kinmont the City Engineer remained far more pragmatic in his approach to the problem:

...it is obvious that from time to time there will be odour emission from the refinery but the policy adopted by this department continues, that is to locate the source of the odour, to ascertain the causes giving rise to that odour, to establish in close co-operation with the refinery measures which will prevent a recurrence of that problem and to press for their introduction at the earliest possible date.⁴⁷

In contrast to this bureaucratic phlegmatism, the politicians on the Council were becoming increasingly frustrated by the upsurge in complaints. Sensing its psychological value the Town Clerk again pressed for Howson's return in order to 'allay public agitation.'⁴⁸ But Stanvac were opposed to Howson's return, pointing to the investments it had made over the previous four years to overcome pollution problems and the close working relationship which it had developed with the Corporation's Pollution Engineer, Mr. Johnson.⁴⁹ Stanvac's preference for a local official with whom it had regular personal

⁴⁶ See TBD 3/DBN 4/1/4/951 Vol. 2, W.A. Arnold to Town Clerk, 11th September, 1957 and W. A. Arnold to Town Clerk, 17th September, 1957.

⁴⁷ TBD 3/DBN 4/1/4/951 Vol. 2, A. Kinmont City Engineer to Town Clerk, 24 September, 1957.

⁴⁸ TBD 3/DBN 4/1/4/951 Vol. 2, Telegram from Town Clerk to Howson, 1st October, 1957.

⁴⁹ TBD 3/DBN 4/1/4/951 Vol. 2, W. A. Arnold to Town Clerk, 17th December, 1957. Also see TBD 3/DBN 4/1/4/951 Vol. 2, Town Clerk to H.G. Howson, 22nd October, 1957.

contact hints at the importance of this kind of regulatory system in the decades that followed.

Stanvac's belligerence soon began to look rather misguided because complaints were still coming in.⁵⁰ The Corporation again sought legal advice about the legal steps it could take to 'secure the abatement of the nuisance' associated with the refinery.⁵¹ The Corporation's solicitors agreed that 'the smells coming from the oil refinery constitute a public nuisance' and recommended that the Council proceed with an interdict, as had briefly been contemplated almost four years previously. Stanvac had admitted the smell was an inconvenience to residents, which strengthened the Corporation's case considerably.⁵² But like the City Engineer this was a path which the Town Clerk had already signalled his opposition towards. Though, as Purcell argues, the City Council generally held sway over the municipal bureaucracy at this time, it is clear that the Town Clerk was nonetheless able to exercise considerable autonomy in terms of his power to shape municipal decision-making.⁵³

⁵⁰ TBD 3/DBN 4/1/4/951 Vol. 2; Acting Town Clerk to Managing Director, 23rd January, 1958.

⁵¹ TBD 3/DBN 4/1/4/951 Vol. 2; Acting Town Clerk to Messrs Shepstone & Wylie, 27th January, 1958.

⁵² TBD 3/DBN 4/1/4/951 Vol. 2; Opinion regarding Abatement of Nuisance-Oil Refinery by H.J. May, 31st January, 1958.

⁵³ J. Purcell 'Durban, South Africa: Local Politics in a Plural Society' University of California, Los Angeles, PhD thesis 1974.

In February, the refinery's management were called to appear before a special meeting of the Council's Works Committee. It was a remarkably confrontational session characterised by the combative stance of Stanvac's lawyer Charles Friedman. Stanvac's ire had been raised by a letter written by the Town Clerk which suggested that the refinery had 'been lax' in its approach to the pollution question and which contained what it regarded as 'a very clear threat of legal action'. Stanvac's position was that there had been no odours and Friedman cited statistical reports by the Corporation's own Air Pollution Officer to support this claim. But he also pointed to the opinion of the 'three world experts' who had investigated the refinery in 1954, that it was not possible for there to be a 'total elimination of all odours...' ⁵⁴

He claimed there were 'a small hard core of complainers' on the Bluff responsible for 'two-thirds of the complaints'. He argued that the refinery 'had become a great bogey...a Frankenstein' in the minds of many residents on the Bluff and served as a 'whipping stone'. Media reporting about pollution could literally *produce* pollution: 'if you hammer it home, it builds up a belief that something is happening...'

⁵⁴ TBD 3/DBN 4/1/4/951 Vol. 2, Special Meeting of Works Committee, 28 February, 1958.

Friedman defended Stanvac's reluctance to agree to Howson's return by arguing that pollution problems could be solved 'internally', through the (alternative) technical expertise of its' parent company's in the U.S. He cited expenditure on anti-pollution measures, as evidence of the company's proactive attitude before arguing that the Council had a 'responsibility' to protect Stanvac against 'unjustified attacks.' He cut straight to the chase – the refinery had been 'encouraged' to establish in Durban and Stanvac were 'entitled to some protection too.'

Friedman warned the Council to 'consider the effects of hasty action...against all industries' including, 'the local grocer on the Bluff and the chemist and shops'. He pulled no punches about the impact of an interdict against the refinery in terms of loss of revenue to the central state, to the city and also its longer term implications for the establishment of new industries in Durban.⁵⁵

Friedman's threats may have zeroed in on the cul-de-sac faced by the Durban municipality, but they were not met with particular sympathy. The Mayor, Councillor Jackson cited instances when he had 'gone out' himself 'and smelt the same smell of bad onions' that many complainants mentioned. Read in the

⁵⁵ TBD 3/DBN 4/1/4/951 Vol. 2, Special Meeting of Works Committee, 28 February, 1958.

light of the later development of South Durban, his remarks take on a deeply ironic edge:

...it is a pity we didn't shift the refinery 25 miles out of Durban...as far as I am concerned the public and residents are more important than any industry that comes to this town. ...I want to say this – the heads of the people at the refinery don't live at the Bluff – if so, it would be a different story-they all live at Durban North...all we have had is a lot of complaints. I am not interested in who complained, or who didn't complain. I don't think for one minute those were organized complaints. I have been called up at lunch time to come and smell the smell and I have gone and I have smelled them. All I want from you, please, is to get rid of the smell from the refinery, then I will be quite happy.⁵⁶

Friedman responded by insisting that 'under certain meteorological conditions, you can't do away with the smell'. The Mayor's reply spoke for itself: 'I wish the experts had said that before putting the refinery there!' This failure had resulted in increased scepticism among municipal bureaucrats and politicians towards expert assurances regarding pollution. But despite this both the local state in Durban and the central state would turn to experts repeatedly in the years to come, primarily because they were a valuable resource in political conflict. It became clear that the Company was

⁵⁶ TBD 3/DBN 4/1/4/951 Vol. 2, Special Meeting of Works Committee, 28 February, 1958.

no longer prepared to give the Council the assurances it wanted on pollution. There would be smells. That would not change. And it didn't.⁵⁷ As we will see in chapter three, the City Council would be much less inclined to accept the assurances of 'experts' about pollution when plans for the construction of a second refinery in Durban emerged.

At around this time the municipal archives reflect a shift from written complaints, many of them rich in discursive detail towards a more statistical and quantitative reporting as the City Engineers Department assumes responsibility for monitoring pollution. It becomes more difficult to gauge the severity of the experience of pollution.⁵⁸ In early August, however, prompted by a further deterioration in conditions, some residents made the effort to write letters to the Town Clerk.⁵⁹ Wary of a repetition of previous confrontations, Stanvac invited the Council's Works Committee to visit the

⁵⁷ TBD 3/DBN, 4/1/4/952 Vol. 3, Standard Vacuum Oil Refinery Wentworth; Extract from City Engineer Report to Works Committee, 6 May, 1958; Extract from City Engineer 10 June, 1958; Extract from Report of City Engineer, 5 August, 1958; Stanvac to Director of Water Affairs, 10th July 1958.

⁵⁸ For a similar argument about the increasing use of quantitative data in the Native Affairs Department in early Apartheid see K. Breckenridge 'From Hubris to Chaos: the makings of the Dompas and the end of documentary government'; History and African Studies Seminar, April 10, 2002. Also of relevance is D. Posel 'A mania for measurement: statistics and statecraft in the transition to apartheid' in *Science and Society in southern Africa*; edited by Saul Dubow; Manchester University Press, 2000.

⁵⁹ TBD 3/DBN, 4/1/4/952 Vol. 3, Letter to Town Clerk 4th August, 1958.

refinery to see recently installed anti-pollution measures first hand.⁶⁰ The Company employed similar methods with newspapermen invited from across the country to the launch of its new high octane petrol product. Even some of the more 'hard-bitten' journalists were 'intrigued, delighted and roused' by what they saw, prompting one to comment 'before we left, we all felt like going out on the road and selling it ourselves.' The refinery was 'one of the sights of South Africa':

... [the refinery] is glamorous and intimidating. We viewed it at night from the top ridge of the Bluff when it looked like a mighty battleship; in the daytime with its bristling pipes, converters and generators one thought: 'Gosh, I'll never get the hang of this.' (It was stimulating because there was a constant subdued roar from its towers like a thousand chained animals. It pulsed with latent power.)⁶¹

This kind of fetishisation of the refinery's aesthetics and its technologies was a strikingly persistent characteristic of media representations at this time, even in the face of complaints of pollution emanating from its gleaming stack towers. Similarly, both the Company and the municipality invested a great

⁶⁰ TBD 3/DBN, 4/1/4/952 Vol. 3, Visit of the Works Committee of the Durban City Council held on 20th August, 1958.

⁶¹ 'Young S.A. Oil Men Pick Up Know-How Fast' *The Natal Mercury*, August 23, 1958.

deal of faith in technological 'remedial measures' as a solution to ongoing pollution problems, despite a history of their repeated failure.⁶²

This faith in technology needs to be explained; a simple sweeping dismissal of technological innovation, redolent of a lazy post-modern cynicism is not sufficient. Very real pollution abatement resulted from the technological and operational interventions of engineers at the Wentworth refinery after the initial pollution controversy arose. Remarkable advances in production and refining capacity which resulted from post-World War II innovation and automation across the global oil refining industry formed the basis of this powerful belief in technocratic solutions, which was reflected in the discursive acclamation of the Wentworth refinery's modernity in the local media and in public proclamations by politicians and officials of the central and (for a time) the local state.

Of course the financial and human resources invested in pollution abatement technologies in the 1950s were not comparable with those poured into production aspects. As a rule, because of the importance of reliability, untried processes are rarely installed on a commercial scale in oil refineries, particularly if they are located far away from the research and development

⁶² TBD 3/DBN, 4/1/4/952 Vol. 3, Extract from report of City Engineer, 18 September 1958.

centres responsible for the development of refinery technologies. Design and engineering for the Wentworth refinery occurred in 1950/51, three to four years prior to the refinery starting-up. Certain facets of the refinery were genuinely world firsts in petroleum refining, though chiefly in relation to production aspects, rather than pollution prevention. During construction and prior to the emergence of pollution problems, widespread media commentary repeatedly fixated on the refinery's sophistication; it was in its essence, *modern*. But it was already 'out-of-date' by the time its design plans had been finalised. The processes and technologies that were added to the refinery in 1958, against the backdrop of continuing pollution problems, and which Stanvac claimed would 'sharply reduce or eliminate pollution potential' were not, by and large; commercially viable or tested when the refinery had been designed at Stanvac's New York headquarters. The position of the Wentworth refinery on the periphery of Standard Vacuum's global refining empire undoubtedly exacerbated this phenomenon. Though the faith in technocratic solutions to pollution problems which was so powerful at this time was undoubtedly seriously compromised by both failure and hubris, any substantial improvements which *may* have resulted from technological interventions were necessarily restricted by these dynamics of innovation and design.⁶³

⁶³ TBD 3/DBN 4/1/4/952 Vol. 3, W. A. Arnold to Town Clerk, 24th September, 1958.

The Durban municipality learnt from its experience at Wentworth that pollution could be expected to emerge from petroleum refineries. This history, which I have detailed in the first and second chapters, would powerfully shape the responses of the municipality to the materialization of a proposal by the Shell Oil Company to build a second refinery in Durban. Chapter three tells the story of how this refinery was pushed back from the Durban bay, Shell's preferred site, to Isipingo (its present site) in close proximity to the large Indian and Coloured communities living in housing schemes at Merebank and Wentworth. This outcome was partly a result of the new reluctance of the Durban municipality to accept Shell's promises about pollution, which were rooted in familiar claims to expert knowledge, at face value. It also reflected the prioritisation of labour needs, at the expense of concern about the effects of refinery pollution on people living in close proximity to the refinery's site.

Chapter Three

'Once bitten, twice shy' – Experience, Investment and Race in the Sapref Story, 1958-1960



Image 6: Official Sapref earth-moving ceremony, November 1960¹

The system of environmental regulation which arose during the 1950s and 1960s to deal with the polluting effects of petroleum refining in Durban developed out of the belated recognition that refinery pollution could not be *eliminated* by technological solutions. Environmental regulation would chiefly occur at the level of the local state and was designed to *minimise* refinery pollution. As such it was a practical result of the balancing of the Durban municipality's financial and populist imperatives. As this chapter will show, the experience of pollution problems with the Wentworth refinery had left a powerful mark in the way in which petroleum refining was viewed in Durban. Where previously the

¹ From Sapref Refinery Library Photographic Collection

bureaucratic and political elite in the city had little knowledge or experience of the industry and accepted the assurances of Stanvac and 'experts' about pollution unproblematically, this was not the case when a second refinery proposal emerged in early 1958. Despite its prioritisation by the government and its bureaucracy, the project would be jeopardised by a drawn-out dispute with the Durban municipality over the suitability of Shell's preferred refinery site in view of the possible polluting impact of the industry. Rather than blaming crude environmental racism for the shape of the urban landscape in south Durban, this chapter argues that the shifting of environmental risk from the centre of Durban and the Bluff onto the Indian and Coloured communities living at Merebank and Wentworth was the end-product of a complicated process in which the interests of white landowners, the Durban municipality and the Apartheid state played a predominant part. The Shell project's reincarnation at Isipingo thus represents both a triumph for the power of white civic culture at the expense of Indian and Coloured communities in south Durban and a decisive step in the development of the system of environmental regulation which had begun to emerge in the 1950s in response to the Stanvac pollution problems.

These problems had clearly not reached any real kind of resolution. While the refinery's management and Durban's municipal bureaucracy looked once more to the promise of a technological solution, at the national level, the Department of Commerce and Industries had been approached by the Shell Oil Company

about the erection of another oil refinery in Durban, as part of its desire to increase its global production capacity.² After two visits by preliminary survey teams of 'technical advisers' from its offices in The Hague and London, Shell had concluded that the only site in South Africa which would be an 'economic' location for the size refinery it envisaged establishing was at Salisbury Island in the Durban bay, which was largely covered with mangrove swamps at the time.³ It was Shell's choice of the harbour – one of the city's most attractive natural amenities, as the site for its refinery which would provoke great controversy.

Shell's negotiations with the government had gone considerably more smoothly than had been the case with Standard Vacuum. This was doubtless partly because precedents had been set. While the degree of protection which Stanvac had demanded had been a stumbling block in the previous negotiations and pollution questions had not figured prominently, the Shell project saw a reversal of sorts. The government bureaucracy approached the financial aspects of the project with a great deal more confidence than had been the case with Stanvac. As it turned out pollution concerns would occupy a great deal more of the attention of national government officials and bureaucrats. But this should not necessarily be mistaken for a simple recognition of the importance of the issue.

² TBD 3/DBN Vol. 1, 4/1/4/952, Background Information concerning the South African Refinery Project.

³ SAB HEN 718 92/2/33, Vol. 1, Establishment of Industry, Shell Company of South Africa Ltd; P.M.Dowson, Managing Director of the Local Board of Shell Company of South Africa Ltd to D.de Waal Meyer, Secretary for Commerce and Industries, 17th March, 1958.

Nor does it represent a new thoroughness in the government's consideration of pollution concerns. The pollution question became an important one because it impinged on the successful execution of a project which the Apartheid state regarded as being of national importance because of its strategic and economic benefits.

The Durban bay occupied an extremely important place in Durban's economic life, both in terms of shipping trade and its aesthetic appeal to tourists. Much of the public debate on the issue revolved around differing, largely mutually exclusive visions of Durban's future as either a seaside tourist resort or a major industrial centre.⁴ This question became increasingly important after World War II, and has remained one of the most intractable problems facing the political and planning elite in post-Apartheid Durban. The municipal bureaucracy had to balance concerns about the impact of pollution on the property and health of Durban's white ratepayers, the burgeoning local tourist industry, and a desire to secure the valuable capital represented by the refinery's presence in Durban. Shell enjoyed the government's support for its choice of site, which was owned by the State through the South African Railways and Harbours Administration. For this reason, getting control of the land at the Bay would not be nearly as difficult as it had proven for Standard Vacuum at Wentworth. There would be

⁴ 'Durban Must Decide: Industrial City or Holiday Resort' *Natal Daily News*, 14 May 1958.

no repeat of the 'excursions into the country' to locate 'some distant relative' who had inherited a piece of land 'in many instances unbeknownst to him'.⁵ Protracted negotiations with private property owners and expropriation would not be necessary.

In March 1958, when Shell made its original approach to the Government for the Bay site, the company's South African subsidiary's Managing Director Mr Dowson wrote to David de Waal Meyer, the Secretary for Commerce and Industries, citing the 'considered opinion' of Shell's 'technical experts' that with 'present day techniques and experience' it would be possible to 'design, construct and operate a refinery with the minimum nuisance to the general public living in the vicinity.'⁶ This would be Shell's basic position throughout the coming months and, as here, it would repeatedly point to expert opinion to justify it.

At the early secret meetings between Shell representatives and the Durban's municipality's leading bureaucrats, it was made clear to the Company that the Durban City Council had had its full of difficulties because of complaints from sections of the [white] 'public' about pollution from the Wentworth refinery.

⁵ 'Durban Refinery 10th Anniversary' by A.D. Troye and P.N. Malherbe *Refinery Tidings*, February 1961.

⁶ TBD 3/DBN Vol. 1, 4/1/5/835, Standard Vacuum Oil Refinery, Wentworth; P.M. Dowson to D. de Waal Meyer, 17 March, 1958.

Wary of the hangover from Stanvac, Shell pointed to improvements which were 'constantly being made in refinery technique' and 'new processes' which had emerged since the Wentworth refinery's construction to overcome the odour problem. As before, technological development was held up as the answer. Because of the interest of the South African Railways & Harbour Administration in the project, three Railway Commissioner's, Dr Botha, Dr van Abo and Mr van Lingen, had visited Geelong refinery in Australia and had been 'completely convinced' that no 'obnoxious odours' were released from the refinery, and 'no complaints had been made by local residents.' Shell had decided to try to make the Geelong refinery the benchmark for the debate about the project, holding it up as an example of the new generation of sophisticated and odourless refineries. The proposed refinery in Durban would 'embody the latest refining techniques' and would be 'at least equal to those in use at Geelong.'⁷

On the 9th of May Shell representatives met with the Durban Mayor H.W. Jackson at City Hall. Once again, they promised to deliver 'a most modern plant', designed by the same technicians responsible for the Geelong refinery. They invited the City Council to send two Councillors to visit the refinery, which it described as being situated 'right in a built-up area, close to the Eton of Australia' where it claimed 'there is evidence that there are no complaints of any

⁷ TBD 3/DBN Vol. 1, 4/1/5/835, P.M. Dowson to Mayor, 9 May, 1958.

kind regarding the pollution of the atmosphere.' Councillor Carte, who sat in on the meeting asked why the refinery could not be built 'in that piece of no-mans land near Isipingo' on the other side of the Reunion Airport 'that nobody wants'.

The municipality's reluctance to agree to the harbour site was summed up by Carte as a case of 'once bitten, twice shy'. The Mayor captured the general feeling of Councillors: 'we have been let down badly by Standard Vacuum', and, he argued, the 'financial side comes after contentment of residents and the health of the city comes first.'⁸ It was these concerns which provided the impetus to the development of a local regulatory regime to deal with pollution from the refineries. But the Mayor's assertion of the secondary importance of the financial benefits of the Shell project masked the immense power of foreign investment in forcing the local state's hand. Dowson realised that 'more than' Shell's assurances would be needed to convince the Councillors 'that their fears are groundless.' Expert knowledge was not necessarily enough. This was why Shell invited two Councillors to visit Geelong for themselves, to see it with their own eyes.⁹ In the meantime however Shell persisted with its written and verbal assurances. In its submission to the City Council on the advantages and disadvantages of the project to Durban, for instance, it confidently proclaimed

⁸ TBD 3/DBN Vol. 1, 4/1/5/835, Notes taken at Meeting of Shell Company Representatives with Mayor, 9 May, 1958, Regarding Proposed Shell Oil Refinery.

⁹ TBD 3/DBN Vol. 1, 4/1/5/835, P.M. Dowson to Mayor, 9 May, 1958.

that 'modern refinery techniques' which were being installed at the Stanvac refinery at Wentworth had 'overcome' pollution problems. This was not the case. It claimed that there had been 'no complaints' from residents of 'heavily populated cities' in various parts of the world where Shell had established 'modern' refineries.¹⁰

As I have already suggested, national government deliberations on pollution concerns were certainly notably greater in their quantity than had been the case with the first refinery project. The interdepartmental committee, appointed by the Cabinet, tasked Dr Maule Clark, who was a longstanding bureaucrat in the National Department of Health, then serving as Acting Secretary for Health with the responsibility of looking at the possible health aspects associated with air and water pollution. As had been the case during the negotiations for the Stanvac project, Clark looked to expert knowledge overseas for information about refinery pollution and how to deal with it.¹¹ Central government's consultation with overseas experts about pollution was in marked contrast to the Durban municipality, which drew upon its experiences with the Wentworth refinery in evaluating the Shell project.

¹⁰ TBD 3/DBN Vol. 1, 4/1/5/835, An Appraisal of the South African Refinery Project and its impact on Durban by Shell.

¹¹ SAB Department of Health (GES) 2419, Oil Refinery in Durban, Acting Secretary for Health B.M. Clark to J.J. du Pre le Roux, Chief Delegate of Union of South Africa at the 11th World Health Assembly, 10th May, 1958.

On the 22nd of May the Heads of Department's from across the central government bureaucracy met to discuss the project. When discussions turned to the subject of pollution the Committee's Chairman, General Manager of the Railway Administration, Mr D.H.C. du Plessis, noted that because of the 'any possible health hazards' created by the refinery would 'be seriously viewed' by his Department. Though he cited the large marshalling yard and railway workshops in the vicinity of the proposed site at the Durban bay, this concern was almost certainly a product of the pressure placed on the Railways Administration in Durban because of the pollution associated with the operation of its own coal-burning locomotives in the harbour area. The Department of Commerce and Industries' position was embodied by Dr Gaigher and David de Waal Meyer, both of whom argued that the smells from the Wentworth refinery had had no *actual* health impact, and that psychology had played a large role in the pollution complaints.

Perhaps most significantly, Dr Clark from the Department of Health admitted that he 'did not know anything' about oil refineries and 'what could be done to neutralize harmful and obnoxious gases emitted in the refining processes.' Clark abdicated a great deal of the National Health department's responsibility for dealing with the pollution issue because of what he, like many others, characterised as the highly technical nature of the question. Clark claimed that the Department of Health did not possess the 'technical officers' in its staff to

give advice on refinery pollution for this reason. Instead he suggested that the C.S.I.R, who he argued *did* have the necessary technical expertise, should be consulted. So health questions in relation to pollution would be dealt with by scientists with the 'necessary technical expertise', and *not* by the Health department. Clarke's apparent renunciation of the Health Department's 'natural' responsibilities disturbed Du Plessis, particularly because once the refinery started operating and complaints began, he predicted that questions would be asked about the interdepartmental committee's deliberations on the project and whether there had been any opposition to its construction, then there could be serious repercussions.¹² It was suggested that Dr E.C. Halliday of the C.S.I.R's General Physics Division, be sent to Geelong. Halliday had been awarded the World Health Organisation fellowship to study air pollution overseas and was widely regarded as the leading South African 'expert' on air pollution. Significantly, he would prove to be one of the prime movers behind the move towards the development of a national legislative framework for pollution control in South Africa from the late 1950s into the 60s which lead to the promulgation of the Atmospheric Pollution Prevention Act of 1965.¹³

¹² SAB GES 2419. Aantekeninge geneem tydens samesprekings van Hoofde van Departemente, 22 May, 1958 in verband met die aansoek van die Shell Company of South Africa Limited om 'n olieraffinadery in Durbanhawe op te rig.

¹³ See PAR 3/PMB 4/5/630 Air Pollution Control, Principles to be considered in planning a programme for the reduction if atmospheric pollution in South Africa by E.C. Halliday September, 1956 and 'Air Pollution and the local authority.' An address given to the Council of Reef Municipalities by E.C. Halliday of South African Council for Scientific and Industrial Research and the National Physical Research laboratory in February, 1959.

The project's reception in Durban was proving to be predictably frosty. On the 1st of June, Kenneth Sutler-Gore delivered an impassioned speech to the City Council arguing that Shell could only be allowed to build its refinery at the harbour if its operating licence contained 'entrenched' conditions which would allow the Council to stop the refinery from operating if it causes a nuisance, though crucially, 'without interference from higher authorities.' The intervention by Eric Louw, the Minister of Economic Affairs in the dispute in 1954 had been, in Sutler-Gore's words 'most galling' as the Council found itself 'without a leg to stand on.'¹⁴ The Town Clerk continued his correspondence with H.G. Howson, one of the original experts from 1954, who visited the Geelong refinery and reported to Howes that 'the operation of similar plants at Durban should not cause offence', though 'upsets' could be expected to happen.¹⁵

While the central government bureaucracy waited for comparative 'expert' information about refinery pollution from cities in the Netherlands (Pernis refinery near Rotterdam) and Australia (Geelong) where Shell had established refineries, the C.S.I.R's National Physical Research Laboratory reported in early June on the possible implications of an increase in air pollution in Durban because of the project. Dr E.C. Halliday's report suggested that there was a

¹⁴ TBD 3/DBN Vol. 1, 4/1/5/835, Press Release 8.30 pm 2 June, 1958.

¹⁵ TBD 3/DBN Vol. 1, 4/1/5/835, H.G. Howson to Town Clerk, June 3, 1958.

danger that similar smog problems to those experienced in Los Angeles could arise in Durban with the establishment of the new refinery, because of the high degree of air stagnation associated with temperature inversions in the city.¹⁶

On the 6th of June, when the Shell delegation appeared before the Durban City Council-in-Committee, the opposition to the proposed location for the refinery was palpable. Shell made it clear that it would only give assurances on pollution which it could fulfil, primarily because two factors; human error and mechanical failure could not be ruled out. The Shell delegation was comprised of a number of 'experts' who had been specially flown in from Shell headquarters in the Hague, the Netherlands, to convince the Council to let it to build the refinery on its preferred site at the Durban bay. The basic thrust of the delegation's argument centred on reiterating the sophistication of the refinery and the technical know-how behind its design, which it claimed would ensure pollution was not a problem.

In order to advance its case, the delegation relied on a basic historical sketch of its refining operations vis-à-vis pollution. Its basic outlines were as follows: prior to World War I, Shell's refineries were chiefly situated, 'in the jungles and deserts of the world' and compared to their modern cousins, these older refineries were

¹⁶ SAB HEN 719 92/2/33 Vol. 3 Establishment of Industry Shell Company of South Africa. SA Petroleum Refineries Pty Ltd; National Physical Research Laboratory; Report on the Possible Implications of Air Pollution increase if a large refinery were to be established in the Durban Bay Area by E.C. Halliday, 11 June, 1958.

'simple'. Pollution was not a problem, because 'there just was nobody to complain about anything that the refineries did.' After World War II though Shell's refineries became larger and more complicated, and were increasingly located in more populated areas, which meant that greater attention had to be given to pollution. Shell claimed to have been producing refineries throughout the 1950s alongside residential communities in various parts of the world which were not causing any nuisance to residents, citing its refineries at Rotterdam, Holland and Geelong, Australia as examples. Whatever the accuracy of this narrative, its discursive point is obvious: the Durban refinery, like Geelong, would reflect Shell's commitment to eliminate pollution through technological development.

This 'new type of refinery' would be built in Durban, and 'under normal operating circumstances' (i.e. when there were no breakdowns caused by mechanical failure or human error) there would be no smells 'at all'. The Council did not buy it. These were many of the same promises and qualifications made by Standard-Vacuum a couple of years before, at times word for word. Shell wheeled a succession of 'experts' out, proclaiming each man's qualifications to the committee. Its 'pollution expert' Mr Kirby insisted that comparing the two refineries was like comparing 'chalk and cheese' and for this reason the Council should 'forget any unfortunate experiences' it had had with the Stanvac refinery. Pushed to provide some sense of the frequency of breakdowns which might

occur, Kirby made a comment which would later be seized upon for its flippancy (though not for its sexism):

Would you be prepared to estimate to me how often you cut yourself when shaving, or how frequently your wife drives your car through the back of the garage?¹⁷

The lack of definitive guarantees, the string of caveats clearly worried the Councillors. Councillor H. Ross Butcher perhaps put it best when he commented: 'we are not technical experts; we can be led up the garden path.' In the end the delegation could only give the Council a guarantee of its 'sincerity', which was clearly not sufficient. Take for instance, Councillor H.A. Mason's remarks:

The thing that is most vitally important for this City Council is the reaction of the resident and the residents of the city as a whole, irrespective of where the refinery may be sited...the question is what the man in the street regards as annoyance in comparison with what the refinery regards as justifiable annoyance; it is the reaction of the inhabitant who lives around a refinery and in particular those who are susceptible to smells more than others – it is an annoyance to them...as a City Councillor, and representing the areas gravely affected for the past three years – which we are told to forget, but it is very

¹⁷ TBD 3/DBN Vol. 1, 4/1/5/835, Record of Proceedings of Meeting of Council in Committee, 6 June, 1958 re proposal by Shell Company of South Africa Limited to build oil refinery: Durban Harbour.

hard thing to forget – it is a grave thing for me to consider...if we should make a mistake it is something that will be planted there for all time.¹⁸

Many City Councillors employed a 'layman' discourse, which juxtaposed the experiences of pollution from the Wentworth refinery with the assurances of experts about the likelihood of future problems emerging with the second refinery. But clearly the immediate investment of £25 million which the refinery represented to the city was exceedingly important. Throughout the period covered by this dissertation, the economic value of the refineries was a constant spectre looming in the background. For this reason there was never any question of the municipality not offering alternative sites to Shell. As Councillor T.A. Blakeley, one of the few Councillors who supported the project in its initial incarnation put it 'there is not a city in South Africa that pretends that it is an industrial city that would not jump at the idea of the refinery'¹⁹

The sub-committee established by the government's Inter-departmental committee to investigate potential sources of air and water pollution associated with the proposed refinery reported that 'it cannot raise objections based upon

¹⁸ TBD 3/DBN Vol. 1, 4/1/5/835, Record of Proceedings of Meeting of Council in Committee, 6th June, 1958 re proposal by Shell Company of South Africa Limited to build oil refinery: Durban Harbour.

¹⁹ TBD 3/DBN Vol. 1, 4/1/5/835, Record of Proceedings of Meeting of Council in Committee, 6th June, 1958 re proposal by Shell Company of South Africa Limited to build oil refinery: Durban Harbour.

health considerations to establishing the refinery on the proposed site near Salisbury Island.’ Remarkably, nuisance aspects of pollution were deliberately excluded from its considerations.²⁰

Further approval for the project was forthcoming in early June when Dr Maule Clark, the Acting Secretary of Health reported that it was ‘clear’ to the Health Department that ‘every effort is being made’ in the designing of the proposed refinery in Durban bay ‘to minimize any actual danger to health or any nuisance that may arise owing to the operation of a large oil refinery there.’ The Health Department appears to have been convinced by Shell’s rhetoric, as indicated by Clark’s comment that ‘a new concept of factory design is envisaged’. But this did not mean that the Department did not flag certain key concerns which it felt needed to be borne in mind, including the ‘considerable atmospheric stagnation’ in Durban; the height of the refinery’s stacks and the fact that ‘the typical refinery odour cannot entirely be eliminated’. Unknowns were also a problem: it was not known at which point the amount of ‘potentially harmful gaseous substances’ in Durban’s atmosphere would become ‘deleterious to health.’ The Department recognised that the refinery could potentially increase the amount of such harmful gases but they would have, what it termed, a ‘possibly negligible effect on physical health’. It predicted that there would be ‘initial difficulties’ and

²⁰ SAB HEN 719 92/2/33 Vol. 3, Confidential Report on the Health Aspects of Establishing an Oil Refinery in the Durban Bay Area by Sub-Committee.

'complaints in regard to both nuisance and danger to health' from people living and working in the area during the first year or so after start-up and later 'temporary breakdowns' which would 'give cause for complaints for varying periods of time'.²¹ Despite this the National Health Department gave Shell the green light. The central state's strategic and economic interests in the project, as with Stanvac before it, overrode other considerations.

But the weight of pressure from white ratepayers and residents in Durban meant that the municipality could not accede to Shell's request to be allowed to build on its preferred site at the harbour. The strength of the opposition to the proposal (and an appreciation of the project's economic significance) is reflected in this letter written on the 9th of June from the President of the Durban Women's Municipal Association to the Town Clerk:

The fact that the Union government will save thousands of pounds in foreign exchange and that big business in Durban will make more money will not compensate the ordinary ratepayers of one of the most beautiful cities in the World, for the ruination of the Bay and its environs. Future generations will not thank us if we sold their heritage for a mess of pottage. If the government needs money, why should Durban be sacrificed to get them out of their financial muddle? Shell, by saying that if they cannot have the Bay site, they

²¹ SAB HEN 719 92/2/33 Vol. 3, B.M. Clark to Chairman Committee of Enquiry on Proposed Establishment of Oil Refinery at Durban, 8th June, 1958.

will not build a refinery anywhere in South Africa, are holding a pistol to our heads...we should call their bluff and no doubt in two or three years time they will be back again and only too glad to have an alternative site near Durban.²²

The project received its first major blow when two of the city's most important bureaucrats, the City Engineer, A. Kinmont and the Deputy City Medical Officer of Health Dr A. Stephen signaled their opposition to the siting of the refinery at the Bay. Kinmont emphasized the importance of the Bay; the large proportion of the total ratable value of the city in the form of residential, hotel, business and commercial premises near to the site; the 'injurious effect' on land values on the Bluff overlooking the Bay, and he alluded to the history of the Wentworth refinery as evidence that human error and mechanical failure were 'comparatively frequent occurrences.' This argument was all the more powerful because it contrasted so strikingly with the more naive technocratic discourses employed by Shell. His report was marked by an emphasis upon 'orderly' development to 'preserve the character, amenities and land values associated with the central core of a large urban region' Through careful planning Kinmont argued that it would be possible for Durban to navigate the delicate path which would maintain Durban's appeal as a resort town and at the same time allow it to fulfil its industrial potential. He was concerned that the refinery's size would

²² TBD 3/DBN Vol. 1, 4/1/5/835 Durban Women's Municipal Association to Town Clerk, 9th June, 1958. See also Mr C.A. Evenden to Town Clerk, 12 June, 1958. Underlined in original.

make it 'extremely difficult' to exercise 'effective control of any nuisance'. He disputed Shell's claim that the Isipingo site was necessarily a more expensive option, noting that there would have to be a costly reclamation of a vast area of the Bay in any case. The site at Isipingo would 'affect relatively little residential property' and he regarded it as a suitable compromise.²³

In his report Stephen argued against the siting of the refinery on the bay site because it would bring Durban 'appreciably nearer the critical stage' where the capacity of the atmosphere to receive pollutants would be reached, and smog problems, not dissimilar to those experienced in Los Angeles would occur. Stephen also cited the previous experience with the Stanvac refinery to support his argument. Until the appointment of the Air Pollution Officer in the City Engineer's Department, the municipal health department received the majority of complaints about offensive smells. He noted that in all 1, 135 complaints had been recorded since the Stanvac refinery had opened, mainly from residents on the Bluff. Though he recognized that it fell outside of the direct scope of a health report, Stephen argued that 'many principles of town planning are based on health considerations' and, he noted, the refinery would be 'practically encircled by thickly populated residential, business and industrial areas.'²⁴

²³ TBD 3/DBN Vol. 1, 4/1/5/835, A. Kinmont, City Engineer to Town Clerk, 18th June, 1958.

²⁴ TBD 3/DBN Vol. 1, 4/1/5/835, A. Stephen, Deputy City Medical Officer of Health to Town Clerk, 18th June, 1958.

The municipality's opposition was echoed by letters written to the Town Clerk by white landowners living in and around the proposed site, including, for example, H. McGregor from Marlborough Park who argued that the establishment of the refinery within 'a few hundred yards' from this 'select and beautiful suburb' was 'incompatible with modern town planning principles.'²⁵ The Honorary Secretary of the Bluff Ratepayers and Burgesses Association captured much of this skepticism in his letter when he questioned why the future of 'our beautiful city' should be compromised by the setting up of a refinery 'mainly for the purpose of earning dividends for its shareholders most or all of whom live and spend such dividends in other countries'.²⁶ Many letters published in newspapers at this time referred to the negative impact of a refinery in the harbour on the aesthetic beauty of the city and on tourism. There appears to have been an emphasis, as with many of the Bluff complaints about the Wentworth refinery, on the importance of preserving Durban's amenities. This notion extended beyond Durban's physical attributes, such as the harbour, to the less tangible attractions offered by the city, many of which could be jeopardized by pollution.²⁷

²⁵ TBD 3/DBN Vol. 1, 4/1/5/835, H. McGregor to Town Clerk, 19th June, 1958. See also L.F. Maurice to Town Clerk, 19th June, 1958 and J.R. Ellis to Town Clerk, 19th June, 1958.

²⁶ TBD 3/DBN Vol. 1, 4/1/5/835, Hon Secretary Bluff Ratepayers and Burgesses Association, 19th June, 1958.

²⁷ 'Will Amenities be Jeopardised?' *The Natal Mercury*, 13 May, 1958; 'The new Refinery' *Natal Daily News*, 17 May, 1958.

Unsurprisingly, the Natal Chamber of Industries was one of the most enthusiastic supporters of the project.²⁸ Its memorandum in support of Shell's proposal contained arguments for its strategic importance in the context of the Cold War and Middle East instability similar to those propagated by national government, as well as alluding to the economic benefits, greater industrial diversification which it would stimulate and the 'vote of confidence' which the 'huge investment of capital' by Shell, 'an organization of international repute', demonstrated 'to the outside world'.²⁹

But the Council's General Purposes Committee rejected the proposed site with a unanimous vote, though, alert to the economic value of the project; it left the door open for Shell to consider an alternative site.³⁰ The Council's decision clearly pleased many of its key local residential constituents.³¹ Though the Railways Administration owned the land which Shell wanted to build on, because it fell within the municipal borough boundaries it had no power to

²⁸ TBD 3/DBN Vol. 1, 4/1/5/835, T. H. Howard, President, Natal Chamber of Industries to Town Clerk, 19th June, 1958.

²⁹ TBD 3/DBN Vol. 1, 4/1/5/835, Memorandum by Natal Chamber of Industries and Durban Chamber of Commerce in regard to the proposed establishment of a second oil refinery in Durban.

³⁰ 'City Councillors Reject Bayhead as Refinery Site' *Natal Daily News* 20 June 1958.

³¹ See TBD 3/DBN Vol. 1, 4/1/5/835 J. Hall [Hon. Sec Durban Women's Municipal Association] to Town Clerk, 22 June 1958 and C.A. Evenden to Town Clerk, 24 June 1958.

ignore the City Council's decision, as it undoubtedly would have liked to, and sell the land to Shell.³²

The Minister for Economic Affairs, Dr van Rhijn was 'exceedingly disappointed' by the City Council's decision.³³ The City Council had not bought Shell's attempts to make its Geelong refinery the yardstick for the project. It rejected repeated invitations for a site visit because the 'situation' of the refinery at Geelong was 'materially different' to that proposed for the Durban bay.³⁴ It is clear that the City Council's experience with the Wentworth refinery powerfully shaped the way in which it evaluated the Shell project. This was unambiguously reflected in the memo it sent to van Rhijn in late July, which stated that the Council had learnt 'in the last four years' (i.e. since 1954) that: 'from the angle of atmospheric pollution any oil refinery is dangerous' and that 'the pollution which comes from the refining of crude oil is inevitably offensive, because of the

³² See SAB HEN 719 92/2/33 Vol. 3, Chief Legal Adviser Legal Advice to General Manager SAR & H Re Proposed Oil Refinery for the Shell Company of South Africa Ltd at Durban. The Durban Town Clerk, Bill Howes was fully aware that the municipality's opposition to the refinery being built at the Bay depended on its ability to persuade the government not to sell the land to Shell. See TBD 3/DBN 4/1/5/835 Vol. 1, W.L. Howes to R.T. Douglas, 25th February 1960.

³³ TBD 3/DBN 4/1/4/953 Vol. 2, Oil Refinery Shell Co of South Africa, Secretary for Commerce and Industries to Town Clerk, 5th July, 1958.

³⁴ TBD 3/DBN 4/1/4/953, Vol. 2, Deputy Town Clerk, Durban to P.M. Dowson, 8th July, 1958.

nature of crude oil and the extreme potency of the effluence and gases which come from refining it.’³⁵

The City Council had singled out Isipingo as its preferred site. The City Engineer’s Department had reported at the beginning of August that it had ‘excellent prospects of both Native and Indian labour...as major housing schemes for both these races are projected in the area.’ What is most striking about the Department’s evaluation of the various possible alternative sites for the refinery was that construction at Wentworth, near to the existing Stanvac refinery was discounted because of its proximity to the Bluff residential areas which had been complaining about pollution since 1954. A further refinery ‘would only tend to aggravate these conditions.’ In every other respect, *including* the ‘major housing schemes’ for ‘Natives’ and Indians in the area; the site at Isipingo was thought to be ideal, reflecting the prioritisation of labour needs at the expense of concern for the effects of pollution upon Blacks and Indians.³⁶

National government hoped that it could again influence events as it had in 1954.

A City Council deputation was invited to Cape Town for a meeting with the interdepartmental committee to discuss the issue on the 8th of August. The

³⁵ ‘Cabinet Asked to Approve Oil Refinery Decision’ *Natal Daily News*, 25 July 1958.

³⁶ TBD 3/DBN 4/1/4/953 Vol. 2, Memorandum on Alternative Sites Proposed for the Location of an Oil Refinery to be established by the Shell Company of South Africa Limited prepared by City Engineers Department, Durban, 5th August, 1958.

Council delegation's basic argument conceded the 'economic value' of the refinery, but insisted that it would have to be 'correctly situated.' The Council's 'actual experience of an industry of this kind' meant that the proposed site at the Durban bay was simply unacceptable.³⁷ The pollution conditions which had been imposed by the Government in 1951 for the Wentworth refinery had been proven to be toothless and of no value in terms of common law. For this reason the municipal bureaucracy came close to rejecting legal controls because 'the only safeguard' against pollution was careful town planning.³⁸

Of course it hardly needs to be pointed out that there would still be breakdowns if the refinery was moved back to Isipingo. It would merely shift the problem away from Durban. The Deputy Mayor Councillor Shaw argued that 'it would, however, have the effect of removing the hazards to a less vulnerable area.'³⁹ It was 'less vulnerable' because fewer white residents would be affected by pollution, but Indians and Coloureds living in areas nearby, particularly at Merebank and Wentworth in major housing schemes, who already had to contend with the Wentworth refinery, would be even more vulnerable because

³⁷ TBD 3/DBN 4/1/4/953 Vol. 2, Deputy Mayor's Notes at Cape Town Conference on Proposed Shell Oil Refinery

³⁸ TBD 3/DBN 4/1/4/953 Vol. 2, Supplementary Memorandum by Durban City Council re Proposed Shell Company Oil Refinery in the Durban Harbour Area.

³⁹ TBD 3/DBN 4/1/4/953, Vol. 2, Notes of Interview between the interdepartmental Committee on the question of the proposed establishment of a second oil refinery at Durban and a deputation from the Durban City Corporation, Cape Town, 8th August, 1958.

of the proximity of their homes to the new refinery's site – as illustrated by the pictures below.

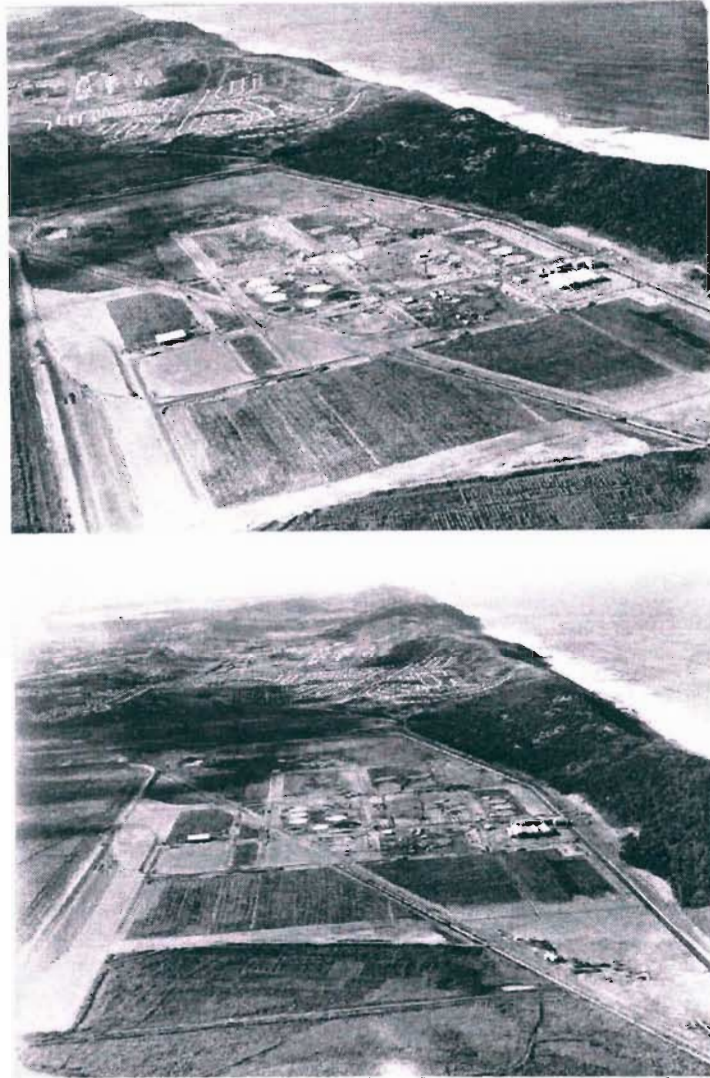


Image 7-8: Aerial views showing Sapref's proximity to Merebank-Wentworth housing schemes, 1962.⁴⁰

Although Shell had been making threatening noises in the local media about establishing the refinery outside South Africa as a consequence of the Council's decision, and again playing up the supposed virtue of its Geelong refinery, it had begun making preliminary investigations about the Isipingo site in July, once it

⁴⁰ From Sapref Oil Refinery Library Photographic Collection.

became clear that the Council was not going to budge.⁴¹ By December, with no sign that government intervention could reverse the Council's decision, Shell had begun to resign itself to planning 'an economical and practical' refinery for the Isipingo site, and meeting the Department of Transport's stack height conditions which had been imposed because of the proximity of the Reunion Airport.⁴²

In early February of 1959, in its last desperate bid, Shell asked the Department of Commerce and Industries if it could pressurize the City Council into allowing it to build in the harbour.⁴³ Though its sympathies clearly lay with Shell, the Government was faced with certain inescapable realities about the possible effects of it trying to force the issue by intervening, as it had in 1954, in quite different circumstances, on the side of petro-capital. The Department of Commerce and Industries was wary of the fact that the Corporation could simply refuse a manufacturing licence in terms of local health regulations. One of the few options the Department believed it could employ was to 'exert a degree of moral blackmail' by suggesting that it would discourage future industries from establishing in Durban. But the Department's Industrial Advisor, B.Gaigher

⁴¹ See 'Refinery may be lost by Durban refusal' *Eastern Province Herald*, 23 June 1958. 'Union May Lose £25m refinery' *Natal Mercury* 25 June 1958 and 'Refineries Don't Worry Australia' *Rand Daily Mail* 28 June 1958; 'Australia says Durban need not worry' *Natal Mercury* 28 June 1958; 'Shell inquiries about sites at Isipingo' *Natal Mercury* 5 July 1958

⁴² SAB HEN 719 92/2/33 Vol. 3, Managing Director, Local Board Shell to D.H.C. du Plessis, General Manager South African Railways & Harbours, 15th December, 1958.

⁴³ SAB HEN 719 92/2/33 Vol. 3, Industrial Adviser B.Gaigher to Under Secretary, Dept of Commerce and Industries, 3 February 1959.

felt that 'it would be a mistake' to try to force the issue; because he recognised that in spite of all the guarantees made by Shell 'there will be occasions when effluent gases would constitute a nuisance', and in those circumstances responsibility would 'rest squarely on the shoulders of the government.' Gaigher was also conscious that Shell might relax its anti-pollution efforts because the Government 'stood behind it.' As he had argued before, the 'psychological effect' of pollution 'on the people' [a reference to exclusively white publics] could 'not be underestimated'. This was especially important because compensation law-suits relating to the loss of value of property could result from this.⁴⁴

Acting on this advice, Diederichs, the Minister of Economic Affairs, explained to P.M. Dowson, Shell's local Managing Director that he could not intervene, because, as he put it, the government was:

...loath to encroach on what traditionally had been regarded in the Union as the terrain of local administrative bodies, viz. the freedom to welcome or reject the establishment of a particular industry within their boundaries and...the right to prescribe in which locality a factory should establish itself. This policy has always been followed by the Government and you will agree with me that it would create a dangerous precedent indeed – and one that could well be interpreted as a first step against the freedom of private enterprise in the Union

⁴⁴ SAB HEN 719 92/2/33 Vol. 3, Industrial Adviser B. Gaigher to Under Secretary, Dept of Commerce and Industries, 3 February 1959. Thanks to Catherine and Gys Dubbeld for their translation.

– if the Government were in any way now to endeavour to influence the Durban Corporation in this matter. It has occurred to me that as the Durban Corporation has the backing of the inhabitants in its attitude any pressure on the Corporation could have an adverse effect on sales of the refinery's products. I am told that it has happened before and it very well could happen again. In the circumstances it is probably better to let matters develop without interference.⁴⁵

Finally, on the 23rd of February the Minister of Transport approved the proposed refinery at the Isipingo site, adjoining the Louis Botha airport. Writing to D.H.C du Plessis, the General Manager of the SAR & H the next day, Dowson expressed Shell's appreciation for the assistance which various government departments had provided in helping it 'overcome what at one stage almost seemed to be an impossible task caused through the uncompromisingly antagonistic attitude of the Durban City Council' towards its initial proposal.⁴⁶

In the meantime the Stanvac refinery at Wentworth was again experiencing trouble. On the 18th of February, one of the junior operators mistakenly allowed some sour caustic to drain to the sewer, prompting complaints about the smell,

⁴⁵ SAB HEN 719 92/2/33 Vol. 3, Minister of Economic Affairs N. Diederichs to P.M. Dowson Managing Director of the Local Board Shell, 20 February 1959.

⁴⁶ SAB HEN 719 92/2/33 Vol. 3, Managing Director of the Local Board of Shell to Mr D.H.C. du Plessis 24th February, 1959.

and on the 26th there was an additional spate of complaints when 'several thousand pounds of vapour containing mercaptan stocks' were released into the atmosphere.⁴⁷ These incidents were cited by the Town Clerk as 'very telling corroboration' of the Council's attitude towards the Bay refinery proposal.⁴⁸

In June Councillor W.E. Shaw, newly elected as Mayor, publicly welcomed the resolution of the dispute, saying that he had received assurances from Shell that there would be 'adequate safe-guards' against pollution and that the refinery would be a 'shot in the arm' for the city.⁴⁹ But even though many of the discussions about the alternative site had been premised on the idea that the refinery would enjoy greater freedom in its operation than it would closer to Durban, it would be inaccurate to suggest that Shell was left to its own devices once it had secured the site at Isipingo.⁵⁰ The system of environmental regulation which had begun to take shape in the 1950s in response to Stanvac's pollution problems became further elaborated with the Sapref project's rebirth at Isipingo. The trend with the Wentworth refinery in the late 1950s had been towards close interactions between officials from the Durban municipality and the Company

⁴⁷ TBD 3/DBN 4/1/4/953 Vol. 2, W. A. Arnold to Town Clerk, W. Howes, 27th February, 1959.

⁴⁸ TBD 3/DBN 4/1/4/953 Vol. 2, Town Clerk to Mayor, Councillor W.E. Shaw, 3rd March, 1959.

⁴⁹ 'Durban Site for Refinery Welcomed by Mayor' *Natal Daily News*, 2 June 1959.

⁵⁰ See TBD 3/DBN 4/1/5/835 Vol. 1, Oil Refinery Shell Company of South Africa; Town Clerk to City Engineer, 25th February, 1960.

and this would continue with Sapref, but the C.S.I.R would play a new, central role in this regulatory system, providing research and monitoring expertise support.⁵¹ Sapref's eventual construction at Isipingo symbolizes the final stage in the Durban municipality's acceptance that it would have to settle for environmental regulation as a compromise between its financial and popular imperatives.

In March, 1960 A. Kinmont, the City Engineer wrote to Shell's Managing Director emphasizing the importance of pollution control once the refinery started up, noting that the Bluff was an 'ever-developing built-up area' and that 'large Indian and Coloured Housing Estates are being erected in close proximity to the proposed site' at Merebank and Wentworth.⁵² This was a rare, and indeed one of the only acknowledgments throughout half a decade of correspondence and discussions of the possible negative effect of refinery pollution on people in south Durban who were not white.

In November 1960, eight months after Sharpeville shook the confidence of foreign investors in South Africa, the latest Durban Mayor, Councillor Mr. C.A. Milne, ceremonially bulldozed the first mound of earth at the refinery site.

⁵¹ Sapref Oil Refinery Library. First Technology and Engineering Progress Information Meeting 1964: T. Technology Session (Cont'd) Papers and Minutes Friday 16h October, 1964, Hague. See 'Water Pollution Abatement at the Durban Refinery' by J.R. Wilson.

⁵² TBD 3/DBN 4/1/5/835 Vol. 1, A. Kinmont, City Engineer to Managing Director, Shell Co of SA, 16th March, 1960.

Speaking to the assembled media, Mr. K Firth, President of the Natal Chamber of Industries emphasized the significance of the project:

...after the unrest last March appeared to create doubts in the minds of overseas investors regarding the ability of South Africa to escape the revolutionary upheavals of the kind which have characterized the emancipation of colonial peoples in other parts of the world.⁵³

Above all else, this was what the project represented to the Apartheid state. In addition to the economic value of the project, which the Council could not ignore, another factor behind the projects' resurrection at Isipingo was Shell's successful inclusion of British Petroleum (BP) in the scheme, which lessened the financial burden of the venture considerably.⁵⁴ Most importantly however, the events of the preceding years had resulted in the refinery being pushed away from the Bluff and the Durban City Centre, further to the South, in close proximity to Merebank and Wentworth, areas populated by Indians and Coloureds. The city's ruling elite regarded this as preferable to the refinery being situated in close proximity to the white residents and ratepayers of the city.

⁵³ 'Bulldozers in action on new refinery site' *Natal Mercury*, 5 November 1960.

⁵⁴ Sapref Oil Refinery Library 'The New Durban Refinery'; 1959 'Shell' Report; See also 'Shell and BP to operate Reunion refinery' *Natal Mercury*, 29 January 1960.

Conclusion

Since the end of Apartheid in South Africa there has been increasing mobilisation by community environmental organisations around issues of 'environmental justice'. Some of the most prominent protests have centred on the country's four petroleum refineries. These groups have been pressurizing local, provincial and national government and the oil companies who operate oil refineries, calling for an end to what are alleged to be unacceptably high levels of pollution. As they have attempted to bolster their struggles, and linked up with other movements, both within South Africa and abroad, they have employed discourses of 'environmental racism'. These discourses have emphasised the role of racism in the positioning of predominantly black communities in close proximity to heavy industry in South Africa's history.

Against this backdrop, environmental regulation in South Africa during Apartheid is viewed with great cynicism and has been under particularly intense scrutiny in the last few years in the context of debate about the efficacy of environmental regulation and the likely effects of new regulatory measures on potential foreign investment. These discussions have been particularly heated in the city of Durban. Attention has focused on the question of how environment and health can be protected while attracting

foreign capital investment in what is seen as an increasingly competitive 'globalised' world.

But the origins of environmental regulation in South Africa have been incorrectly characterised as lying in a vague and simplistic evocation of an Apartheid-era bias towards strategically important industries and crude environmental racism. In fact, while the strategic interests of the Apartheid state were an important superseding factor, as personified by its intervention on the side of the Stanvac refinery in the dispute with the City Council, and race would play an important role in shaping the physical landscape of south Durban, the roots of the system of environmental regulation which arose in the late 1950s and 1960s were far more complex. They lie in a compromise which arose out of the Durban municipality's practical attempts to balance its financial and populist imperatives, in a context where an industry identified by the Apartheid state as being 'in the national interest' became the source of major concerns about pollution. The backdrop to this compromise was the general failure of technocratic solutions, taking the form of expert and technological interventions, to eliminate refinery pollution.

By 1965 the Caltex oil refinery which was established at Milnerton, near Cape Town had joined the Wentworth refinery, operating under Mobil, and the Sapref refinery at Isipingo, owned by British Petroleum and Shell, in the

multinational triumvirate which together with Sasol's oil-from-coal schemes provided Apartheid South Africa with its fuel. These refineries were undeniable symbols of the Apartheid State's strategic and economic priorities. At the local level municipal authorities and the residential and labouring communities in their proximity were faced with the often daily polluting consequences of petroleum refining. It was in this space of city politics that environmental regulation became a practical necessity, though the system was powerfully skewed by the racial and labour politics of Apartheid to be more responsive to white pollution complaints.

During their negotiations with Caltex about the establishment of a refinery on the Cape Peninsula, provincial and municipal authorities in Cape Town drew heavily on the history of pollution problems associated with the Stanvac refinery and the Durban municipality's dispute with Shell over the site of its refinery.¹ While at the height of the Stanvac controversy in 1954 the C.S.I.R had practically begged Standard Vacuum to allow it a place at the table during discussions with the 'overseas' experts, with little practical experience or knowledge of refinery pollution, by the early 1960's the C.S.I.R had begun to occupy a central place in the practical exercise of environmental regulation, as indicated by its increasing role in providing expertise in monitoring the

¹ TBD 3/DBN 4/1/5/835 Vol. 1, Oil Refinery Shell Company of South Africa; Town Clerk to Provincial Secretary, Cape Town, 23rd May, 1962.

opening years of Sapref's operation. Indeed by the mid 1960s the experts from the C.S.I.R were becoming increasingly confident in their predictive abilities vis-à-vis petroleum refining pollution and Dr Halliday was heavily involved during discussions about possible pollution from the Caltex refinery.² His basic position was marked by an insistence that pollution from petroleum refineries had 'no adverse effect from a health point of view', and that gases released were non-carcinogenic.³ Petroleum refinery pollution had been narrowed down to its 'nuisance' value; confining it to largely psychological effects. As a result of this, like the Sapref refinery, the Caltex refinery was given the green-light, though it too would be constructed in close proximity to residential communities whose health would suffer because of their exposure to high levels of refinery pollution.⁴

² SAB HEN 719 92/2/34 Establishment of Industry Caltex Oil Company; South African Council for Scientific and Industrial Research, National Institute for Water Research and National Physical Research Laboratory; Establishment of a Refinery at Cape Town by Messrs Caltex. Memorandum on Water and Air Pollution Aspects.

³ SAB HEN 719 92/2/34, Cape Provincial Administration, Committee on Oil Refinery, Minutes of Meeting held on 27th and 28th August, 1962.

⁴ Research recently conducted by the University of Cape Town's lung institute in seventeen schools near the Caltex oil refinery in Milnerton found that 68% of the schoolchildren interviewed reported that they were living with a brother, sister or parent who suffered from some sort of lung disease. Almost 24% of the children themselves reported suffering asthma attacks, while a further 9% had frequently experienced wheezing and shortness of breath. See 'Blowing in the wind' *Mail and Guardian Online*, 18 October, 2004. Available at: <http://www.mg.co.za/content/l3.asp?cg=0&o=139759> Accessed on December 15, 2004.

It is only comparatively recently that the health effects of industrial air pollution have begun to be properly understood.⁵ But the history of pollution nuisance at Wentworth with respect to the Stanvac refinery left a powerful mark in Durban in the 1950s. South Africa had no experience of petroleum refining before 1954. Early attempts at building up knowledge about pollution experiences with refineries, within both the central state and Durban's municipality led to vague notions of problems experienced in places such as Los Angeles with a long history of intensive petroleum refining. By and large, at this stage the prospect of domestic petroleum refining was seen in overwhelmingly positive terms. The financial and strategic benefits of the Stanvac project, both nationally and to Durban, and the anticipated explosion of secondary industries which the refinery was expected to attract resulted in a marginalisation of pollution concerns. In some respects the Stanvac refinery controversy arose out of a local knowledge vacuum about refinery pollution. In addition to this, the technological sophistication of the refinery; repeatedly reinforced within a larger discursive framework of national progress appears to have suppressed some of the contrary arguments which briefly emerged

⁵ Norwegian experts who studied the health of more than 16,000 men over almost three decades found that those living in more polluted areas were at greater risk of developing cancer. Many previous studies throughout the second half of the twentieth century had argued for the links between cancer rates and industrial air pollution but this study provided unprecedented long-term evidence. See 'Air pollution cancer fears grow' *BBC News Online* Thursday, 4 December, 2003. Available at: <http://news.bbc.co.uk/2/hi/health/3288781.stm> Accessed on December 15, 2004.

before the refinery started up about the polluting effect of petroleum refining. But then pollution started to emerge from the refinery.

The responses this provoked from white residents living on the Bluff shook the Durban City Council into action, at a time when it was particularly responsive to the city's white working class constituents.⁶ It was out of this milieu of Durban's municipal politics that environmental regulation emerged in the 1950s and 60s. City councillors and white constituents on the Bluff came to share a language of 'nuisance' which gave a generative descriptive power to pollution complaints. Letter writing, whether directed at (white) newspaper publics or the municipality was central to this process. Vivid descriptions of the alleged effects of pollution, and of the pollution itself became powerful political drivers. Ratepayer and landowner discourses were integral to the white civic culture out of which these pollution complaints emerged. The extraordinary situation which arose in April of 1954, with the Standard Vacuum Refining Company having been threatened with an interdict against its operation illustrates the importance of understanding the role of local political dynamics in shaping histories of capital during Apartheid. The intervention of the Apartheid state in the dispute between the City Council and the oil company conforms to expectations about its

⁶ See Brij Maharaj 'The Historical Development of the Apartheid Local State in South Africa: The Case of Durban' in *International Journal of Urban and Regional Research*; Volume 20: Issue 4, December 1996.

economic and strategic interests. But it was the form which these interventions took which is most suggestive of the ways in which local political legitimacy was bolstered in Durban in the 1950s. Daily experiences of pollution cut away at the dominant nationalist discourses of industrial progress in which the country's first oil refinery came to play an important symbolic part. The promise which technocratic solutions possessed became crucial to attempts at securing local political legitimacy. Initially this appeared to be particularly important to the central state, but as the local state in Durban was confronted with the reality of the financial benefits of the Stanvac refinery and similar industrial cash-cows to its own coffers, these interventions became similarly critical. In time, the system of environmental regulation which developed out of the pollution controversies of the 1950s would perform a similar function.

From the beginning experts played a key role in first reassuring those anxious about possible pollution, and later, as a suppressant to protests about pollution. These experts, supposed bearers of scientific impartiality and objectivity were seen as sources of solutions to the increasingly intractable pollution problems associated with petroleum refining. Even after their failings had become apparent, experts continued to occupy an important place in the attempts by the Durban municipality to minimise refinery pollution. With the development of environmental regulation, the close

interaction of officials of the Durban municipality and the oil companies would be increasingly supplemented by the expertise of the C.S.I.R. A similar story played itself out with respect to the faith placed in technological solutions to persistent pollution problems associated with the Stanvac refinery. While some important improvements were achieved through plant modifications during the 1950s, it is clear that the sweeping promises of a complete elimination of pollution made by Stanvac's management were based on a faith in technological solutions which they were not able to deliver upon.

When plans for the establishment of a second refinery in Durban bay by Shell emerged towards the end of the 1950s, the history of pollution difficulties associated with the Stanvac refinery became an important experiential source in attempts to prevent its successful location in the harbour. The local state and its key white residential constituents drew upon this experience of a history of pollution in opposition to Shell's claims to technological sophistication and expert knowledge. Of course the juxtaposition of 'expert knowledge' and 'experience' was never quite as clean-cut as many residents and city councillors at the time liked to suggest in their employment of layman discourses, and there were instances, such as in the formation of the Bluff Amenities Technical Committee, where there was real convergence in discursive strategies. Nonetheless, the City Council's opposition to Shell's preferred site in the bay reflected the power of the Stanvac pollution

experiences and the refusal of the local state to uncritically accept Shell's assurances, so familiar in their tenor to promises received from Standard Vacuum in the early 1950s. The municipality and some of its key white constituents had developed a cynical regard for hubristic guarantees made by 'experts' that refinery pollution could be eliminated. This realisation of the limits of technocratic solutions, coupled with an awareness of the populist pressures which refinery pollution had stoked on the Bluff provided the primary impetus behind the development of environmental regulation.

But the story told in this dissertation is also about the powerful grip of foreign industrial investment and its political imprint. As precipitous as events appeared to be in April of 1954, the City Council did not follow-through with its threatened interdict. The deadline for the ultimatum passed. The refinery kept operating. Though the City Council again flexed its muscles in opposing Shell's preferred site in 1958, there was never any question that the municipal bureaucracy would offer the company alternative sites for its refinery.

Though I have emphasised the importance of historical contingency in this story, and to the debate about the relationship between Apartheid and Capitalism, there clearly were some important, *defining* predictabilities. The eventual singling out of the site at Isipingo, in close proximity to the recently established Indian and Coloured housing schemes reflected a more general

and long-standing trend of subtle bureaucratic racism within the local state in Durban. Labour needs – indeed, the very stuff of Apartheid – retained their overriding power.

A year after Sapref started operating, Mondi, a subsidiary of Anglo-American, announced plans for the construction of a major paper mill at Merebank. Already hemmed in on both sides by the two existing petroleum refineries, residents of the Merebank and Wentworth housing schemes objected to the establishment of a third major petrochemical industry nearby. The critique rested on frustration with the City Council's contradictory policies and increasingly empty assurances regarding the area's development. The Merebank and Wentworth housing schemes had originally been trumpeted as 'model townships'; the culmination of decades of obsession by the City Council with unhealthy 'slum' conditions in the area. Instead, the positioning of two petroleum refineries in close proximity to the housing schemes meant that 'unpleasant odours' had become a mundane reality. The Merewent Ratepayers Association (a product of disputes between the old Merebank Indian Ratepayers Association and its rival body the Merewent Association over the right to represent the interests of Indians in the area) officially took up the issue with the City Council.⁷ Their opposition would not prove to be

⁷ 'Objection to New Industry: Merewent has had enough of unpleasant odours' *The Leader*, October 16, 1964; 'Merewent Ratepayers Bodies Clash' *The Leader* April 10, 1964.

successful, in stark contrast to the mobilisation by Bluff residents with respect to the Stanvac and Sapref refineries. The politics of industrial consent may help explain why; two years previously the same organisation had officially approached Sapref, pleading with it to fill a reported 2,000 vacancies at its new refinery, citing the 'alarming unemployment' among Indians in Durban and the Apartheid governments 'restrictive and repressive' job reservation legislation. The Association offered its assistance in helping Sapref obtain workers from amongst Indians residents at Merebank.⁸

By this stage the course of south Durban's development had been well and truly set, through the positioning of Indian and Coloured housing schemes alongside the Stanvac and Sapref petroleum refineries. Despite the protection they were undoubtedly afforded because of their strategic importance during Apartheid, these industries were hardly left to pollute at will. Though pollution standards during Apartheid were unquestionably lax, it was precisely because of the histories of experiences of and concern about pollution detailed in this dissertation that the oil companies were not/could not be given free reign. The local state in Durban was confronted with the complaints of its key white constituents which arose out of their experience of the negative polluting effects of petroleum refining. It was at this local level

⁸ 'Refinery Jobs for Indians Plea by Ratepayers' *The Leader* April 27, 1962.

that refinery pollution took on its urgency, and its persistence, in the face of unsuccessful technocratic efforts at *eliminating* pollution, led to a shift towards what I have termed the bureaucratisation of pollution; the emergence of a regulatory regime, however flawed, whose chief purpose became the *minimisation* of petroleum refinery pollution. This bureaucratisation process gradually removed discussions about refinery pollution from their previous public prominence, into the offices of the city's bureaucracy, and was also marked by close *personal* interaction between officials of the Durban municipality's City Engineer's Office and the oil companies concerned. This was a by-product of the local state's negotiation of its financial and populist imperatives and a reflection of the municipality's attempts to bridge the city's self-styled dual identity as an industrial port city *and* a tourist resort. Crucially, white residents living on the Bluff were able to exert an important measure of power vis-à-vis the local state in Durban in the 1950s. The outcome of these interactions left its mark in this bureaucratisation of environmental politics and in the development of environmental regulation. They also powerfully moulded the shape of the urban landscape in south Durban. These legacies provide the backdrop to contemporary struggles over environmental issues by communities in post-Apartheid South Africa today.

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