

AIR QUALITY COMPLIANCE AND ENFORCEMENT



Legal Authorisations, Compliance and Enforcement



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

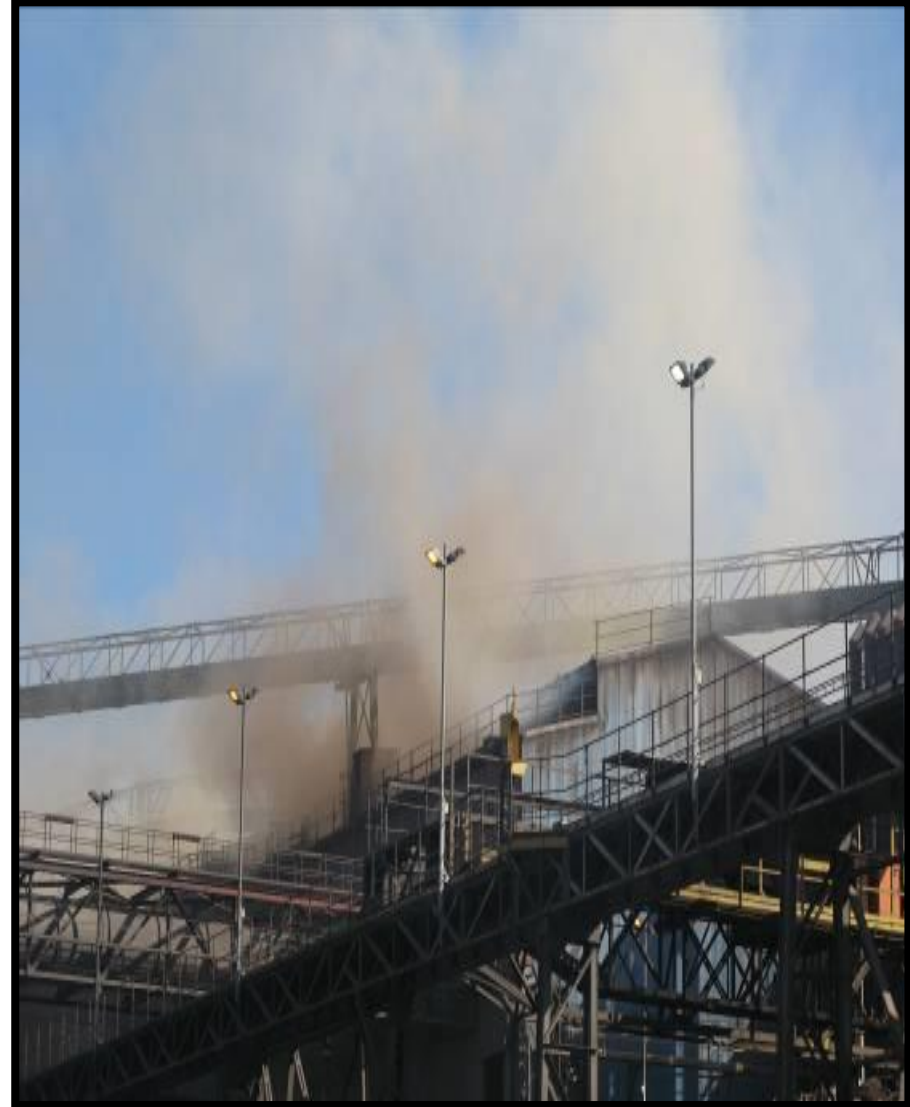


Challenges in relation to Enforcement

- Historically,
 - outdated legislation and permits – low penalties and poorly drafted permits
 - no effective monitoring
- New legislation in 2004 (appropriate penalty system) but various sections commenced later
- Transitional period from APPA registration certificates to AELs – more stringent permits – able to monitor compliance and enforce
- Staggered time periods for compliance with standards
- Lengthy process when non-compliance detected – old, dirty technologies and significant monetary resources to correct
- Capacity to monitor compliance and enforce – local authorities



ArcelorMittal Vereeniging





ArcelorMittal – R20 million (2 years) “elephant house” – extraction system Result of administrative enforcement action



Some positive results – criminal enforcement at Rand Carbide





Silicon Smelters – Rand Carbide August 2011

- No registration certificates – old APPA certificates of Highveld Steel & Vanadium Corporation Ltd
- Even if applicable – serious non-compliance
- Environmental harm caused by fugitive emissions
- Contravention of Section 51(a), read with section 22 NEMAQA
- Contravention of Section **28(14) of NEMA**
- Fine of **R2 million**, half suspended on certain conditions – NEMAQA
- Fine of **R1 million**, half suspended on certain conditions NEMA





Proactive focus since 2007

Sectors targeted for joint projects

- **Operation Ferro – steel, iron and ferro-alloy**
- **Refineries**
- **Cement industry**
- **Paper and Pulp**
- **Hazardous Waste**
- **Electricity Generation**



Process followed – strategic joint projects



- Initial baseline inspection – very comprehensive and detailed
- Inspection report issued to facility and provided with an opportunity to come into compliance
- Follow-up inspections after a specific period – identifying the need for enforcement action
- A number of facilities have not made progress and we are in various stages of enforcement action
- Some positive results of enforcement action taken in previous years:
 - ArcelorMittal Vereeniging, in response to enforcement notice commissioned a secondary extraction system to address the significant fugitive emissions at a cost of R220 million
 - Assmang Cato Ridge spent R100 million to commission its extraction system in response to enforcement action taken by the DEA

Outcomes - Refineries



Engen Refinery

- Site inspection - 11th and 12th of November 2008
- The following issues of concern were noted:
 - Failure to submit certain reports
 - Storage tanks without required authorisations
 - Decommissioning activities without required environmental authorization
 - Storage of hazardous chemicals in unbunded areas
- Engen addressed the concerns raised in the inspection report
- Continuous engagement with Department/provincial department and local authority through monitoring meetings - resolve ongoing issues and matters of compliance
- Despite taking action to come into compliance a number of emergency incidents occurred at the site and the DEA assisted the KZN Provincial Department in issuing Engen with a pre-directive in November 2012 followed by a directive in May 2013 to compel the company to employ the services of an external specialist to undertake a risk and integrity assessment and compile a plan of action for the facility



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Outcomes - Refineries



SAPREF Refinery

- Inspection - August 2008
- Non-compliances were detected in relation to the APPA registration permits:
 - lack of records to verify compliance with the various emission limits,
 - storage of hazardous waste without the required authorisations and
 - potential water and soil pollution caused by the improper storage of hazardous waste.
- Green Scorpions returned to the site on the 18th of December 2009 in order to evaluate the environmental performance of SAPREF against the baseline audit that was done during August 2008
- SAPREF was then instructed to compile an action plan consisting of measures to be taken to resolve the issues detected at this facility together with stringent timeframes within which to implement these measures
- Department is a standing member of the quarterly environmental management committee and is closely monitoring the facility to ensure that SAPREF complies with the commitments contained in the action plan



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**CRIMINAL ENFORCEMENT ACTIONS TAKEN RELATING TO ATMOSPHERIC EMISSIONS
OR OTHER APPA OR AQA OFFENCES**

Ref.	Date	Company name	Sector	Alleged offence	Outcome
Nigel Cas 260/04/2010	May 2011	Blue Sphere Investments and Trading 103 (Pty) Ltd	Ferro manganese smelter	APPA 9(2) and enforcing the Plea and Sentenced agreement reached in 2007 on contravention of APPA 9(2)	The investigation has been finalised and the case docket has been referred to the National Director of Public Prosecution (DPP) for decision – further investigation been undertaken as a result of DPPs comments
Swartkops Cas 55/03/2012	07 January 2011	SPEC	Shot Blasting	NEM:AQA s1,32, 61(2) GNR 542 dated 23 March 1984 – Regulations relating to dust controlled areas	DPP requested additional inspection. Report from inspection sent back to DPP
Oudtshoorn Cas 441/06/2006	January 2005	Cango Clay Bricks (Pty) Ltd		APPA 9(2)	Accused decided to plead guilty
Durbanville Cas 119/12/2011	December 2011	Brunig	Sewage fertilising production facility	Significant offensive odours NEM: AQA 35(2)	Docket to DPP – declined to prosecute but still waiting for reasons
Verulum Cas 296/04/2010	June 2008	Minemet (Pty) Ltd		APPA 9(2)	The investigation is finalised and the case docket has been referred to the DPP for decision.
Randfontein Cas 306/02/2012	August 2011	PSS Oil	Oil Recycling	Section 35(2) of the NEM:AQA	The investigation is finalised and the case docket had been referred to the DPP for decision.

Harrismith Cas 194/05/2010	May 2007	Harrismith Galvanizing and Steel Profiles (Pty) Ltd	Iron and Steel	APPA 9(2) (in addition to NEMA harm to environment offences)	Case has been postponed as accused wishes to plead guilty
E566/06/2012	June 2012	Samancor Manganese SA (Pty)Ltd	Iron and Steel	Section 51 of the NEM:AQA Non – compliance with the APPA certificate	The case is in the final stages of investigation and should be handed over to NPA for a decision shortly
E520/03/2011.	March 2011	Highveld Steel and Vanadium (Pty) Ltd	Iron and Steel	Section 51 of the NEM:AQA Non – compliance with the APPA certificate	The case is still under investigation.
Ravenhoad Cas 626/01/2010	March 2008	CASTCO Precision Milling (Pty) Ltd		APPA 9(2)	The accused was acquitted due to insufficient evidence (State did not measure extent and nature of emissions due to lack of resources)
Swartkops Cas 280/02/2014	February 2014		Drum recycling	Section 35 NEMAQA	Investigation finalised and docket referred to DPP
Swartkops Cas 197/94/2013	June 2013	Cape Drums	Drum recycling	Section 35 NEMAQA	Investigation finalised and docket referred to DPP
Greylingstadt Cas 33/11/2011	March 2011	Boiler and Energy	Animal matter rendering plant	Section 35 NEMAQA	Matter currently in court

ADMINISTRATIVE ENFORCEMENT INTERVENTIONS

COMPANIES TARGETED	SECTOR	OUTCOME
ASA Metals	Ferroalloy	Application for new AEL submitted
Samancor Middelburg, Mpumalanga	Ferroalloy, Iron and Steel	Compliant with all authorisations
Samancor Tubatse, Ferrochrome, Limpopo	Ferroalloy, Iron and Steel	Compliant with notice – matter dealt primarily with water pollution
Evraz, Highveld Steel	Iron and Steel	Action plan submitted. Complying with timeframes and commitments
Xstrata Wonderkop, North West	Ferroalloy, Iron and Steel	Submitted new AEL applications
Arcelor-Mittal Vanderbijlpark, Gauteng	Ferroalloy, Iron and Steel	GDARD issued notice. Criminal matter being finalised by DEA
Columbus Stainless Steel, Mpumalanga	Ferroalloy, Iron and Steel	New AEL's issued by MDEDET
Foskor Richards Bay in Kwa Zulu Natal	Ferroalloy, Iron and Steel	DEA satisfied with the response with regards to air quality issues and in compliance.
Transnet, Richards Bay, KZN	Port terminals	Umoya Nilu Consulting has been appointed to conduct an Air Quality Study, dust monitoring stations have been installed on site and refurbished the Silo's on site.
Eskom Mathimba Power Station	Power Generation	Issues related to dust in PCN/PD addressed. APPA R/C is valid until September 2014. Installed new emission monitors. The facility has Standard Cooperating Procedure for emission monitoring and reporting.
Eskom Lethabo Power Station, Free State Province	Power Generation	Most of the non-compliances have been and / or are the process of being addressed and mitigated. Facility is still awaiting their AEL, but continues, under exemption, to operate with their previous APPA permits.

ADMINISTRATIVE ENFORCEMENT INTERVENTIONS

COMPANIES TARGETED	SECTOR	OUTCOME
Eskom Camden Power Station in Mpumalanga	Power generation	Implementing measures now: Upgrading of ash lines, replaced all ash pumps and pump impellers, FFB bags have been replaced, and sprinkler system has been placed on the Ash Dam.
Natal Portland Cement, Cimpor, Simuma, Durban, Kwazulu-Natal	Cement	All air quality issues (dust) addressed.
Mpact (previously known as “Mondi Piet Retief”)	Paper and Pulp	All issues in relation to air quality (exceedences) addressed.
PetroSA	Refinery	All issues pertaining to air quality addressed.
Engen Refinery, Kwa-Zulu Natal	Refinery	KZN issued Pre directive and action plan submitted. Facility currently complying with commitments and timeframes.

ADMINISTRATIVE ENFORCEMENT INTERVENTIONS

COMPANIES TARGETED	SECTOR	OUTCOME
Blue Sphere	Ferro manganese smelter	Facility Shut down
SPEC	Shot Blasting	Significant improvement in technology used
Thermopower	Thermo desorption unit	Major improvements in the plant infrastructure and process control have been achieved. However, non-compliances with legislation were still detected and emission limits are not being met. Further administrative enforcement action initiated and facility placed under proof of performance.
PSS Oil	Oil recycling facility	Facility shut down
Girlock and ZF	Automotive manufacturing	AEL applications submitted as a result of administrative enforcement action

ADMINISTRATIVE ENFORCEMENT INTERVENTIONS

COMPANIES TARGETED	SECTOR	OUTCOME
Emfuleni Mediclinic	Health Care Risk Waste	Compliance Notice being drafted
African Hide Tannery	Tannery	Application for AEL as a result of administrative enforcement action
Cape Produce/ Pelts	Tannery	Variation on 2 August 2012, based on the extent of infrastructure refurbishment that had to be installed and associated engineering constraints. The effluent management of the facility has been changed dramatically and the difference in odour is considerable.
RennMell	Waste Incineration	Activities ceased and area rehabilitated
Rodeo Solve	Waste Tyre incinerator	Activities ceased and area rehabilitated

ADMINISTRATIVE ENFORCEMENT INTERVENTIONS

COMPANIES TARGETED	SECTOR	OUTCOME
Broadcomms	Communications	Installation of appropriate ventilation equipment, removing the source of odour from receptors.
WasteXpress / Dealtech	Waste incineration	Facility Shut down
Buffalo City Local Municipality	Waste – municipal landfill	Final Compliance Notice not complied with. Criminal investigation underway - Berlin CAS 25/09/2014 – s35(2) NEMAQA



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- Eskom - Administrative Enforcement Successes -

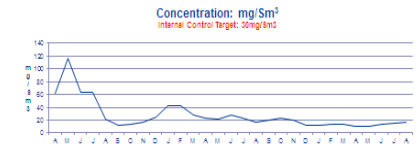
Eskom – Camden

26 and 27 July 2011-Inspection; Notice of Intent- August 2012; Follow-up inspection- November 2013

Facility's undertakings after administrative action was issued:

- Construction of Reverse Osmosis Plant – Water balance/pollution control
- Replacement of 4 ash lines – Pollution prevention
- Replacement of fabric filter bags
- A rezoning application was submitted to the town planner to rezone Camdens property from Agriculture to Industrial 3
- A Water Use License amendment application has been submitted to the Department of Water Affairs to include various water use's
- A Waste Management Licence application has been submitted to this Department for the temporary storage of hazardous waste
- Submitted a renewal application for the ash disposal site permit
- Voted Best Power Station in Eskom for lowest Emission, Generation 2011/2012 by Eskom

EMISSIONS: PERFORMANCE SUCCESS



2012 - 2013	PM	SO ₂	NO _x
Limit	75	3500	1100
Actual	12.782	2362	986

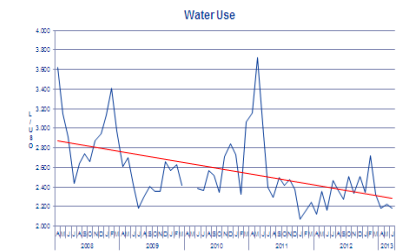
2013/10/02

UPGRADED ASH LINES



2013/10/02

IMPACT OF IMPLEMENTED PROJECTS



2013/10/02



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- Eskom - Administrative Enforcement Successes -

Eskom – Lethabo

3 November 2009- Inspection; S31H- October 2011; Notice of Intent- July 2012; S31H- July 2012

Facility's undertakings after administrative action was taken:

- the facility has and / or is in the process of ensuring compliance to all conditions contained in all applicable environmental authorisations;
- the facility has applied for authorisations for the unauthorised activities which are still applicable. It is worth noting that although the applications have been submitted to the Department;
- the facility has conducted the necessary rehabilitation on site and has put in place mitigation measures to prevent any negative impacts on the environment;
- applied for the conversion of its Registration Certificates in terms of the APPA to an AEL;
- facility has been issued with an Integrated Water Use License (“IWUL”) which addresses the water quality requirements for the site



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