CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

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REPORT TO GOOD HOPE SUBCOUNCIL

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1. ITEM NUMBER : 16 SUB 08/06/15 *tariat*

2. SUBJECT

REPORT TO GOOD HOPE SUBCOUNCIL REGARDING COMPLAINTS RECEIVED FROM THE HOUT BAY RATEPAYERS ASSOCIATION RELATING MALODOUROUS EMISSIONS FROM LUCKY STAR FISH RENDERING PLANT, HOUT BAY

ONDERWERP

VERSLAG AAN DIE GOEIE HOOP-SUBRAAD OOR KLAGTES ONTVANG VAN DIE HOUTBAAI-BELASTINGBETALERSVERENIGING OOR ONWELRIEKENDE VRYSTELLINGS VANAF DIE LUCKY STAR-VISVERWERKINGSAANLEG, HOUTBAAI

ISIHLOKO

INGXELO EYA KWIBHUNGANA LASE-GOOD HOPE EMALUNGA NEZIKHALAZO EZIFUNYENWE KWIQUMRHU LABAHLAWULI-RHAFU BASE-HOUT BAY EZIPHATHELENE NEVUMBA ELIBI ELIPHUMA KUMZI OVELISA IINTLANZI WAKWA-LUCK STAR, E-HOUT BAY

LSU 3029

3. PURPOSE

The report seeks to inform the Good Hope Subcouncil of the status of the investigation into the odour complaints and address concerns raised by the Hout Bay Residents and Ratepayers Association (HBR&RA), Clean Air for Hout Bay Sub-Committee.

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4. EXECUTIVE SUMMARY

Oceana Brands, trading as Lucky Star, operate an Industrial Fish Rendering Plant in the Hout Bay Harbour precinct.

The Factory has been in operation since the 1960's and is in possession of an atmospheric emission licence for a Category 10 Listed activity, in terms of Notice 893 of the National Environmental Management: Air Quality Act (NEMAQA).

The Factory was also a registered offensive trade in terms of the Offensive Trade Regulations (which have since been repealed).

The rendering of industrial fish to produce fishmeal is a seasonal activity that takes place annually from February to August. It is a Noxious Industry. As such it is known to emit a number of malodourous emissions including Hydrogen Sulphide (H_2S) and Trimethylamines. These pollutants have an extremely low threshold of smell.

A number of relatively new residential developments have taken place which has resulted in conflict.

Residents of Hout Bay and in particular the more affluent community of Hout Bay Heights, North Shore and parts of Scotts Estate, frequently complain about the odours, when Fish Meal production is underway. The Hout Bay Residents and Ratepayers Association have formed a Sub-Committee who has engaged with the City to address the odour issue.

The factory has however adopted best practice for odour management, as is required by the NEMAQA.

The MAYCO Members for Health; Housing; and Planning and Environment have scheduled a meeting with the Managing Director of Oceana Brands, which is scheduled to take place on the 25th of June 2015, to establish an understanding on the future of the Lucky Star factory and the implications on further development of the area.

A meeting has also been scheduled by the MAYCO member for Health and the Clean Air for Hout Bay Sub-Committee members and community representatives to discuss the odour issue.

In addition, the Air Quality Officer will be reviewing the Atmospheric Emission Licence issued to Lucky Star, with a view to further tightening controls on the factory.

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5. RECOMMENDATION

It is recommended that the report be noted by the Goodhope Subcouncil.

AANBEVELING

Daar word aanbeveel dat die Goeie Hoop-subraad van die inhoud van die verslag kennis neem.

ISINDULULO

Kundululwe ukuba ibhungana lase-Good Hope maliqwalaselwe okuqulathwe kwingxelo.

6. DISCUSSION/CONTENTS

7.1 Background:

Lucky Star (formerly registered as Oceana Brands) is in possession of an atmospheric emission licence for animal matter processing (Category 10) of the List of Activities promulgated in terms of the Section 21 Listing Notice no 893 the National Environmental Management: Air Quality Management Act, Act 39 2004.

"Category 10: Animal matter processing

Description:	Processes for the rendering cooking, drying, dehydrating, digesting, evaporating or protein concentrating of any animal matter not intended for human consumption.
Application:	All installations handling more than 1 ton of raw materials per day.

(a) The following special arrangement shall apply:

Best practice measures intended to minimised or avoid offensive odours must be implemented by all installations. These measures must be documented to the satisfaction of the Licensing Authority."

It is important to note that unlike all other Listed Activities, the animal matter processing activity is the only listed activity that has no point source emission limits specified for any of the pollutants emitted.

The plant has been in existence for more than forty years and was also registered as an Offensive Trade, operating out of a working fishing harbour. The plant operates on best practice and is the foremost fishmeal plant in South Africa.

The process:

Lucky Star target pelagic fish species such as anchovies, red eye and pilchards, which they then process to produce a high quality fish meal which is exported to international markets. Fishmeal production generally runs from February to July, tailing off in August of each year.

Offloading and storage:

Raw fish is caught with purse-seine fishing vessels and offloaded by means of a vacuum system; into the fish meal plant raw fish holding facilities. The holding facilities for raw fish consist of three pits constructed of concrete, each capable of

holding 130 tons of fish. The pits are housed inside the factory in an enclosed area that is cooled with refrigerant.

Cooking and dewatering:

The raw fish is transported into the processing plant directly from the fish pits into the two continuous steam jacketed cookers. The fish is cooked in the cookers and all excess liquids are extracted by aid of dewatering screens and two presses.

Separation and evaporation:

The liquid phase is put through centrifuges where the oil is separated from the stick water. The oil is polished by adding hot water to the oil and putting through a centrifuge. The oil is stored by Lucky Star pending customer orders and dispatch. The stick water is evaporated in a steam evaporating plant and/or waste heat evaporating plant into concentrate which is added back into the solid press cake before it is dried. The press cake and the concentrate are mixed in a pre-mixing heater prior to the steam driers.

Drying:

The meal is partially dried with two indirect steam driers and then in a low temperature air drier.

Milling and bagging:

The meal is then conveyed to the bagging plant were it is milled by hammer mills. The final product is bagged into 50kg or bulk bags. Dust is removed by a cyclone and bag filters. The fish meal is stored by Lucky Star pending customer orders and dispatch.

Steam required and used for cooking and evaporating of liquids from the process is generated by steam boilers using heavy furnace oil (HFO) as a fuel source. Steam is provide by 4x 14 000 kg/hr John Thompson steam boilers. The water vapour from the two indirect driers is passed through a waste heat evaporator to re-use the heat. The remaining vapour is condensed in scrubbers and the non condensables are ducted to a mixing tank from which the boilers draw air to incinerate the odorous air. The air from the plant is also scrubbed and fed into the mixing tank. The surplus air not burnt in the boilers is treated in a chemical scrubber with a solution of sodium hyper chlorite.

In a good year the factory contributes in excess of R150 Million the Cape Town's economy and they contribute significantly to the development local community.

Continuous Improvement:

The Lucky Star factory has undergone a program of continuous improvement over the years. These include the following:

2008 – Ongoing improvements to ducting units for odour control

Collection of odour emissions from processing equipment, which is directed to the scrubbing unit or for gas incineration.

2008 – Windmeul cooker installation

Replacement of old cooker that failed the statutory pressure test.

2009 - Meal Cooling and Scale Systems

Removal of meal cooling system which allowed for better functionality of the Odour Suppression Plant.

2010 – Dupps cooker
Installation of cooker to replace existing cooker that failed the statutory pressure test. Cooker reached the end of its life cycle.

2010 - 2 tricanter units installed
The tricanter is a continuously operating horizontal solid wall centrifuge. It enables three-phase separation with simultaneous separation of two immiscible liquids with different densities and one solid phase. The ability to separate the solid from the liquids enables separation, irrespective of raw fish quality, when pressing is no longer possible. The two tricanters were installed for process optimization and has eliminated the use of formalin, which acts as a coagulating agent that binds the proteins and assists with pressing.

2010 – Enclosure and refrigeration system for fish pits
Total enclosure of 3 fish pits and circulation of cold air in order to minimise fish degradation and odour emission.

2011 – Conveying system
Change in transportation system of fish to cookers by replacing the screw conveyor system with pumps and ensuring enclosure of the conveyors. This prevents odour emissions by ensuring that maximum vapour is directed to the necessary odour treatment plant.

2011 – Sea Water scrubber
A new bigger and higher efficiency seawater scrubber was installed and commissioned. This higher capacity scrubber allows for more contact, by increasing surface area and contact time, between the vapour stream and sea water in order to scrub out the condensables.

2011 – Micro filters
Online micro filtering units installed after decanter, tri-canter and by the stick water tank. This eliminates fines from being transported to the Waste Heat Evaporator which minimises blockages and delays with production.

2011 –Second chemical dosing tank
Conversion of old existing seawater scrubber to a second chemical scrubbing tank. This increases capacity and contact time with the oxidising agent which aids with odour removal and inhibits bacterial growth.

2012 - New cooker replacement
Previous Dupps cooker (2010) had to be replaced due to damaged caused by poor rigging and shipping. There were also manufacturing faults that caused it to fail the statutory pressure tests.

2012/13 –additional decanter
This will be done to increase separation efficiency.

2013 -2015
Separators
2013 Separator 6 was installed to improve the plant efficiency.

Boilers:
2014 Boiler1 was re-tubed because of old age so all the boiler tubes were replaced with new ones. Increasing heat transfer efficiency thus using less HFO to produce steam
2014 boilers 1 and 4, the rotary cup burners were replaced with steam atomizing jet burners which have high combustion efficiency and with more automatic control which reduces human error.
2014 Boilers 2 and 4 were acid washed this was to improve heat transfer of the boiler heating surfaces thus using less HFO to produce steam.

Chemical Scrubbers
2014 an automatic dosing system was installed. There is a probe inserted in the chemical scrubber which measures the concentration and then dose sodium hypochlorite proportional to the concentration.

Other

2013-2014 – Repair to main municipal pipeline

The Lucky Star Hout Bay Fishmeal Factory concluded the Effluent Spill Investigation which was independently conducted by SRK Consulting. The investigation was initiated in April 2013 when there was an observed effluent spill into the bay. This resulted in Oceana contracting SRK Consulting to conduct an independent investigation in order to monitor the effluent release process into the Hout Bay Harbour. This facilitated an assessment to determine possible breaches that may result in contamination of the bay.
The project scope included a Field Investigation (Civils Assessment) which included a Land Survey, System Integrity Checking and Sewage Reticulation System. Trevor Stander Land Surveyors conducted a land survey in order to provide a layout of the sewer and storm water reticulation system. This was then followed by a survey that was conducted by Messrs Wasteman Sight Lines who conducted CCTV inspections of the respective sewage and storm water lines.
The following is a summary of the outcomes that were noted:

- In addition to the Fishmeal Factory the sewer pipes carry effluent from upstream catchments (i.e residential areas and the Hout Bay precinct).
- The CCTV inspections were not possible without extensive cleaning of the systems.
- A hole was located in the main municipal sewer line adjacent to the quay
- Indications are that there are sewage and/or effluent spills through the hole whenever the sewer pipe flow is approximately more than 75% full.
- The storm water reticulation system which is independent of the sewage system conveys storm water from the Hout Bay Fishmeal Factory as well as from surrounding upstream catchment.

The conclusion was that the hole in the sewage pipe required immediate attention and this initiated discussions with the City of Cape Town Water and Sanitation as well as the Department of Public Works.

The matter was treated as a priority and repair work was speedily completed which required that a more substantial section of the pipeline needed replacement. Although the problem (in terms of the area identified) is now considered resolved, the effluent discharge procedure for the Hout Bay Fishmeal Factory still requires the staff to actively monitor the pipeline. This will ensure immediate escalation of the matter and if possible initiation of corrective action in order to prevent any future spills.

2013 December – Community Stakeholder Meeting

Presentation at site with key stakeholders which included a plant tour.

2014 – Visual Monitors

Installation of visual monitors at boiler operators, supervisors, LT Dryer as well as site managers work areas. This was done in order to facilitate faster reaction time for corrective action whenever there is smoke generation from the burners.

June 2014

This website was developed by the Lucky Star team in order to inform the community about the factory, its history and operations as well as procedures and systems. It is a tool, together with other constructive Group initiatives, that was intended to facilitate better communication between stakeholders and thereby improve relations between the factory and the community.

August 2014

Hout Bay Community stakeholder meeting which took place on 15 August 2014. Minutes for the meeting were provided to the City of Cape Town.

April 2014 to Present

- Evaluation of Chlorine Dioxide as a superior oxidising agent for the use of chemical scrubbing. This was done by testing the efficiency of the chemical at the Lucky Star St Helena Bay facility.

□ Investigation and review of Ecosorb Dosage Technology for H_2S reduction

2015

Installation of online H_2S monitoring system for chemical scrubber. Equipment was ordered on 30 March 2015 and has a 6 week turn-around time for delivery. Communication for progress in this regard to be sent to the City of Cape Town.

Over the years the Air Quality Management Unit has conducted a number of investigations into the operations at Lucky Star. In 2011 the Specialist Technical Adviser to the National Air Quality Officer – Dr Greg Scott was invited to conducted an assessment of the premises. We have also conducted joint inspections with representatives of the Provincial Air Quality Officer.

It was found that the operations of the factory are generally in compliance with their emission licence conditions.

7.2 Complaints:

The Hout Bay Ratepayers Associations, Clean Air for Hout Bay Sub-Committee submission (See Annexure A) has raised a number of issues to which I would like to respond:

7.2.1 Registering the smell as a public nuisance:
HBR & RA wish to have the fish odour registered as a public nuisance.

Response: The City of Cape Town is the licensing authority for this listed activity. As such the City has effectively chosen to renew a Licence previously issued by the Department of Environmental Affairs, with the knowledge that this is an odorous industry that is operating in a working harbour that has been in operation since the 1960's.

HBR & RA raise the question as to why the City continues to licence the premises despite of widespread complaints about noxious odours and complaints being received.

Response:
The Authorities at National, Provincial and Local Authority level concur that the plant is one of the foremost Fishmeal plants in the country insofar as odour abatement and control goes and that they have adopted all reasonable measures to abate and control odours.

The plant provides much needed jobs to an otherwise impoverished community that resides on its doorstep and who do not complain about the factory.

The factory furthermore has pre-existing Land-use rights.

HBR & RA raise the question as to what mechanisms are in place for the concerns of the community to be regarded and action to be taken against the smell:

Response:
Politically a decision could effectively be taken not to renew Lucky Stars emission licence or to withdraw it altogether. But this would have to pass the test of the Promotion of Administrative Justice Act (PAJA).

Secondly, the HBR & RA could decide to petition the high Court to seek relief against Lucky Star.

7.2.2 Technicalities for issuing of an emissions licence:

Complaints Register: Each licensed facility is required to keep complaints register and to submit these registers to the licensing authority on request or annually as prescribed in the AEL.

We are in possession of Lucky Stars complaints registers. These have been made available to the HBR & RA upon conclusion of an Access to information process.

It is possible that there are some discrepancies between the two registers. All complainants who have lodged complaints with the City are encouraged to do so on Lucky Stars online complaints logging system or with the factory directly.

Complainants who log complaints with the City are required to provide physical addresses so that an assessment can be made of the area in which they live and the impact the factory emissions are having on them. This information is often not forthcoming.

When the emissions licence is reviewed for the purposes of considering a renewal application, these complaints registers are scrutinized against and assessed.

Measures for Control:
The HBR & RA question why the Minister or MEC has not prescribed measures for the control of odours as empowered by Section 35 of the Air Quality Act.

Response: This is not a local government competency so why cannot state why this is the case.

The matter has previously been raised with the National Air Quality Officer, at a number of forums. The response has been that this is currently not a national priority.

7.2.3 Health Implications of Smell
HBR & RA make reference to a housing development across the road from the factory and the Health Departments objections to the process.

Response:
These objections were based on the fact that a Health Risk Assessment had not been carried out as part of the application process and had a specific reference to undeveloped land directly across the road from the factory.

Furthermore, it is a well-known fact that air pollution dispersion takes place spatially and temporally i.e. over distance and time taken to disperse from the point source. Thus an impact on a potential development could be significantly more acute than on the broader community.

This aspect can be verified when one assesses the ambient air quality monitoring results obtained from the Western Cape Government monitoring station that is located at Sentinel School in Hangberg. These results as shown in Annexure B indicate that the Hydrogen Sulphide (H_2S) levels are considerably below Health Risk Levels which range between 135 micrograms and 150 micrograms depending on the reference source.

The measured ambient H_2S levels during fish production recorded at the site (which is located 197m from the Factory) at the time a number of odour complaints were received, show the Hourly average H_2S levels are in the 30 microgram range for short duration and for much of the time are below 10 micrograms. The threshold of smell for H_2S is 7 micrograms.

7.2.4 Breach of Air Quality Bylaw
It is alleged that there has been a breach of the City's Air Quality Management Bylaw due to the malodourous emissions from the factory.

Chapter 2 of the City of Cape Town Air Quality Management Bylaw, 2010 deals with the "Duty of Care":

"DUTY OF CARE

Reasonable measures to prevent air pollution

4. (1) Any person who is wholly or partially responsible for causing air pollution or creating a risk of air pollution occurring must take all **reasonable measures including the best practicable environmental option**–

(a) **to prevent** any potential significant air pollution from occurring; and

(b) **to mitigate** and, as far as reasonably possible, remedy any significant air pollution that has occurred."

In the hierarchy of legislation, the Bylaw is also subservient to the National Environmental Management: Air Quality Act (NEMAQA), which has prescribed the "Special Arrangements for Category 10 Listed activities, which include the adoption of best available method for odour control.

It is the view of the Air Quality Officer that these measures have been adopted by Lucky Star. We however continue to engage with our colleagues both provincially and nationally regarding odour control in the fish rendering industry. We are also reviewing international practises for this industry.

The complainants have the right to embark on civil litigation, but any court will apply the test of reasonableness to any action. I believe the factory has technically done all that is reasonably practical to control odours and this has been verified by the third parties mentioned above. There is however always room for improvements.

Way Forward:

The MAYCO Members for Health; Housing; and Planning and Environment have scheduled a meeting with the Managing Director of Oceana Brands, which is scheduled to take place on the 25th of June 2015, to establish an understanding on the future of the Lucky Star factory.

A meeting has also been scheduled by the MAYCO member for Health and the Clean Air for Hout Bay Sub-Committee members and community representatives to discuss the odour issue.

In addition, the Air Quality Officer will be reviewing the Atmospheric Emission Licence issued to Lucky Star, with a view to achieving the following:

- Require the installation of continuous in-stack odour monitoring equipment so as to improve odour monitoring.
- Require the use of Low Sulphur Oil as a fuel source for the Boiler operations
- Reduce the number of Boilers authorized to operate at any one time to no more than two.
- Improve the chemical scrubber operation and efficiency through the change from Sodium Hyperchlorite to Chlorine dioxide as a chemical scrubbing agent which may require a Basic Assessment in terms of the EIA Regulations.

6.1. Constitutional and Policy Implications

Air pollution control is a Local Government competency in terms of the Constitution.

The Air Quality Management mandate is exercised in accordance with the National Environmental Management: Air Quality Act; the National Framework for Air Quality Management; and through municipal bylaws.

6.2. Sustainability implications

Does the activity in this report have any sustainability implications for the City?	No ☐	Yes ☒

This report is in line with the following IMEP Sectoral Approaches:
7.2.1 Air:
A commitment to reducing the incidence of all forms of air pollution and the potential environmental health risks associated with air pollution.
The commitment includes:
• Recognising that the minimisation of air pollution and control of pollution sources is a priority.
• Recognising that pollution levels may be detrimental to the health of communities.
• Recognising the cumulative impact of new and existing sources of air pollution.

7.2.3 Environmental health:
A commitment to the Constitution of South Africa which guarantees the right of all South Africans to an environment which is not detrimental to their health and well-being.

6.3. Legal Implications

The Lucky Star factory is legally compliant with the conditions of the Atmospheric Emission Licence issued by the City of Cape Town, the competent Licensing Authority.

6.4. Staff Implications

Does your report impact on staff resources or result in any additional staffing resources being required?

No ☒

Yes ☐

6.5. Other Services Consulted

Western Cape Government, Department of Environmental Affairs and Development Planning – Directorate Air Quality Management provided the monitoring data contained in the annexure to this report.

ANNEXURES

ANNEXURE A - Hout Bay Residents and Ratepayers Association Submission

ANNEXURE B - Hout Bay Ambient Air Quality Monitoring data

FOR FURTHER DETAILS CONTACT :

NAME	*Ian Gildenhuys*
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DIRECTORATE	*City Health*
FILE REF NO	

Comment:

EXECUTIVE DIRECTOR CITY HEALTH
Dr Zandile Mahlangu

DATE 06/5/2015

ANNEXURE A

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HOUT BAY RESIDENTS' & RATEPAYERS' ASSOCIATION

PO Box 27031, Hout Bay, 7872

Email: hbrra@houtbay.org.za

Chairman: Len Swimmer (021 790-0268)

Website: www.houtbay.org.za

April 2014

Ian Gildenhuys
Head Specialised Environmental Health
City Health

Dear Mr Gildenhuys,

RE: Dealing with the noxious smell from the Oceana fish factory

Over the past 12 months, the Air Pollution portfolio of the Hout Bay Residents' and Ratepayers' Association (HBR&RA) has been engaging with the City of Cape Town and Oceana to better understand some of the issues surrounding the noxious smells emanating from the fish factory in the Hout Bay harbour. Throughout this process, we have found a number of challenges and inconsistencies. We would like to table these concerns at the next sub-council 16 meeting for further clarification, as part of our efforts to eliminate the smell from the town.

Below is a detailed account of the information we have received and the questions that arise from its study.

1. Registering the smell as a public nuisance

HBR&RA requested information on the process to register the smell as a public nuisance and received the following information from Councillor Benedicta van Minnen in August 2014, which was again confirmed by Ed Filby from the Department of City Health, Specialised Environmental Health, Air Quality Management Unit, in April 2015:

> *"The same authority that has issued a premises a licence to operate a listed activity that is known to be an operation that generates malodours and for which there are no emission limits specified in the Listing Notice, cannot on the one hand licence the premises and on the other hand prosecute them for nuisance odours. Should any prosecution need to take place, this would need to be conducted in terms of the Air Quality Act with its R5 Million Rand penalties. As there are no contraventions of the Air Quality Act we are not in the position to prosecute Luck Star."*

Essentially, this statement indicates that because the City of Cape Town has chosen to issue an operational licence to Oceana, there is no process for the community to register the smell as a public

nuisance, despite widespread community concern. We believe this is unconstitutional. Councillor van Minnen further states that she is of the view that Oceana has *"technically done all that is reasonably practical to control odours".*

This raises two specific questions. First, why does the City continue to issue an operational licence despite the noxious odours and continuous complaints from the community, and why can this licence not be withdrawn? Second, in a situation such as this, what mechanisms are in place for the concerns of the community to be regarded, to the extent that they can take action against the smell? Despite Oceana doing all that is 'reasonably practical' this is not enough and the smell persists, causing economic, social and environmental harm to the community. Councillor van Minnen states that in such a case the "*odours must be tolerated by the broader community*". It appears that the interests of Oceana are put before the interests of the community. We believe this is unconstitutional, considering our basic right to live in an environment that is not harmful to our health and well-being.

2. Technicalities for issuing an emissions license

There are two areas of concern regarding the technical requirements for the Atmospheric Emissions Licence that Oceana requires to operate.

- **Complaints Register**.
  - According to Mr. Ian Gildenhuys, City Health, Oceana is required to have a complaints register in place as part of their Atmospheric Emissions License and "*their Production Management are required to assess each complaint against operating conditions."*
  - HBR&RA was informed that to retrieve this information, we would need to send a request to the City for the C3 complaints register, following the process outlined in the Promotion of Access to Information Act, 2000.
  - HBRRA has followed this process and in September 2014 requested access to the registers for the past five years of operation (2010 – 2014). After months of correspondence with various information officers, it appears that a comprehensive register of all complaints logged simply does not exist - we have received some of the complaints registered by Oceana from 2010 - 2013, but there is no record of complaints registered directly with the City, nor of the complaints registered telephonically through the factory. With the lack of a comprehensive document, it is therefore reasonable for HBR&RA to assume that this complaints register is not considered an important component of issuing the Atmospheric Emissions License.
  - Without a comprehensive documentation of complaints, and with the inability to register the smell as a public nuisance, how can residents be assured that that their concerns are being taken into account, and that their constitutional rights are being protected?

- **Measures for control.**
  - According to Section 35 of the NEM: Air Quality Act 35 (1) *"The Minister or MEC may prescribe measures for the control of offensive odours emanating from specified activities."* We have been informed by Councillor van Minnen that to date "*neither the Minister or MEC has chosen to do so*."
  - HBR&RA would like to know why this is the case. According to Mr. Gildenhuys, "*Odour has many different causative agents, each with a different threshold of smell. Setting a standard would be extremely difficult.*" While we appreciate that this is, indeed, a complex process, we do not feel that this is a valid reason for not setting a limit.
  - What process would we need to embark on to engage proactively with the Minister or MEC to set these limits to address the concerns of the community?

3. Health implications of the smell

The City of Cape Town and Oceana state that there are no negative health implications caused by the smell from the fish factory. This raises two specific questions.

- **Definitions of health and well-being.**
  - Section 24 of the South African Constitution states that everyone has the right to "*an environment which is not harmful to their health or well-being*".
  - Over the years, residents have raised complaints citing nausea, headaches, scratchy eyes and noses, aggravated asthma, discomfort, insomnia, and lack of concentration as a direct result of the smell from the fish factory. These concerns directly influence conditions of both health and well-being yet are not considered as valid concerns by the City.
  - HBR&RA would like to know why this is the case and what definitions and parameters the City uses to determine impacts on health and well-being. In correspondence sent by Councillor van Minnen in August 2014, it was indicated that a Health Risk Assessment was being conducted but we have not heard of the results of this study. Where can this information be obtained and what are the results?

- **Contradiction of information.**
  - While representatives of City Health maintain there are no negative health implications, contradicting information has been received. As stated in the sub-council minutes dated 19 August 2013 (16 SUB 51/08/13) referring to the application for consent in terms of the Land Use Planning Ordinance for ERF 8474 in Hout Bay, it is stated that "*the Health Department and other objectors raised serious health concerns – the fish odour is unbearable and may be a health hazard for those living in close proximity to the fish factory*" and "*due to health concerns, the area is not suitable for housing purposes.*"
  - In further correspondence received from Councillor Marga Haywood to HBR&RA in November 2014, the following was stated: "*The City has purchased for R10 million a plot of land at the bottom of the Road leading up the hill to Hangberg. The plan was to build residential CRUs (Community Residential Units) on the land but an expert health study has stated that proximity to the Fish Factory with its inevitable noxious emissions renders this land unusable for residential buildings. Thus the City has the embarrassment of having acquired expensive land which as yet has no purpose.*"
  - How is it possible that on the one hand, the department claims no negative health impacts, yet on the other hand states directly that the noxious emissions from the factory render the area unfit for residential development? HBR&RA believes this to be a blatant contradiction – it is clearly stated that noxious emissions are a health hazard, and yet Councillor van Minnen and City Health insist that the "*odours must be tolerated by the broader community.*" It is, therefore, reasonable to assume that the City is deliberately choosing to ignore these health concerns and is willingly subjecting the residents of Hout Bay to harmful odours that have a direct influence on the health and well-being of the broader community.

4. Breach of the Air Quality Management By-Law

HBRR&A is aware of the Draft Air Quality Management By-Law 2015 that is currently open for comment and it is our intention to submit substantial comments about this document. Our initial examination of the document, however, leaves us with some critical questions. Specifically, Chapter IX, 26-1-c states:

"No person shall... cause any reasonable interference or likely interference through air pollution which may adversely affect the health or well-being of any person or living organism; or the use and enjoyment by an owner or occupier of his or her property or environment."

It is abundantly clear that the smell from the Oceana fish factory is in violation of this requirement – with hundreds of complaints registered, more than 1,000 signatories on a petition, and thousands of people actively voicing their concerns about the smell, **the smell has a direct and negative impact on the health, well-being and enjoyment of people living in Hout Bay**.

How is Oceana allowed to maintain their operation when the smell they produce is in direct violation of this by-law, and what is the City doing to hold them accountable? No information is provided on how this is being handled. In Mr Filby's April 2015 letter, he acknowledges that "very unpleasant" and "rancid" smells have been recorded, and yet there is no action taken against this. How is the City addressing the violation of this by-law, and addressing the concerns of the residents of Hout Bay?

In addition to the concerns and questions we raise above, we would also like to inform you of the activities HBR&RA has undertaken to engage proactively with the community of Hout Bay to address the issue.

Formation of Fresh Air for Hout Bay. Under the leadership of the Air Pollution portfolio, the community organisation Fresh Air for Hout Bay (FAHB) has been established and currently engages with over 2,500 people, all of whom believe the smell is unacceptable. This group has as its objective the elimination of the smell from the fish factory and is undertaking a systematic community engagement process to do this. Some of the activities include:

- **Stakeholder Meeting with Oceana:** In August 2014, members of FAHB met with Oceana for the first stakeholder meeting to discuss issues relating to the smell. The meeting did little to address the concerns of the community and instead Oceana emphasised that 'nothing can be done' to eliminate the smell. This is an unsatisfactory outcome and while Oceana claims to be operating completely within the law, it became evident that further engagement with the City of Cape Town would be necessary. Detailed minutes of this meeting can be found here.

- **Creation of FAHB Website:** FAHB has established a new website www.smellsfishy.co.za that provides comprehensive information on the issues surrounding the fish factory, including the current legal status of the factory, information received from the City, questions regarding health, and different avenues of engagement, including a community survey, a petition and participation on social media discussion platforms. It is our intention that through this website, we will be able to provide factual information and regular updates to the community in support of our cause to eliminate the smell from Hout Bay.

- **Petition against the smell:** FAHB has launched a petition calling for the City of Cape Town to take action to address the noxious emissions from the fish factory. This petition currently has over **1,000 signatories** and can be viewed here. As part of this document, we are formally submitting this petition to the City of Cape Town and expect a detailed response in return.

- **Active participation on social media:** FAHB is coordinating two main social media sites to communicate with the community. Fresh Air for Hout Bay is the official page that provides direct communication about FAHB's current activities. Hout Bay Fish Factory Clean Up is a discussion panel for community members to voice thoughts and concerns. Between the

two groups we have more than 2,500 supporters.

- **Encouraging the complaints registration process:** Despite the concerns and inconsistencies raised above regarding the complaints registration process, FAHB has been actively encouraging community members to register complaints each time they are affected by the smell. Complaints are directed to the fish factory website and despite the blatant lack of effort made by Oceana to proactively communicate with the community, we are supporting the mechanisms that exist.

HBR&RA considers the smell from the fish factory to be a blemish on the community of Hout Bay and that it exerts a serious negative influence on this area's otherwise high tourism potential, thus resulting in a loss of employment opportunities which are desperately needed. Thus we sincerely hope that the concerns of the community will finally be taken into account and the necessary actions taken to eliminate the smell.

In addition, we firmly believe that there are solutions to the problem. While we are not advocating that the factory necessarily be shut down, we would be very interested to consider other opportunities that might offer a range of positive benefits to the community. We would like to engage with the City of Cape Town to conduct an investigation into the true sustainability of the fish factory in the harbour. Taking into account concerns of employment and job creation, environmental sustainability, and social cohesion, we believe that the current situation offers an opportunity for both the City and the community to be leaders in the sustainable development of Hout Bay. We would like to use this opportunity and look forward to further engagement with the City to create a healthier, happier and more sustainable society for all.

Please feel free to contact us should you require any further information.

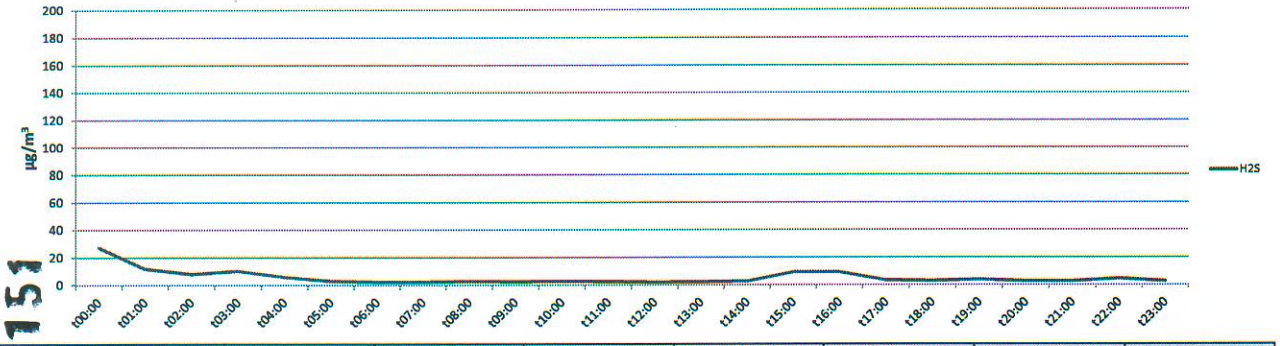
Sincerely,

Kiara Worth

Kiara Worth

HBR&RA Air Pollution Lead
Fresh Air for Hout Bay Facilitator
kiara.worth@gmail.com
072-283-7590

HOURLY MEANS AT HOUT BAY
10 April 2015



151

Date	Time	H_2S (µg/m³)	WDR (°)	WSP (m/s)	TTT (°C)	RH (%)	RAD (W/m²)	BAR (HPa)
2015/04/10	t00:00	27	58	1.4	22.0	46	6	1011
2015/04/10	t01:00	12	43	1.2	19.6	57	7	1011
2015/04/10	t02:00	8	110	1.1	19.7	57	7	1010
2015/04/10	t03:00	10	37	1.2	18.9	60	6	1010
2015/04/10	t04:00	6	212	2.3	18.5	61	7	1010
2015/04/10	t05:00	3	104	2.6	21.5	47	6	1011
2015/04/10	t06:00	2	52	3.1	25.9	26	8	1010
2015/04/10	t07:00	2	60	3.3	27.2	26	24	1010
2015/04/10	t08:00	2	44	3.5	25.9	35	57	1010
2015/04/10	t09:00	2	171	3.3	25.1	35	153	1011
2015/04/10	t10:00	2	73	4.4	28.4	30	608	1011
2015/04/10	t11:00	2	60	6.7	28.5	29	717	1011
2015/04/10	t12:00	2	69	5.9	28.4	31	772	1011
2015/04/10	t13:00	2	210	3.6	27.1	39	746	1011
2015/04/10	t14:00	3	205	2.7	23.9	52	647	1011
2015/04/10	t15:00	9	114	1.6	21.5	66	496	1011
2015/04/10	t16:00	9	119	1.4	22.4	64	316	1011
2015/04/10	t17:00	3	91	1.6	20.4	69	100	1011
2015/04/10	t18:00	3	59	1.5	18.5	75	16	1011
2015/04/10	t19:00	4	99	1.3	17.6	79	6	1012
2015/04/10	t20:00	3	237	1.3	17.6	83	5	1012
2015/04/10	t21:00	2	92	1.0	17.1	85	5	1012
2015/04/10	t22:00	4	110	1.2	16.9	86	5	1012
2015/04/10	t23:00	3	77	1.0	16.6	87	5	1012
Mean		**5**	-	**2.4**	**22.1**	**55**	**197**	**1011**
Max		**27**	-	**6.7**	**28.5**	**87**	**772**	**1012**
RSA AQ Standard		-	-	-	-	-	-	-
Period		-	-	-	-	-	-	-
Exceeded		-	-	-	-	-	-	-

ANNEXURE 5

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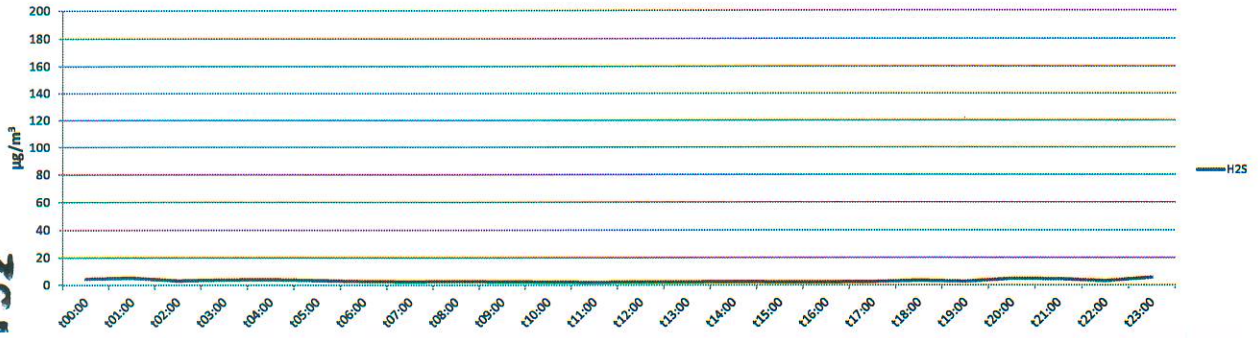
* Draft standard for PM-2.5

HOURLY MEANS AT HOUT BAY
11 April 2015



152

Date	Time	H_2S (µg/m³)	WDR (°)	WSP (m/s)	TTT (°C)	RH (%)	RAD (W/m²)	BAR (HPa)
2015/04/11	t00:00	4	101	1.3	15.6	87	5	1012
2015/04/11	t01:00	5	230	1.1	15.3	88	4	1012
2015/04/11	t02:00	3	81	0.9	14.7	88	4	1012
2015/04/11	t03:00	4	147	0.7	14.3	88	4	1012
2015/04/11	t04:00	4	81	0.8	14.8	89	4	1012
2015/04/11	t05:00	3	158	0.8	15.6	89	5	1013
2015/04/11	t06:00	2	133	0.9	16.2	89	5	1013
2015/04/11	t07:00	2	234	1.3	16.2	90	20	1014
2015/04/11	t08:00	3	232	1.4	16.8	90	60	1015
2015/04/11	t09:00	2	189	1.7	19.1	85	381	1015
2015/04/11	t10:00	2	200	1.8	23.7	63	625	1015
2015/04/11	t11:00	2	355	2.7	24.5	55	726	1015
2015/04/11	t12:00	2	358	2.3	24.9	54	773	1014
2015/04/11	t13:00	2	359	2.8	24.3	58	744	1014
2015/04/11	t14:00	2	17	2.3	24.0	58	652	1014
2015/04/11	t15:00	2	4	3.2	23.3	62	499	1012
2015/04/11	t16:00	2	349	2.2	22.6	67	290	1014
2015/04/11	t17:00	2	217	1.3	21.9	68	95	1014
2015/04/11	t18:00	3	118	0.7	19.1	74	14	1015
2015/04/11	t19:00	2	20	1.3	17.7	80	5	1015
2015/04/11	t20:00	5	13	1.0	17.4	82	5	1015
2015/04/11	t21:00	4	101	1.0	17.0	83	4	1016
2015/04/11	t22:00	3	326	1.3	17.5	85	4	1016
2015/04/11	t23:00	5	24	1.2	17.1	84	4	1016
Mean		**3**	-	**1.5**	**18.9**	**77**	**205**	**1014**
Max		**5**	-	**3.2**	**24.9**	**90**	**773**	**1016**
RSA AQ Standard		-	-	-	-	-	-	-
Period		-	-	-	-	-	-	-
Exceeded		-	-	-	-	-	-	-

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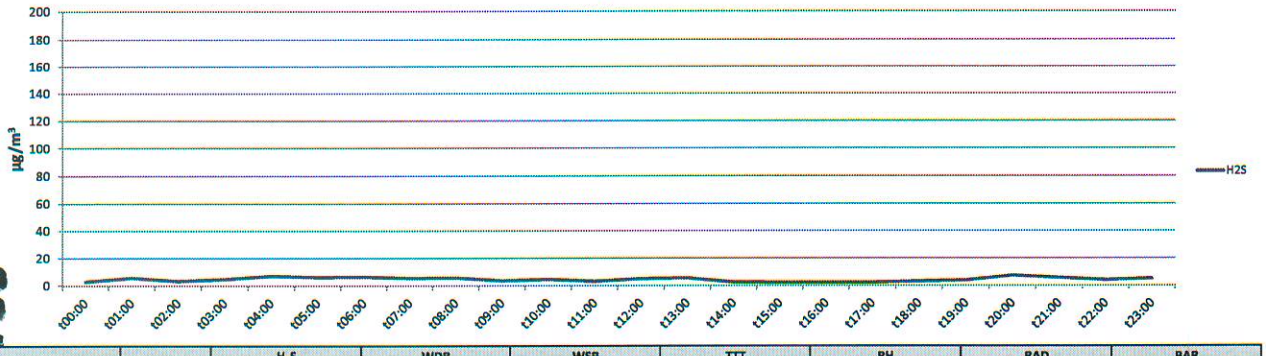
* Draft standard for PM-2.5

HOURLY MEANS AT HOUT BAY
12 April 2015



153

Date	Time	H_2S (µg/m³)	WDR (°)	WSP (m/s)	TTT (°C)	RH (%)	RAD (W/m²)	BAR (HPa)
2015/04/12	t00:00	3	48	1.1	16.7	85	4	1016
2015/04/12	t01:00	6	16	0.8	16.2	85	3	1016
2015/04/12	t02:00	3	17	1.1	15.5	85	3	1015
2015/04/12	t03:00	5	27	1.4	15.2	85	4	1015
2015/04/12	t04:00	7	24	1.1	14.5	86	4	1014
2015/04/12	t05:00	6	71	0.9	13.8	86	4	1014
2015/04/12	t06:00	6	120	0.8	13.0	86	4	1015
2015/04/12	t07:00	5	117	0.8	12.9	87	30	1016
2015/04/12	t08:00	5	165	0.9	14.6	87	153	1016
2015/04/12	t09:00	3	202	1.2	16.0	85	318	1016
2015/04/12	t10:00	4	186	1.8	19.3	73	606	1016
2015/04/12	t11:00	3	182	1.9	20.2	64	701	1016
2015/04/12	t12:00	5	118	1.7	20.6	62	754	1016
2015/04/12	t13:00	5	134	2.0	21.9	62	725	1015
2015/04/12	t14:00	2	245	1.8	23.5	60	634	1015
2015/04/12	t15:00	2	27	2.3	23.5	60	487	1015
2015/04/12	t16:00	2	213	1.9	23.3	61	308	1015
2015/04/12	t17:00	2	272	1.5	21.7	64	89	1015
2015/04/12	t18:00	3	70	1.4	19.1	71	14	1016
2015/04/12	t19:00	4	186	1.0	17.8	76	5	1016
2015/04/12	t20:00	7	5	0.8	17.0	79	4	1016
2015/04/12	t21:00	5	11	1.3	16.7	78	3	1016
2015/04/12	t22:00	4	20	1.7	16.4	76	4	1016
2015/04/12	t23:00	5	22	1.3	16.0	75	3	1016
Mean		**4**	-	**1.4**	**17.7**	**76**	**203**	**1016**
Max		**7**	-	**2.3**	**23.5**	**87**	**754**	**1016**
RSA AQ Standard		-	-	-	-	-	-	-
Period		-	-	-	-	-	-	-
Exceeded		-	-	-	-	-	-	-

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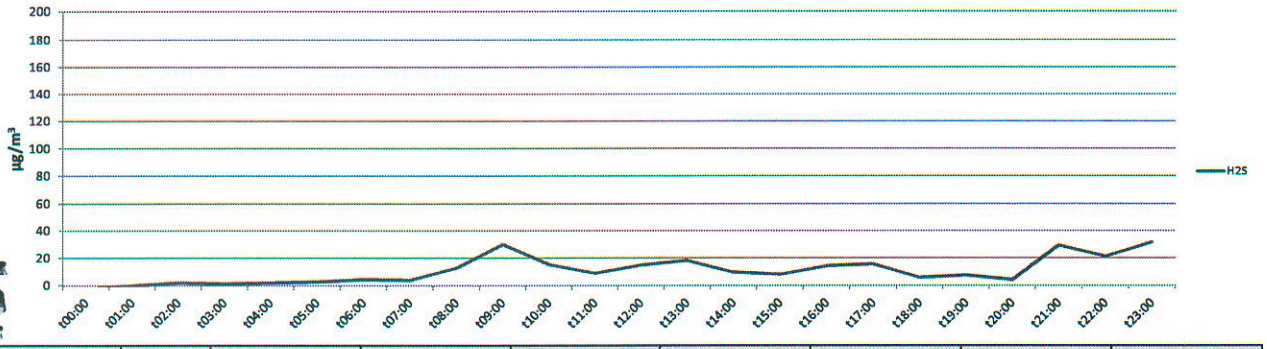
HOURLY MEANS AT HOUT BAY
24 April 2015



Date	Time	H_2S ($\mu g/m^3$)	WDR (°)	WSP (m/s)	TTT (°C)	RH (%)	RAD (W/m^2)	BAR (HPa)
2015/04/24	t00:00	-2	74	3.9	20.6	44	6	1016
2015/04/24	t01:00	0	75	3.4	20.5	44	6	1016
2015/04/24	t02:00	2	85	1.2	17.7	54	7	1016
2015/04/24	t03:00	1	9	1.6	15.9	58	5	1016
2015/04/24	t04:00	2	27	1.6	15.4	58	5	1016
2015/04/24	t05:00	2	8	1.4	15.5	56	5	1015
2015/04/24	t06:00	4	346	1.3	15.2	56	5	1015
2015/04/24	t07:00	4	38	1.4	14.4	58	26	1015
2015/04/24	t08:00	13	158	0.9	18.5	50	147	1016
2015/04/24	t09:00	30	132	1.1	21.9	44	405	1016
2015/04/24	t10:00	15	148	1.4	21.6	46	569	1016
2015/04/24	t11:00	9	147	1.6	21.3	49	668	1016
2015/04/24	t12:00	15	146	1.6	23.1	44	712	1016
2015/04/24	t13:00	18	146	1.6	23.7	41	692	1014
2015/04/24	t14:00	9	137	1.5	22.5	47	602	1014
2015/04/24	t15:00	8	137	1.5	22.6	48	444	1014
2015/04/24	t16:00	14	145	1.4	22.8	46	278	1015
2015/04/24	t17:00	16	91	0.9	20.8	47	43	1014
2015/04/24	t18:00	6	20	1.7	20.0	37	11	1015
2015/04/24	t19:00	7	30	1.8	19.7	38	7	1015
2015/04/24	t20:00	4	24	2.0	19.3	37	7	1016
2015/04/24	t21:00	29	23	1.4	18.1	41	6	1016
2015/04/24	t22:00	21	3	1.5	16.9	48	6	1016
2015/04/24	t23:00	32	31	1.4	15.8	56	5	1016
Mean		**11**	-	**1.6**	**19.3**	**48**	**194**	**1015**
Max		**32**	-	**3.9**	**23.7**	**58**	**712**	**1016**
RSA AQ Standard		-	-	-	-	-	-	-
Period		-	-	-	-	-	-	-
Exceeded		-	-	-	-	-	-	-

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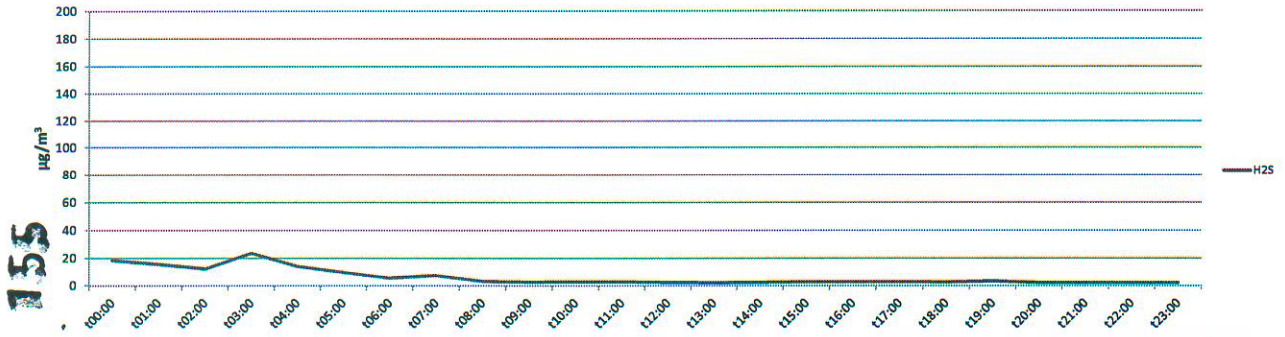
HOURLY MEANS AT HOUT BAY
25 April 2015



Date	Time	H_2S ($\mu g/m^3$)	WDR (°)	WSP (m/s)	TTT (°C)	RH (%)	RAD (W/m^2)	BAR (HPa)
2015/04/25	t00:00	18	57	1.2	15.3	53	4	1015
2015/04/25	t01:00	16	35	1.6	14.7	60	5	1016
2015/04/25	t02:00	12	34	1.7	14.7	59	5	1015
2015/04/25	t03:00	24	22	1.3	13.4	64	5	1015
2015/04/25	t04:00	14	12	1.7	12.9	67	5	1015
2015/04/25	t05:00	10	87	1.3	12.7	70	5	1016
2015/04/25	t06:00	5	17	1.1	13.8	73	4	1016
2015/04/25	t07:00	7	145	1.2	14.2	75	16	1017
2015/04/25	t08:00	3	125	1.4	15.7	80	91	1017
2015/04/25	t09:00	3	262	2.0	16.7	80	217	1018
2015/04/25	t10:00	3	186	2.4	18.8	71	405	1019
2015/04/25	t11:00	3	146	2.2	18.9	68	215	1020
2015/04/25	t12:00	2	94	2.3	18.7	70	158	1020
2015/04/25	t13:00	2	94	3.2	19.9	67	423	1019
2015/04/25	t14:00	2	78	2.7	19.6	68	182	1019
2015/04/25	t15:00	3	207	2.7	19.7	68	190	1019
2015/04/25	t16:00	3	244	2.0	19.3	69	70	1020
2015/04/25	t17:00	3	204	1.6	18.2	71	45	1020
2015/04/25	t18:00	3	200	1.2	17.7	74	9	1020
2015/04/25	t19:00	3	220	1.1	17.7	78	6	1021
2015/04/25	t20:00	2	298	1.7	17.8	81	6	1021
2015/04/25	t21:00	2	275	1.5	17.4	83	6	1021
2015/04/25	t22:00	2	291	1.3	17.5	84	5	1021
2015/04/25	t23:00	2	303	1.9	17.1	83	5	1021
Mean		**6**	-	**1.8**	**16.8**	**71**	**87**	**1018**
Max		**24**	-	**3.2**	**19.9**	**84**	**423**	**1021**
RSA AQ Standard		-	-	-	-	-	-	-
Period		-	-	-	-	-	-	-
Exceeded		-	-	-	-	-	-	-

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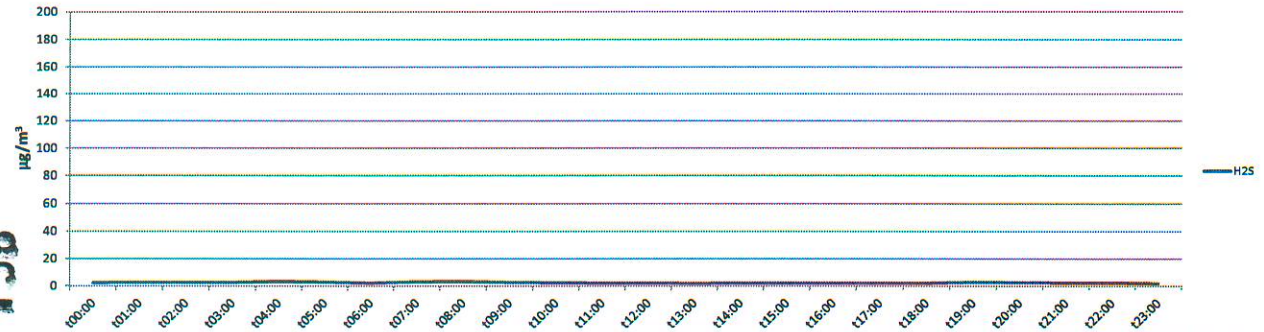
HOURLY MEANS AT HOUT BAY
26 April 2015



Date	Time	H_2S (µg/m³)	WDR (°)	WSP (m/s)	TTT (°C)	RH (%)	RAD (W/m²)	BAR (HPa)
2015/04/26	t00:00	2	301	1.6	16.8	82	4	1021
2015/04/26	t01:00	3	278	1.6	16.7	82	4	1021
2015/04/26	t02:00	2	268	1.8	16.6	81	4	1021
2015/04/26	t03:00	2	281	1.6	16.3	81	4	1021
2015/04/26	t04:00	3	150	1.0	14.7	83	4	1021
2015/04/26	t05:00	3	317	1.3	15.2	84	4	1021
2015/04/26	t06:00	2	347	1.8	15.3	84	5	1021
2015/04/26	t07:00	3	343	1.3	14.8	83	24	1021
2015/04/26	t08:00	3	81	1.1	18.0	78	152	1021
2015/04/26	t09:00	2	178	1.1	22.4	61	389	1021
2015/04/26	t10:00	2	359	2.6	22.6	57	515	1021
2015/04/26	t11:00	2	301	2.4	22.6	56	469	1021
2015/04/26	t12:00	2	7	3.1	21.5	60	487	1021
2015/04/26	t13:00	2	296	2.9	22.5	60	608	1020
2015/04/26	t14:00	2	299	3.5	22.2	64	589	1020
2015/04/26	t15:00	2	338	3.4	22.1	63	458	1020
2015/04/26	t16:00	2	295	3.0	20.4	67	238	1020
2015/04/26	t17:00	2	306	2.9	18.8	70	32	1019
2015/04/26	t18:00	2	289	1.8	17.6	72	10	1019
2015/04/26	t19:00	3	274	1.8	17.0	73	5	1019
2015/04/26	t20:00	2	281	2.1	16.8	76	4	1020
2015/04/26	t21:00	2	254	2.5	16.8	77	4	1020
2015/04/26	t22:00	2	245	3.2	16.7	79	3	1020
2015/04/26	t23:00	2	221	3.9	16.7	80	3	1020
Mean		**2**	-	**2.2**	**18.4**	**73**	**167**	**1020**
Max		**3**	-	**3.9**	**22.6**	**84**	**608**	**1021**
RSA AQ Standard		-	-	-	-	-	-	-
Period		-	-	-	-	-	-	-
Exceeded		-	-	-	-	-	-	-

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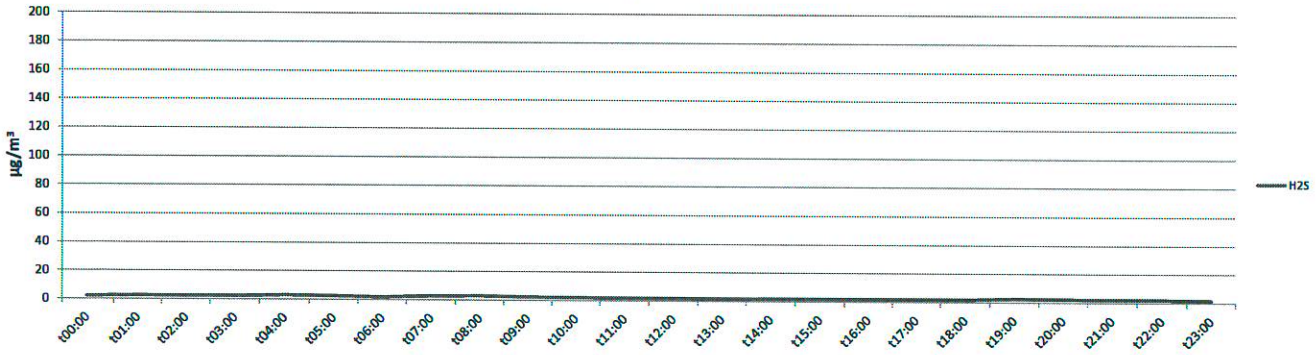
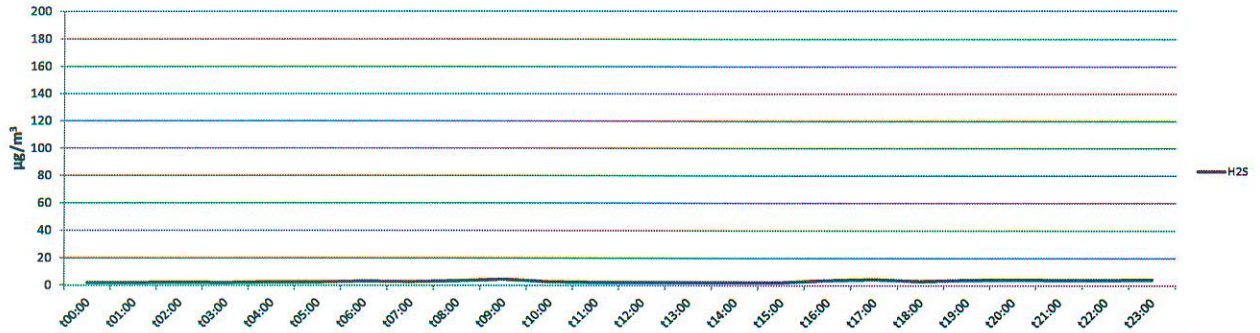
* Draft standard for PM-2.5

HOURLY MEANS AT HOUT BAY
26 April 2015



HOURLY MEANS AT HOUT BAY
27 April 2015



Date	Time	H_2S ($\mu g/m^3$)	WDR (°)	WSP (m/s)	TTT (°C)	RH (%)	RAD (W/m^2)	BAR (HPa)
2015/04/27	t00:00	2	216	4.9	16.7	81	3	1019
2015/04/27	t01:00	2	214	4.8	16.7	74	2	1018
2015/04/27	t02:00	2	241	3.2	16.9	67	3	1017
2015/04/27	t03:00	2	63	2.6	16.8	68	3	1016
2015/04/27	t04:00	2	36	1.7	16.0	69	2	1016
2015/04/27	t05:00	2	24	1.7	14.2	71	4	1016
2015/04/27	t06:00	3	9	1.3	13.9	71	4	1016
2015/04/27	t07:00	2	11	1.5	13.6	67	23	1016
2015/04/27	t08:00	3	359	1.2	17.8	58	160	1016
2015/04/27	t09:00	4	135	1.3	20.4	50	410	1017
2015/04/27	t10:00	2	237	3.5	21.4	49	565	1017
2015/04/27	t11:00	2	231	6.6	20.0	56	628	1017
2015/04/27	t12:00	2	229	5.0	21.7	50	703	1016
2015/04/27	t13:00	2	253	3.7	22.8	46	673	1015
2015/04/27	t14:00	2	80	3.0	24.5	41	568	1013
2015/04/27	t15:00	2	9	2.9	23.9	41	391	1012
2015/04/27	t16:00	4	142	1.3	21.4	51	213	1013
2015/04/27	t17:00	4	97	0.9	18.8	58	39	1013
2015/04/27	t18:00	3	304	1.7	18.6	59	9	1013
2015/04/27	t19:00	4	230	1.1	17.2	64	6	1013
2015/04/27	t20:00	4	6	1.0	16.6	63	5	1013
2015/04/27	t21:00	4	71	1.2	16.0	63	5	1013
2015/04/27	t22:00	4	36	1.1	14.8	68	5	1013
2015/04/27	t23:00	4	31	1.6	14.1	69	4	1012
Mean		**3**	-	**2.5**	**18.1**	**60**	**184**	**1015**
Max		**4**	-	**6.6**	**24.5**	**81**	**703**	**1019**
RSA AQ Standard		-	-	-	-	-	-	-
Period		-	-	-	-	-	-	-
Exceeded		-	-	-	-	-	-	-

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