

ORAL SUBMISSION COMMISSIONER FOR THE ENVIRONMENT

26 MAY 2021

Hi, my name is Michael and I live in Kuils River. I have an extensive background in mining ventilation which includes fans, airflow, heat, dust and gases.

We stand here today to present a case study of CISCO as our motivation that in the Western Cape, we need a Commissioner for the Environment, or at the very least, a Watchdog for Sustainable Development which has a fair balance with the economy, social and environmental impact.

CISCO is a steel mill in Kuils River which was put into care and maintenance in 2010. It was sold in 2012 to a Turkish company named DHT Holdings Africa. In October 2017 the plant restarted and it had an immediate negative impact on the receiving environment with ±426 officially logged complaints in a short space of 2 years under the PAEL. The major complaints were about noise, fugitive emissions, dust fallout, fumes, smell and smoke.

Please refer to our written submission #SaveKuilsriver which will be submitted on the 31st of May 2021. Our written submission will explain the relevance between our case study and the need for an Environmental Commissioner in the Western Cape.

PUBLIC PARTICIPATION PROCESS

The first public participation process took place around March 2014. A comment and responses document at this stage incorrectly identified an 'existing electric arc furnace' when later in 2014, the existing 36t electric arc furnace was entirely removed and replaced with a new larger 45t unit. The reference to 45t capacity is also under dispute as we feel

that it may be even larger?

The comments by I&AP's were thorough and valid concerns like heavy metal fallout, air pollution, noise and serious health impact concerns were raised.

The AEL application process took around nine months instead of the guideline 60 days?

There was clearly lots of internal conflict going on? It was not plain sailing?

On the 2nd of February 2015 the PAEL was granted by the City. An appeal process was lodged by the Chairperson of the Vredelust Ratepayers Association in Kuils River.

The city appeal authority dismissed the appeal.

A mayor sit down meeting with community representatives, was held in May 2015 to discuss the concerns. No minutes are available.

In 2016 there was another round of public participation as the previous license period had lapsed. By this time the community had lost both confidence and trust in the fairness of the process. Consideration should have been taken of the previous concerns raised in 2014?

In October 2017 the facility started up. There was an immediate outcry from the surrounding community regarding excessive rampant air pollution, noise and explosions. Health complaints started: coughing, sneezing, headaches, nose bleeds, insomnia.....

On the 29th of January 2018, a Ward 11 Meeting was arranged by Councillor D. Visagie. MAYCO was represented by Mr. Malusi Booie and Mr. JP Smith who chaired the meeting. City officials for Air Quality & Noise were in attendance. Spatial Planning did not attend but sent a written comment which was loudly BOOOED when read out.

At this public meeting I raised queries to the CISCO general manager asking what the actual plant design capacity was as there were various conflicting reports in the media. These were later confirmed on the past and present company websites. See Annexure in our written submission. Something had changed inside the Plant resulting in sudden excessive rampant visible fugitive emissions, extreme noise and explosions.

I further questioned why the AEL made reference to three fume plants? To our knowledge the baghouses use fabric type filter bags which only filtered dust and did not capture any FUMES. The specialist engineer present admitted that fumes were not being filtered, so fume plants did not exist. This was a shocking reference! Any one from the community reading this AEL was placed under false pretences. This was Grand misrepresentation and very misleading.

How does this fit into our climate change action goals?

We also verified by using google historical images that the stack heights had changed significantly. In the air dispersion modelling done by the specialist engineer, he bases his specialist reports on historical heights. That in itself is also misleading.

COMMUNITY INVESTIGATIONS

Due to the ongoing rampant fugitive pollution emissions, I decided to lift samples of dust from flat surfaces within the receiving community for screening purposes, to be viewed under an electro-microscope (microscan). Elements such as iron, sulphur, copper and cobalt were detected.

Based on these preliminary indicators, a fallout dust bucket project was initiated by the community. Dust samples were collected and sent away for full elemental analysis and

various heavy metals were detected. This was all done at own cost and time.

The results showed exceedances protective of a water resource for Arsenic, Cadmium, Chromium, Copper, Manganese, Nickel and Lead.

Chromium, Manganese and Lead also exceeded the Standard Residential soil screening values.

This raised serious health concerns as well as concerns about how this facility was potentially polluting our receiving environment through the accumulation of toxic fallout. Heavy metals accumulate and do not degrade, remaining persistent in the environment.

The AQO sent our samples elemental analysis certificate to National Air Quality requesting guidance.

I was also referred to the Contaminated Soils act 2010.

In April 2019, an oily mill scale sludge incident was reported to us by a contractor recycling aggregate from CISCO. We reported it to WC DEA&DP for investigation. The section 28 report reveals further shocking exceedances of heavy metals protective of a water resource. Please refer to our written submission for the investigation report.

In the PAEL dated June 2018, the following comment is made by the City -

- “a sample analysis of the baghouse dust obtained by the city indicates ***elevated*** levels of heavy metals; including Zinc, Lead and Manganese, which is cause for concern”.

No Unit of Measure was provided to define what “***elevated***” means – **compared to what?**

Lead is a priority pollutant of concern with its own stand-alone Lead act and Lead is not even mentioned in the AEL?

LISTED ACTIVITY CONCERNS

This Listed Activity should be identified as the process where mixtures of scrap steel/matter are heated and melted by the application of heat. The volumetric increase in scrap feed into the larger EAF and its resultant increase in melting capacity is the source of most of the fugitive pollution emissions and increased noise. About 95% of the pollution is generated during this process.

At some point the melt shop electricity supply increased from 25 MVA to 42 MVA, a 68% increase which is significant. Indications were that something had changed inside the melt shop. We believe that the abatement machinery remained largely the same capacity.

The AEL shows that CISCO is listed for Listed Activity sub-category 4.7 and sub-category 4.2 which does not include pollutants such as heavy metals and certain fumes. We contend that listed activity sub-category 4.21: **Metal Recovery** should have been applicable as this includes minimum emission limits for the **sum** of heavy metal pollutants and certain fumes known to be present at CISCO.

Had the AEL application included the listed activity sub-category 4.21, for the monitoring of heavy metals, would CISCO have been allowed to operate in a general industrial 1 zone when the city, in recent correspondences continuously fails to recognize CISCO as a noxious facility? Spatial Planning doesn't bother to respond to this very query!

SPATIAL DEVELOPMENT & PLANNING

The Spatial Planning issue seems to be another bone of contention.

Residential development has allowed houses to encroach to within 80m of CISCO boundary wall.

A Technical Report from the City Spatial Development Framework in 2012, clearly states that CISCO had then become a Nuisance industry and that the land use was not considered a complementary activity corridor use. It further noted that increased investment has been put into the steel works to **increase its production Capacity** within the last 5 years. Yet nobody is admitting that a plant design capacity increase had in fact taken place without the required EIA process!

At the time of this report in 2012, this facility was **CLOSED** – so who/how was it allowed to re-open?

CISCO operates in a general industrial 1 zone, a zone not appropriate for a noxious facility in such close proximity to a receiving community. The RISK activity zoning classification clearly fits with CISCO. The re-zoning appears to never have been corrected?

Even the Air Quality Officer noted in an email that: *“he couldn't agree more that the lack of buffer zone is concerning and that as far as he is concerned, he doesn't know how he is supposed to solve a land-use planning disaster, which was not of their making or CISCO's for that matter”*.

From the comment made by the AQO, it sounds like he also needed the assistance of an Independent Environmental Commissioner!

Many residents sold their houses and moved away from the mess!

HISTORICAL PLANT CAPACITIES - EIA

- Source: CISCO website history page:
 - 1967: 13,000tpa “POOL SCRAP”
 - 1973: 50,000tpa “REBAR”
 - 1982: 100,000 tpa “BILLET”
 - 1989: 160,000tpa “BILLET”
 - 2012: 280,000tpa “SCRAP STEEL”
- Other Sources:
 - 2013: Eng News - 230,000tpa “REBAR” to be further upgraded
 - 2018: IDC Official Opening – at full capacity 500,000tpa “SCRAP METAL”
 - 2020: IDC Request for Proposal – 300,000tpa “BILLET” and to be ramped up to full capacity?
- There appear to have been 5 or 6 plant upgrades over 40 years.
- THE COMMUNITY HAS NOT HAD SIGHT OF ANY **EIA** FOR THIS FACILITY, IN SPITE OF THE MANY DOCUMENTED INCREASES IN PLANT CAPACITY?
- GRADUAL URBAN CREEP WAS ALLOWED BY COCT OVER MANY YEARS.....
- Where was Municipal & Local Spatial Planning oversight?

AEL SPECIALIST AIR FLOW CALCULATIONS

As someone who has knowledge of mining ventilation I was able to look at the AEL airflow calculations that the EAP, Environmental Consultant and CoCT AQO had all signed off.

When I checked the calculations to compare the 3 stack exit point airflow quantities (m³/s) to their corresponding baghouse filter Capacities, it highlighted that the airflow Calculations were either hopelessly overstated OR the baghouse design filtering capacities were hopelessly understated – A did not equal B!

- Stack exit #1 airflow was +235% overstated
- Stack exit #2 airflow was +216% overstated

- Stack exit #3 airflow was +144% overstated

Were the above stack exit airflow calculations used for the In-Stack monitoring process?

The above calculation concerns were relayed to the AQO who requested an independent engineers report to verify these measurements.

The air dispersion modelling did not include any fugitive emissions or upset conditions and at a stakeholder forum meeting the consultant deemed them; **unquantifiable**? This was at the heart of our complaints! Repeat - **Unquantifiable Fugitive Emissions!**

We don't understand how an AEL can be issued if fugitive emissions are simply ignored?

Thus suitable standards were not available to protect the receiving community and the environment from possibly harmful toxic fallout.

PAIA REQUESTS

The PAIA process was a very bad experience, we are not lawyers. I don't wish this on anybody..... Suddenly everyone somehow hides behind confidentiality!!!!!! What is the point?

Myself and one other requested access via PAIA to the engineers airflow report and in-stack monitoring results and various other documentation.

The In-Stack monitoring reports were simply refused. What are they hiding?

The Air Flow calculations report was initially refused. On appeal, I received a redacted copy of the applicable PAEL which excluded these new calculations. Again, what are they hiding?

Previously, the facility proudly handed out the AEL so why now hide the very same information from the community? What had changed? What had suddenly become confidential?

If the airflow measurements and calculations are correct and In-Stack monitoring is done

to protect the receiving community and the environment, what is there to hide from?

Please Release the results!

I also requested permission to witness the in-stack Monitoring process but my request was not entertained. Stakeholder Forum transparency became Meaningless. It appeared that we were on a “needs to know” basis!

THE EAP

In an email dated 30 September 2019 from the City Air Quality official, he says:

'The EAPs who assisted CISCO at the time were inexperienced in AEL processes'

– does this perhaps mean that the public Participation process may have been misrepresented? Why then issue an AEL if uncertainty existed?

STAKEHOLDER FORUMS

At one meeting I requested to view the complaints register only to be denied. I was told that there is some confidential information therein?

On another occasion I voiced my disapproval that a Meeting minutes were incorrect!

At the last meeting in August 2019, I tabled a Presentation requesting clarity as to the plant Design capacity & the EAF actual design capacity? I questioned if CISCO knowingly purchased a facility which had an undocumented plant design capacity increase which exceeded the AEL design capacity?

I also questioned the pollution source of heavy metals as found around the facility in community dust buckets and soil samples? This point was met with stunned silence!

My presentation was acknowledged by the Chairman but went entirely un-minuted. **Yup, true story.**

The final AEL, following the provisional two year period appeared to be automatic and was

approved about a month later; this in Spite of ±426 official logged complaints!

I found the Stakeholder Forum to be a simple “box ticking” exercise, generally insincere and an Absolute waste of time!!!!

WHO WE HAVE ENGAGED WITH

1. CoCT Air Quality, Information Officer PAIA, Spatial Planning, Water and Noise - and we still continue to engage.
2. Municipal Manager AEL appeal and we have recently requested a full review of the AEL award, we are still waiting for any reply?
3. Community meetings with Councillors, various MEC's and Mayors.
4. We submitted ±30 affidavits relating to noise and health concerns, all of which went untested.
5. The Noise exceedence Court case was thrown out of court after about 4 years because of undue delays and a missing stenographer. Why is this the community's problem?
6. WC DEA&DP Air Quality, Pollution and Chemicals, Development Planning, Waste Management.
7. We have met with the local and national Environmental Management Inspectors (green scorpions) and have not had any feedback reports from them.
8. We have attended a formal meeting and presented at WC DEA&DP for the establishment of an IGTT (province and city) and it was dismissed. We have asked for this decision to be revisited.
9. National Air Quality and national waste licencing requesting guidance
10. The SA Human Rights Council
11. The IDC requesting plant design capacity clarification based on tender information that was in conflict with the plant capacities in the AEL. IDC replied stating regret –

confidential!

12. Department of Labour who only responded once.
13. The Public prosecutor who also organised an ad-hoc public meeting to better understand the noise & health concerns? Minutes are available!
14. Have we left anyone out?

CONCLUSION

It should not be the public's responsibility to:

- Create Non Profit Companies for legal interaction
- Interact with Social Justice & Environmental Organisations
- Read copious amounts of legislation and to try understand them then try to argue them
- Research, investigate and pay for scientific monitoring of pollutants
- Send emails every other day and attend meetings
- Learn about electric arc furnaces and related pollutants
- Correct sums of specialist engineers
- Take hundreds of photographs and video recordings of fugitive emissions which continued until the facility closed in September 2019.

Office bearers are well equipped in NEMA whereas the community is not.

Is the community expected to become experts in Environmental Law?

Any receiving environment should not be expected to be impacted so negatively. The public needs to be able to have confidence and trust in administration and procedural fairness. In Kuils River, these systems failed us dismally.

POLLUTION DOES NOT LIE!