

REFERENCE NUMBER: 16/3/3/2/A1/20/3010/20
NEAS REFERENCE NUMBER: WCP/EIA/0000769/2020
ENQUIRIES: MR. R. Chambeau
DATE OF ISSUE: 30 October 2020

ENVIRONMENTAL AUTHORISATION

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED): PROPOSED INSTALLATION OF REFINERY EQUIPMENT WITHIN THE EXISTING BUILDING AT FABIO CHAINS (PTY) LTD FACILITY LOCATED AT THE LONGCLAW BUSINESS PARK ON ERF 34103, MONTAGUE GARDENS.

With reference to your application for the abovementioned, find below the outcome with respect to this application.

DECISION

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") and the Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended), the Competent Authority herewith **grants Environmental Authorisation** to the applicant to undertake the listed activity specified in section B below with respect to the Preferred Alternative, described in the Environmental Impact Assessment Report ("EIAR"), dated 18 February 2020.

The applicant for this Environmental Authorisation is required to comply with the conditions set out in section E below.

A. DETAILS OF THE APPLICANT FOR THIS ENVIRONMENTAL AUTHORISATION

Fabio Chains (Pty) Ltd
Mr. Baruch Katz
Unit 1 Longclaw Business Park
Longclaw Drive
MONTAGUE GARDENS
7441

Tel: 021 555 0611
Fax: 021 555 0613
Email: Baruch@fabioschains.com

The abovementioned applicant is the holder of this Environmental Authorisation and is hereinafter referred to as "**the holder**".



B. ACTIVITY AUTHORISED

Listed Activity	Activity/Project Description
<p>Listing Notice 2 of the NEMA EIA Regulations, 2014 (as amended):</p> <p>Activity Number: 6 Activity Description:</p> <p><i>The development of facilities or infrastructure for any process or activity which requires a permit or licence or an amended permit or licence in terms of national or provincial legislation governing the generation or release of emissions, pollution or effluent, excluding—</i></p> <p><i>i. activities which are identified and included in Listing Notice 1 of 2014;</i></p> <p><i>ii. activities which are included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies;</i></p> <p><i>iii. the development of facilities or infrastructure for the treatment of effluent, polluted water, wastewater or sewage where such facilities have a daily throughput capacity of 2000 cubic metres or less; or</i></p> <p><i>iv. (iv) where the development is directly related to aquaculture facilities or infrastructure where the wastewater discharge capacity will not exceed 50 cubic metres per day.</i></p>	<p>The proposed development entails the installation of refinery equipment and associated infrastructure within an existing building on Erf 34103, Montague Gardens for the refining of precious metals, which requires an Atmospheric Emissions License in terms of the National Environmental Management: Air Quality Act, 2004 (Act 39 of 2004).</p>

The abovementioned activity is hereinafter referred to as **“the listed activity”**.

The holder is herein authorised to undertake the following development that includes the listed activity as it relates to the proposed development:

The proposed development entails the installation of refinery equipment and associated infrastructure within an existing building on Erf 34103, Montague Gardens for the refining of precious metals, which requires an Atmospheric Emissions License in terms of the National Environmental Management: Air Quality Act, 2004 (Act 39 of 2004).

The proposed installation of equipment entails:

- The installation of a glass reactor (Static Refining system);
- The installation of a polypropylene reactor (Tumbling Refining system);
- An additional stack;
- The storage of approximately 375 litres of Hydrochloric Acid;
- The storage of approximately 375 litres of Nitric Acid; and
- The storage of approximately 19 kg Liquefied Petroleum Gas.

Both these will be connected to abatement equipment. Some emission extraction units are already in place at the site for the existing facility. The current activities at the existing facility entail the purchasing, melting, casting and selling of precious metals to local refineries. The proposed installation of refinery equipment will enable the additional precious metal refining through a chemical process.



The chemical refining process will be conducted using automated closed system refining plant equipment and all the emissions will be extracted via two stacks and treated using wet scrubber units. Emissions associated with the three melting furnaces will be extracted via one stack and treated using a wet scrubber unit. Extraction hoods will be placed over each of the individual furnaces.

The installation of the refinery equipment will occur within the existing facility and no expansion to the developed footprint will occur.

C. SITE DESCRIPTION AND LOCATION

The authorised listed activity will be undertaken on Erf 34103, Montague Gardens and has the following co-ordinates:

Point	Latitude	Longitude
Middle	33° 51' 59.20" South	18° 30' 43.87" East

The SG digit code for Erf 34103, Montague Gardens:

Erf 34103, Montague Gardens	C01600340003410300000
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Refer to: Annexure 1: Locality Map
Annexure 2: Site Plan.

The above is hereinafter referred to as "**the site**".

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

Marang Environmental & Associates (Pty) Ltd.
c/o Ms. C. Taylor
P.O. Box 1369
BROMHOF
2154

Tel: (011) 792 0880

Fax: (086) 592 0298

Email: info@maranggroup.co.za / claire.taylor@maranggroup.co.za

E. CONDITIONS OF AUTHORISATION

Scope of authorisation

1. The holder is authorised to undertake the listed activity specified in Section B above in accordance with the Preferred Alternative described in the EIAR dated 18 February 2020 on the site as described in Section C above.
2. The holder must commence with the listed activity on site within a period of **ten (10) years** from the date of issue of this Environmental Authorisation.
3. The development must be concluded within ten (10) years from the date of commencement of the listed activity.
4. The holder shall be responsible for ensuring compliance with the conditions by any person acting on his/her behalf, including an agent, sub-contractor, employee or any person rendering a service to the holder.



5. Any changes to, or deviations from the scope of the alternative described in section B above must be accepted or approved, in writing, by the Competent Authority before such changes or deviations may be implemented. In assessing whether to grant such acceptance/approval or not, the Competent Authority may request information in order to evaluate the significance and impacts of such changes or deviations, and it may be necessary for the holder to apply for further authorisation in terms of the applicable legislation.

Written notice to the Competent Authority

6. A minimum of 7 (seven) calendar days' notice, in writing, must be given to the Competent Authority before commencement of development activities.
 - 6.1. The notice must make clear reference to the site details and EIA Reference number given above.
 - 6.2. The notice must also include proof of compliance with the following conditions described herein:

Conditions: 6, 7, 11 and 16.

Notification and administration of appeal

7. The holder must in writing, within 14 (fourteen) calendar days of the date of this decision–
 - 7.1. Notify all registered Interested and Affected Parties ("I&APs") of –
 - 7.1.1. the outcome of the application;
 - 7.1.2. the reasons for the decision as included in Annexure 3;
 - 7.1.3. the date of the decision; and
 - 7.1.4. the date when the decision was issued.
 - 7.2. Draw the attention of all registered I&APs to the fact that an appeal may be lodged against the decision in terms of the National Appeal Regulations, 2014 (as amended) detailed in Section G below;
 - 7.3. Draw the attention of all registered I&APs to the manner in which they may access the decision; and
 - 7.4. Provide the registered I&APs with:
 - 7.4.1. the name of the holder (entity) of this Environmental Authorisation;
 - 7.4.2. name of the responsible person for this Environmental Authorisation;
 - 7.4.3. postal address of the holder;
 - 7.4.4. telephonic and fax details of the holder;
 - 7.4.5. e-mail address, if any, of the holder; and
 - 7.4.6. the contact details (postal and/or physical address, contact number, facsimile and e-mail address) of the decision-maker and all registered I&APs in the event that an appeal is lodged in terms of the National Appeal Regulations, 2014 (as amended).
8. The listed activity must not commence within 20 (twenty) calendar days from the date the holder notifies the registered I&APs of this decision. In the event that an appeal is lodged with the Appeal Authority, the effect of this Environmental Authorisation is suspended until the appeal is decided, i.e. the listed activity, including site preparation, must not commence until the appeal is decided.



Management of activity

9. The draft Environmental Management Programme ("EMPr") dated 09 December 2019 and submitted as part of the application for Environmental Authorisation is hereby approved and must be implemented.
10. The EMPr must be included in all contract documentation for all phases of implementation.

Monitoring

11. The holder must appoint a suitably experienced environmental control officer ("ECO"), or site agent where appropriate, before the commencement of the development activity to ensure compliance with the provisions of the EMPr and the conditions contained in this Environmental Authorisation.
12. A copy of the Environmental Authorisation, EMPr, Environmental Audit Reports and compliance monitoring reports must be kept at the site where the listed activities will be undertaken and must be made available to any authorised official on request.
13. Access to the site referred to in Section C above must be granted, and the environmental reports mentioned above must be produced, to any authorised official representing the Competent Authority who requests to see it for the purposes of assessing and/or monitoring compliance with the conditions contained herein.

Auditing

14. In terms of Regulation 34 of the NEMA EIA Regulations, 2014 (as amended), the holder must conduct environmental audits to determine compliance with the conditions of the Environmental Authorisation and the EMPr and submit Environmental Audit Reports to the Competent Authority. The Environmental Audit Reports must be prepared by an independent person and must contain all the information required in Appendix 7 of the NEMA EIA Regulations, 2014 (as amended).
 - 14.1. The holder must undertake the first environmental audit within 3 (three) months of the commencement of the installation of the infrastructure and submit an Environmental Audit Report to the Competent Authority upon completion of the environmental audit.
 - 14.2. A second Environmental Audit Report must be submitted to the Competent Authority within 1 (one) month after the commencement of the operational phase.
 - 14.3. An Environmental Audit Report must be submitted to the Competent Authority every 5 (five) years after the commencement of the operational phase.
 - 14.4. The holder must, within 7 (seven) calendar days of the submission of an Environmental Audit Report to the Competent Authority, notify all potential and registered I&APs of the submission and make the Environmental Audit Report available to an authorised person on request.

Specific Conditions

15. An integrated waste management approach, which is based on waste minimisation and incorporates reduction, recycling, re-use and disposal, where appropriate, must be employed. Any solid waste must be disposed of at a landfill licensed in terms of the applicable legislation.
16. The adjacent neighbours must be notified of the installation activities two weeks prior to the commencement of installation activities.



17. Employment opportunities must be afforded to the local community (as far as possible) during all phases of the proposed development.

F. GENERAL MATTERS

1. Notwithstanding this Environmental Authorisation, the holder must comply with any other statutory requirements that may be applicable when undertaking the listed activity.
2. Non-compliance with a condition of this Environmental Authorisation or EMPr may render the holder liable to criminal prosecution.
3. If the holder does not commence with the listed activity within the period referred to in Condition 2, this Environmental Authorisation shall lapse for that activity, and a new application for Environmental Authorisation must be submitted to the Competent Authority. If the holder wishes to extend the validity period of the Environmental Authorisation, an application for amendment in this regard must be made to the Competent Authority prior to the expiry date of the Environmental Authorisation.
4. The holder must submit an application for amendment of the Environmental Authorisation to the Competent Authority where any detail with respect to the Environmental Authorisation must be amended, added, substituted, corrected, removed or updated. If a new holder is proposed, an application for Amendment in terms of Part 1 of the NEMA EIA Regulations, 2014 (as amended) must be submitted.

Please note that an amendment is not required if there is a change in the contact details of the holder. In this case, the Competent Authority must only be notified of such changes.

5. The manner and frequency for updating the EMPr is as follows:

Amendments to the EMPr must be done in accordance with Regulations 35 to 37 of the NEMA EIA Regulations, 2014 (as amended) or any relevant legislation that may be applicable at the time.

G. APPEALS

Appeals must comply with the provisions contained in the National Appeal Regulations, 2014 (as amended).

1. An appellant (if the holder of the decision) must, within 20 (twenty) calendar days from the date the notification of the decision was sent to the holder by the Competent Authority –
 - 1.1. Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations, 2014 (as amended) to the Appeal Administrator; and
 - 1.2. Submit a copy of the appeal to any registered I&APs, any Organ of State with interest in the matter and the decision-maker i.e. the Competent Authority that issued the decision.
2. An appellant (if NOT the holder of the decision) must, within 20 (twenty) calendar days from the date the holder of the decision sent notification of the decision to the registered I&APs–
 - 2.1. Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations, 2014 (as amended) to the Appeal Administrator; and
 - 2.2. Submit a copy of the appeal to the holder of the decision, any registered I&AP, any Organ of State with interest in the matter and the decision-maker i.e. the Competent Authority that issued the decision.



3. The holder of the decision (if not the appellant), the decision-maker that issued the decision, the registered I&AP and the Organ of State must submit their responding statements, if any, to the appeal authority and the appellant within 20 (twenty) calendar days from the date of receipt of the appeal submission.
4. The appeal form/s must be submitted by means of one of the following methods:

By post: Attention: Marius Venter
 Western Cape Ministry of Local Government, Environmental Affairs and
 Development Planning
 Private Bag X9186
 CAPE TOWN
 8000

By facsimile: (021) 483 4174; or

By hand: Attention: Mr. M. Venter (Tel: 021 483 3721)
 Room 809
 8th Floor Utilitas Building, 1 Dorp Street, Cape Town, 8001
5. The prescribed appeal form, as well as assistance regarding the appeal processes is obtainable from the office of the appeal authority/ at: Tel. (021) 483 3721, E-mail DEADP.Appeals@westerncape.gov.za or URL <http://www.westerncape.gov.za/eadp>.

H. DISCLAIMER

The Western Cape Government, the holder, committees or any other public authority or organisation appointed in terms of the conditions of this Environmental Authorisation shall not be responsible for any damages or losses suffered by the holder, developer or his/her successor in any instance where construction or operation subsequent to construction is temporarily or permanently stopped for reasons of non-compliance with the conditions as set out herein or any other subsequent document or legal action emanating from this decision.

Your interest in the future of our environment is appreciated.

Yours faithfully



MR. ELDON VAN BOOM
ACTING DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)

DATE OF DECISION: 30 October 2020

Copies to: (1) Mr. M. Theron (City of Cape Town: ERM) Email: Morne.Theron@capetown.gov.za
(2) Mr. I. Gildenhuys (City of Cape Town: Specialised Environmental Health) Email: Ian.Gildenhuys@capetown.gov.za

ANNEXURE 1: LOCALITY MAP



Legend

Scale: 1:9 028
Date created: September 13, 2020

Compiled with CapeFarmMapper



ANNEXURE 2: SITE PLAN



REFERENCE NUMBER: 16/3/3/2/A1/20/3010/20

ANNEXURE 3: REASONS FOR THE DECISION

In reaching its decision, the Competent Authority considered, *inter alia*, the following:

- a) The information contained in the Application Form dated 10 July 2019, the final Scoping Report received by the Competent Authority on 29 August 2019 (Reference No. 16/3/3/2/A1/20/3021/19), the draft EIAR received by the Competent Authority on 30 October 2019, the re-submitted Application form received by the Competent Authority on 11 March 2020 and the final EIAR dated 18 February 2020 and received by the Competent Authority on 15 July 2020;
- b) Relevant information contained in the Departmental information base, including the Guidelines on Public Participation, Alternatives and Need and Desirability (dated March 2013);
- c) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998);
- d) The comments received from I&APs and responses to these, included in the EIAR dated 18 February 2020 and the Comments and Response Report submitted together with the EIAR;
- e) The balancing of negative and positive impacts and proposed mitigation measures; and
- f) A site visit was conducted by officials of this Department on 15 August 2019.

All information presented to the Competent Authority was taken into account in the consideration of the application for Environmental Authorisation. A summary of the issues that were considered to be the most significant for the decision is set out below.

1. Public Participation

The public participation process included:

- identification of and engagement with I&APs;
- fixing a notice board on the site where the listed activity is to be undertaken on 15 July 2019;
- giving written notice to the owners and occupiers of land adjacent to the site where the listed activity is to be undertaken, the municipality and ward councilor, and the various organs of state having jurisdiction in respect of any aspect of the listed activity on 15 June 2019;
- the placing of a newspaper advertisement in the 'Rapport' on 07 July 2019 the "Daily Sun" on 08 July 2019 and the Table Talk newspaper on the 23 October 2019.
- A draft Scoping Report (Ref. No. 16/3/3/2/A1/20/3021/19) was released for a 30-day comment period from 15 June 2019.
- A draft EIAR (Ref. No. 16/3/3/2/A1/20/3021/19) was released for a 30-day comment period from 29 October 2019 to 29 November 2019.
- A revised draft EIAR was released for an additional 30-day comment period from 11 March 2020 to 10 July 2020 (with the exclusion of the period between 27 March 2020 to 05 June 2020 due to the National Lockdown in terms of the National Disaster declared on 15 March 2020 in terms of the Disaster Management Act, 2002 (Act No. 57 of 2002)).

During the initial scoping/EIA application (Ref. No. 16/3/3/2/A1/20/3021/19), the Scoping Report (dated 28 August 2019) was accepted by this Department on 09 October 2019. After the release of the draft EIAR (dated 23 October 2019), the draft EIAR (dated 23 October 2019) was revised to include the concerns highlighted by the City of Cape Town (in their correspondence dated 29 November 2019), which required an update to the Air Quality Impact Assessment Report.

A revised draft EIAR (dated 11 December 2019) was then released for comment from 07 January 2020 until 06 February 2020, which resulted in the lapsing of the application for environmental authorisation.



In terms of Regulation 21 (2)(a) of the NEMA EIA Regulations, 2014 (as amended) in cases where a Scoping Report was accepted as part of a previous application for environmental authorisation and the application has lapsed, subject to regulation 46 of the NEMA EIA Regulations, 2014 (as amended), and if the findings of the Scoping Report are still valid and the environmental context has not changed, the submission of a Scoping Report as contemplated in Regulation 21(1) need not be complied with. Therefore, this Department agreed that the applicant submit a new application for environmental authorisation and continue with the S/EIA process.

Registered I&APs were notified of the resubmission of the application prior to the submission of the application form on 05 March 2020.

Registered I&APs were notified on 11 March 2020 of the release of the draft EIAR (Ref. No. 16/3/3/2/A1/20/3010/20) for comment and was concluded on 10 July 2020.

Concerns with respect to the erosive nature of emitted gases from the refining process on the immediate and surrounding buildings, health concerns on workers in the surrounding area and complying with noise Regulations were raised by I&APs.

All the concerns raised by I&APs were responded to and adequately addressed during the public participation process. The Department is satisfied that the PPP that was followed met the minimum legal requirements and all the comments and responses report thereto were included in the comments and responses report. Specific management and mitigation measures have been considered in this Environmental Authorisation and in the EMPr to adequately address the concerns raised.

2. Alternatives

No feasible or reasonable alternatives was considered for the proposed Fabio Chains project as the proposed installation of refinery equipment is proposed to be located within the existing building currently operated by Fabio Chains and does not include any alteration, extension nor expansion of existing building structures. Equipment related to refinery operations, such as furnaces, refinery machines, and reactors, will be systematically installed within the existing building in dedicated rooms.

The preferred alternative is therefore as follows:

The proposed development entails the installation of refinery equipment and associated infrastructure within an existing building on Erf 34103, Montague Gardens for the refining of precious metals, which requires an Atmospheric Emissions License in terms of the National Environmental Management: Air Quality Act, 2004 (Act 39 of 2004).

The proposed installation of equipment entails:

- The installation of a glass reactor (Static Refining system);
- The installation of a polypropylene reactor (Tumbling Refining system);
- An additional stack;
- The storage of approximately 375 litres of Hydrochloric Acid;
- The storage of approximately 375 litres of Nitric Acid; and
- The storage of approximately 19 kg Liquefied Petroleum Gas.

Both these will be connected to abatement equipment. Some emission extraction units are already in place at the site for the existing facility. The current activities at the existing facility entail the purchasing, melting, casting and selling of precious metals to local refineries. The proposed installation of refinery equipment will enable the additional precious metal refining through a chemical process.



The chemical refining process will be conducted using automated closed system refining plant equipment and all the emissions will be extracted via two stacks and treated using wet scrubber units. Emissions associated with the three melting furnaces will be extracted via one stack and treated using a wet scrubber unit. Extraction hoods will be placed over each of the individual furnaces.

The installation of the refinery equipment will occur within the existing facility and no expansion to the developed footprint will occur.

Confirmation of additional electricity supply has been confirmed by the City of Cape Town. No other additional municipal services are required.

The preferred alternative ensures the optimal use of existing space within the developed footprint of the existing facility. The additional of the chemical process for the refining of the precious metals will result in good quality precious metals being produced. Further, the preferred alternative is preferred from an air quality perspective.

"No-Go" Alternative

The "No-Go" alternative would result in the continuation of the current activities at the site. Given that the proposed development will not result in unacceptable environmental impacts, the No-Go alternative was not warranted.

3. Impact Assessment and Mitigation measures

3.1. Activity Need and Desirability

The existing facility on Erf 34103, Montague Gardens is located within an existing industrial park and is currently zoned Mixed Use 1.

Although a rezoning application will be required in terms of the relevant planning legislation, the proposed development is in line with the Western Cape Provincial Spatial Development Framework which recognises the need to maximize existing infrastructure and the implementation of sustainable living technologies without significantly impacting (compromising) the environment. As such, the technology and equipment proposed is recent and expected to result in the lowest possible emissions. Further, the proposed development is in line with City of Cape Town's Municipal Spatial Development Framework (MSDF) due to the existing facility being located within a "Medium-term Potential of Business Nodes" with an identified "Commercial Growth" (City of Cape Town, 2018) and supports the City of Cape Town's ability to sustain job creation and economic growth within these medium-term nodes.

The proposed activity is in line with the Integrated Development Plan: 2017 – 2020 (IDP) objective to improve Cape Town's business climate and establish it globally as an attractive investment destination with positive economic growth through encouraging more business opportunities and through infrastructure investment (including infrastructure maintenance).

In addition, the existing facility currently employs approximately four permanent staff and provides products to the local economy. The proposed development will allow for additional employment opportunities and possible expansion into the international market.

3.2. Biophysical environment

The proposed site consists of existing buildings and paved areas. No indigenous vegetation or watercourses are present on the proposed site. No botanical or freshwater impacts are therefore anticipated.

3.3. Air Quality Impacts

An Air Quality Impact Assessment (compiled by Rayten Engineering Solutions CC) was undertaken to determine the potential impacts of emissions from the operational activities associated with the proposed refinery equipment. The Air Quality Impact Assessment consisted of an emissions inventory and subsequent dispersion modelling simulations to determine PM₁₀, PM_{2.5}, NO₂, SO₂, CL₂, HCL, HF and NH₃ concentrations associated with the proposed operational activities during the operational phase of the plant.

The study indicated that the predicted maximum incremental concentrations associated with operations at the proposed refinery plant are predicted to be low, with no exceedances of the South African National Ambient Air Quality Standards observed for PM₁₀, PM_{2.5}, NO₂ and SO₂.

The City of Cape Town indicated (in their comment dated 29 November 2019) that the point source emission rates for the pollutants, low Hydrogen Fluoride and Chlorine will need to be specified at rates stricter than those prescribed in the minimum Emissions Standards, to ensure that the Alberta Air Quality objections for Hydrogen Fluoride and Chlorine are not exceeded off-site, thus ensuring health protection. Therefore, a revised dispersion modelling study was requested to demonstrate how the stack emission rates for Hydrogen Fluoride and Chlorine will be reduced in order to meet the offsite Alberta Air Quality objectives.

The Air Quality Impact Assessment (dated December 2019) was therefore amended to include more stringent emission limits to ensure that no exceedances of the Alberta Air Quality Guidelines occur and that emissions of HF and CL₂ at Fabio Chains fall below 10 mg/Nm³ and 20 mg/Nm³ respectively. The potential impacts on air quality was deemed to be of medium negative significance prior to the implementation of mitigation measures. The implementation of the mitigation measures, as described in the Air Quality Impact Assessment, is anticipated to reduce the potential air quality impacts to low negative significance. The specialist's recommendations have been included in the EMPr.

An Atmospheric Emissions License in terms of the National Environmental Air Quality Act, 2004 (Act No. 39 of 2004) is required from the relevant licensing authority (in this instance the City of Cape Town) and will be applied for. Furthermore, the City of Cape Town indicated (in their correspondence dated 10 July 2020), that they do not object to the proposed installation of refinery equipment.

3.4. Noise Impacts

According to the Environmental Noise Impact Statement (compiled by Enviro-Acoustic Research cc and dated 10 October 2019), the existing noise levels in the area are mainly as a result of industrial and commercial concerns, and motor vehicle traffic. Considering the location of the residential areas and the developmental character of the larger area, it is likely that the residential area falls within the typical noise rating level for an Urban District. The acceptable zone sound level is 55 and 45 dBA during the day and night-time periods respectively. It should be noted that this is similar to the noise limits as recommended by the World Health Organization for residential use at night (45 dBA). It is anticipated that the potential noise impacts associated with the proposed development will occur within the Urban District noise level. The potential noise impacts will therefore be of low negative significance post mitigation. Mitigation measures have been included in the EMPr.

3.5. Waste Management

The proposed development will produce additional wastes such as valuable slag and abatement equipment waste (e.g. from baghouses). The quantities yet unknown, however, it is expected to be minimal. These will be kept temporarily on-site to accumulate to a sufficient large enough amount before being sold to international third-party companies for further refining.



Other waste will include used drums, which will either be reused for storing purposes, such as waste storage bins, or sold to waste recyclers.

It is also anticipated that acidic effluent wastewater will be produced from the proposed refinery processes in quantities of about 50 litres per day. The effluent will be a result of the solution produced in the scrubber. Gaseous emissions produced from the refining processes including NO₂, and nitric oxide, will be scrubbed in a caustic soda (sodium hydroxide) scrubber before being released into atmosphere. The resultant scrubber solution will be put through a Resin Recovery System for the purpose of; firstly, recovery of more than 90% of precious metals still in the solution, and secondly to neutralize it to a pH of 7 before being disposed of by an approved waste collector.

The impact for waste was rated as medium negative prior to mitigation. After the implementation of relevant mitigation measures, the impact rating will be reduced to low negative.

Further, this Department's Waste Management Directorate confirmed (in their correspondence dated 08 January 2020) that the types of waste generated at the existing facility will not require a waste management licence and that the chemical wastes and acids need to be managed using the most applicable methodologies complying with the materials safety data sheets. This recommendation has been included in the EMPr.

3.6. Socio-Economic Impacts

Fabio Chains is an existing business located within the industrial area. The proposed new refinery process will expand Fabio Chains' product offering and may allow for additional job creation. The existing facility currently employs three permanent staff. The proposed development may result in four additional permanent employment opportunities. Employment opportunities will be afforded to the local community (as far as practically possible) during all phases of the proposed development.

3.7. Services / Bulk Infrastructure

Although the proposed development will not require additional municipal services, the following services were confirmed:

3.7.1. Water and sewer capacity

The City of Cape Town indicated in their correspondence dated 16 September 2019, that the existing water and sewer reticulation network and bulk services have sufficient capacity to accommodate the current and anticipated water and sewer demands generated by the subject property.

3.7.2. Electricity

The City of Cape Town indicated in their correspondence dated 06 September 2019, that there is sufficient, spare and unallocated capacity.

3.8. Traffic Impacts

The area is characterised by low traffic volumes. The site is accessed via Longclaw Drive through the single point entry into the Longclaw Business Park. The proposed activity is not expected to significantly impact on the existing traffic in the area.



The development will result in both negative and positive impacts.

Negative Impacts include:

- Potential air quality impacts;
- Potential noise impacts; and
- Potential waste impacts.

Positive impacts include:

- Maximum use of the existing facility for the installation of the equipment for the refining process;
- Economic gain for the local market and the applicant; and
- Some employment opportunities.

4. National Environmental Management Act Principles

The National Environmental Management Principles (set out in section 2 of the NEMA, which apply to the actions of all organs of state, serve as guidelines by reference to which any organ of state must exercise any function when taking any decision, and which must guide the interpretation, administration and implementation of any other law concerned with the protection or management of the environment), *inter alia*, provides for:

- the effects of decisions on all aspects of the environment to be taken into account;
- the consideration, assessment and evaluation of the social, economic and environmental impacts of activities (disadvantages and benefits), and for decisions to be appropriate in the light of such consideration and assessment;
- the co-ordination and harmonisation of policies, legislation and actions relating to the environment;
- the resolving of actual or potential conflicts of interest between organs of state through conflict resolution procedures; and
- the selection of the best practicable environmental option.

5. Conclusion

In view of the above, the NEMA principles, compliance with the conditions stipulated in this Environmental Authorisation, and compliance with the EMP, the Competent Authority is satisfied that the proposed listed activities will not conflict with the general objectives of integrated environmental management stipulated in Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and that any potentially detrimental environmental impacts resulting from the listed activities can be mitigated to acceptable levels.

You are reminded of your general duty of care towards the environment in terms of Section 28(1) of the NEMA which states: "Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment."

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