



FORM NO. BAR10/2019

BASIC ASSESSMENT REPORT

**THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND
THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS.**

NOVEMBER 2019

(For official use only)	
Pre-application Reference Number (if applicable):	
EIA Application Reference Number:	
NEAS Reference Number:	
Exemption Reference Number (if applicable):	
Date BAR received by Department:	
Date BAR received by Directorate:	
Date BAR received by Case Officer:	

GENERAL PROJECT DESCRIPTION

(This must include an overview of the project including the Farm name/Portion/Erf number)

Expansion of Get Alloys scrap aluminium and copper foundry, Erf 12399 and 23631, Glenhurst Street, Parow
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IMPORTANT INFORMATION TO BE READ PRIOR TO COMPLETING THIS BASIC ASSESSMENT REPORT

1. **The purpose** of this template is to provide a format for the Basic Assessment report as set out in Appendix 1 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"), Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended) in order to ultimately obtain Environmental Authorisation.
2. The Environmental Impact Assessment ("EIA") Regulations is defined in terms of Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") hereinafter referred to as the "NEMA EIA Regulations".
3. The required information must be typed within the spaces provided in this Basic Assessment Report ("BAR"). The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided.
4. All applicable sections of this BAR must be completed.
5. Unless protected by law, all information contained in, and attached to this BAR, will become public information on receipt by the Competent Authority. If information is not submitted with this BAR due to such information being protected by law, the applicant and/or Environmental Assessment Practitioner ("EAP") must declare such non-disclosure and provide the reasons for believing that the information is protected.
6. This BAR is current as of **November 2019**. It is the responsibility of the Applicant/ EAP to ascertain whether subsequent versions of the BAR have been released by the Department. Visit this Department's website at <http://www.westerncape.gov.za/eadp> to check for the latest version of this BAR.
7. This BAR is the standard format, which must be used in all instances when preparing a BAR for Basic Assessment applications for an environmental authorisation in terms of the NEMA EIA Regulations when the Western Cape Government Department of Environmental Affairs and Development Planning ("DEA&DP") is the Competent Authority.
8. Unless otherwise indicated by the Department, one hard copy and one electronic copy of this BAR must be submitted to the Department at the postal address given below or by delivery thereof to the Registry Office of the Department. Reasonable access to copies of this Report must be provided to the relevant Organs of State for consultation purposes, which may, if so indicated by the Department, include providing a printed copy to a specific Organ of State.
9. This BAR must be duly dated and originally signed by the Applicant, EAP (if applicable) and Specialist(s) and must be submitted to the Department at the details provided below.
10. The Department's latest Circulars pertaining to the "One Environmental Management System" and the EIA Regulations, any subsequent Circulars, and guidelines must be taken into account when completing this BAR.
11. Should a water use licence application be required in terms of the National Water Act, 1998 (Act No. 36 of 1998) ("NWA"), the "One Environmental System" is applicable, specifically in terms of the synchronisation of the consideration of the application in terms of the NEMA and the NWA. Refer to this Department's Circular EADP 0028/2014: One Environmental Management System.
12. Where Section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) ("NHRA") is triggered, a copy of Heritage Western Cape's final comment must be attached to the BAR.
13. The Screening Tool developed by the National Department of Environmental Affairs must be used to generate a screening report. Please use the Screening Tool link <https://screening.environment.gov.za/screeningtool> to generate the Screening Tool Report. The screening tool report must be attached to this BAR.

14. Where this Department is also identified as the Licencing Authority to decide on applications under the National Environmental Management: Air Quality Act (Act No. 29 of 2004) ('NEM:AQA"), the submission of the Report must also be made as follows, for- Waste Management Licence Applications, this report must also (i.e., another hard copy and electronic copy) be submitted for the attention of the Department's Waste Management Directorate (Tel: 021-483-2728/2705 and Fax: 021-483-4425) at the same postal address as the Cape Town Office.

Atmospheric Emissions Licence Applications, this report must also be (i.e., another hard copy and electronic copy) submitted for the attention of the Licensing Authority or this Department's Air Quality Management Directorate (Tel: 021 483 2888 and Fax: 021 483 4368) at the same postal address as the Cape Town Office.

DEPARTMENTAL DETAILS

<p align="center">CAPE TOWN OFFICE: REGION 1 and REGION 2</p> <p>(Region 1: City of Cape Town, West Coast District) (Region 2: Cape Winelands District & Overberg District)</p>	<p align="center">GEORGE OFFICE: REGION 3</p> <p align="center">(Central Karoo District & Garden Route District)</p>
<p>BAR must be sent to the following details:</p> <p>Western Cape Government Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 1 or 2) Private Bag X 9086 Cape Town, 8000</p> <p>Registry Office 1st Floor Utilitas Building 1 Dorp Street, Cape Town</p> <p>Queries should be directed to the Directorate: Development Management (Region 1 and 2) at: Tel: (021) 483-5829 Fax (021) 483-4372</p>	<p>BAR must be sent to the following details:</p> <p>Western Cape Government Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 3) Private Bag X 6509 George, 6530</p> <p>Registry Office 4th Floor, York Park Building 93 York Street George</p> <p>Queries should be directed to the Directorate: Development Management (Region 3) at: Tel: (044) 805-8600 Fax (044) 805 8650</p>

MAPS

<p>Provide a location map (see below) as Appendix A1 to this BAR that shows the location of the proposed development and associated structures and infrastructure on the property.</p>	
<p>Locality Map:</p>	<p>The scale of the locality map must be at least 1:50 000. For linear activities or development proposals of more than 25 kilometres, a smaller scale e.g., 1:250 000 can be used. The scale must be indicated on the map. The map must indicate the following:</p> <ul style="list-style-type: none"> • an accurate indication of the project site position as well as the positions of the alternative sites, if any; • road names or numbers of all the major roads as well as the roads that provide access to the site(s) • a north arrow; • a legend; and • a linear scale. <p>For ocean based or aquatic activity, the coordinates must be provided within which the activity is to be undertaken and a map at an appropriate scale clearly indicating the area within which the activity is to be undertaken.</p> <p>Where comment from the Western Cape Government: Transport and Public Works is required, a map illustrating the properties (owned by the Western Cape Government: Transport and Public Works) that will be affected by the proposed development must be included in the Report.</p>

Provide a detailed site development plan / site map (see below) as Appendix B1 to this BAR; and if applicable, all alternative properties and locations.	
Site Plan:	<p>Detailed site development plan(s) must be prepared for each alternative site or alternative activity. The site plans must contain or conform to the following:</p> <ul style="list-style-type: none"> • The detailed site plan must preferably be at a scale of 1:500 or at an appropriate scale. The scale must be clearly indicated on the plan, preferably together with a linear scale. • The property boundaries and numbers of all the properties within 50m of the site must be indicated on the site plan. • On land where the property has not been defined, the co-ordinates of the area in which the proposed activity or development is proposed must be provided. • The current land use (not zoning) as well as the land use zoning of each of the adjoining properties must be clearly indicated on the site plan. • The position of each component of the proposed activity or development as well as any other structures on the site must be indicated on the site plan. • Services, including electricity supply cables (indicate aboveground or underground), water supply pipelines, boreholes, sewage pipelines, storm water infrastructure and access roads that will form part of the proposed development must be clearly indicated on the site plan. • Servitudes and an indication of the purpose of each servitude must be indicated on the site plan. • Sensitive environmental elements within 100m of the site must be included on the site plan, including (but not limited to): <ul style="list-style-type: none"> ○ Watercourses / Rivers / Wetlands ○ Flood lines (i.e., 1:100 year, 1:50 year and 1:10 year where applicable); ○ Coastal Risk Zones as delineated for the Western Cape by the Department of Environmental Affairs and Development Planning ("DEA&DP"); ○ Ridges; ○ Cultural and historical features/landscapes; ○ Areas with indigenous vegetation (even if degraded or infested with alien species). • Whenever the slope of the site exceeds 1:10, a contour map of the site must be submitted. • North arrow <p>A map/site plan must also be provided at an appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred and alternative sites indicating any areas that should be avoided, including buffer areas.</p>
Site photographs	<p>Colour photographs of the site that shows the overall condition of the site and its surroundings (taken on the site and taken from outside the site) with a description of each photograph. The vantage points from which the photographs were taken must be indicated on the site plan, or locality plan as applicable. If available, please also provide a recent aerial photograph. Photographs must be attached to this BAR as Appendix C. The aerial photograph(s) should be supplemented with additional photographs of relevant features on the site. Date of photographs must be included. Please note that the above requirements must be duplicated for all alternative sites.</p>
Biodiversity Overlay Map:	<p>A map of the relevant biodiversity information and conditions must be provided as an overlay map on the property/site plan. The Map must be attached to this BAR as Appendix D.</p>
Linear activities or development and multiple properties	<p>GPS co-ordinates must be provided in degrees, minutes and seconds using the Hartebeeshoek 94 WGS84 co-ordinate system.</p> <p>Where numerous properties/sites are involved (linear activities) you must attach a list of the Farm Name(s)/Portion(s)/Erf number(s) to this BAR as an Appendix.</p> <p>For linear activities that are longer than 500m, please provide a map with the co-ordinates taken every 100m along the route to this BAR as Appendix A3.</p>

ACRONYMS

DAFF:	Department of Forestry and Fisheries
DEA:	Department of Environmental Affairs
DEA& DP:	Department of Environmental Affairs and Development Planning
DHS:	Department of Human Settlement
DoA:	Department of Agriculture
DoH:	Department of Health
DWS:	Department of Water and Sanitation
EMPr:	Environmental Management Programme
HWC:	Heritage Western Cape
NFEPA:	National Freshwater Ecosystem Protection Assessment
NSBA:	National Spatial Biodiversity Assessment
TOR:	Terms of Reference

WCBSP:	Western Cape Biodiversity Spatial Plan
WCG:	Western Cape Government

ATTACHMENTS

Note: The Appendices must be attached to the BAR as per the list below. Please use a ✓ (tick) or a x (cross) to indicate whether the Appendix is attached to the BAR.

The following checklist of attachments must be completed.

APPENDIX		✓ (Tick) or x (cross)	
Appendix A:	Maps		
	Appendix A1:	Locality Map	✓
	Appendix A2:	Coastal Risk Zones as delineated in terms of ICMA for the Western Cape by the Department of Environmental Affairs and Development Planning	N/A
	Appendix A3:	Map with the GPS co-ordinates for linear activities	N/A
Appendix B:	Appendix B1:	Site development plan(s) (includes environmental sensitivities of the preferred site, indicating any areas that should be avoided, including buffer areas)	✓
	Appendix B2	City of Cape Town Municipality's Spatial Land Use Proposals Map, 2019	✓
Appendix C:	Site Sensitivity Verification Report, including Photographs		✓
Appendix D:	Biodiversity overlay map		✓
Appendix E:	Permit(s) / license(s) / exemption notice, agreements, comments from State Department/Organs of state and service letters from the municipality.		
	Appendix E1:	Final comment/ROD from HWC	N/A
	Appendix E2:	Copy of comment from Cape Nature	N/A – fully transformed site
	Appendix E3:	Final Comment from the DWS Comment on this BAR will be obtained from DWS	x
	Appendix E4:	Comment from the DEA: Oceans and Coast	N/A
	Appendix E5:	Comment from the DAFF	N/A
	Appendix E6:	Comment from WCG: Transport and Public Works	N/A
	Appendix E7:	Comment from WCG: DoA	N/A
	Appendix E8:	Comment from WCG: DHS	N/A

	Appendix E9:	Comment from WCG: DoH	N/A
	Appendix E10:	Comment from DEA&DP: Pollution Management Comment on this BAR will be obtained from P&C Management	x
	Appendix E11:	Comment from DEA&DP: Waste Management Comment on this BAR will be obtained from Waste Management	x
	Appendix E12:	Comment from DEA&DP: Biodiversity Comment on this BAR will be obtained from DEA&DP Biodiversity.	N/A
	Appendix E13:	Comment from DEA&DP: Air Quality Comment on this BAR will be obtained from Waste Management	x
	Appendix E14:	Comment from DEA&DP: Coastal Management	N/A
	Appendix E15:	Comment from the local authority Comment on this BAR will be obtained from City of Cape Town	x
	Appendix E16:	Confirmation of all services (water, electricity, sewage, solid waste management) Facility already fully serviced	N/A
	Appendix E17:	Comment from the District Municipality	x
	Appendix E18:	Copy of an exemption notice	N/A
	Appendix E19	Pre-approval for the reclamation of land	N/A
	Appendix E20:	Proof of agreement/TOR of the specialist studies conducted. Please see specialist studies attached.	
	Appendix E21:	Proof of land use rights	✓
	Appendix E22:	Proof of public participation agreement for linear activities	N/A
Appendix F:	Public participation information: including a copy of the register of I&APs, the comments and responses Report, proof of notices, advertisements and any other public participation information as is required. Identified Stakeholders Table		✓
Appendix G:	Specialist Report(s) 1) Air Quality Impact Assessment Report, Soundscape Consulting, April 2022		✓
Appendix H:	1) EMPr 2) Fugitive Emissions Management Plan		✓
Appendix I:	Screening tool report		✓
Appendix J:	Need and desirability for the proposed activity or development in terms of this Department's guideline on Need and Desirability (March 2013)/DEA Integrated Environmental Management Guideline		✓

Appendix K	Detailed impact assessment	✓
Appendix L	AEL Application	✓

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A. SECTION A: ADMINISTRATIVE DETAILS

Highlight the Departmental Region in which the intended application will fall		CAPE TOWN OFFICE		GEORGE OFFICE
		REGION 1 (City of Cape Town, West Coast District)	REGION 2 (Cape Winelands District & Overberg District)	REGION 3 (Central Karoo District & Garden Route District)
1	Duplicate this section where there is more than one Proponent	Get Alloys (Pty) Ltd		
	Name of Proponent:			
	Name of contact person for Proponent (if other):	Ebrahim Khan		
	Company/ Trading name/State Department/Organ of State:	Get Alloys		
	Company Registration Number:	2021 / 653290 / 07		
	Postal address:	13 Glenhurst Street		
	Telephone:	Cape Town (021) 932 7941	Postal code: 7500 Cell: 079 877 2915	
	E-mail:	ebrahim@getalloys.co.za	Fax: (028) 514 1295	
2	Company of EAP:	The Environmental Practice		
	EAP name:	Colleen McCreadie		
	Postal address:	23 Dartmouth Road, Muizenberg		
			Postal code:7945	
	Telephone:	(021) 788 9323	Cell: 083 695 1664	
	E-mail:	colleen@enviroprac.co.za	Fax: None	
Qualifications:	Honours degree in Economics from the University of Cape Town. Member of the International Association for Impact Assessment (IAIA), the Institute of Waste Management of Southern Africa (IWMSA), and the National Association for Clean Air (NACA).			
EAPASA registration no:	2018/166			
3	Duplicate this section where there is more than one landowner	Applicant is landowner		
	Name of landowner:			
	Name of contact person for landowner (if other):			
	Postal address:			
	Telephone:	()	Postal code:	
	E-mail:		Cell: Fax: ()	
<p>Note: The written consent form must be attached as Appendix B to this NOI form. If there is more than one cadastral, written consent must be provided by all landowners.</p> <p>The consent of the landowner or person in control of the land is not required for: a) linear activities; b) an activity directly related to prospecting or exploration of a mineral and petroleum resource or extraction and primary processing of a mineral resource; or c) strategic integrated projects ("SIPs") as contemplated in the Infrastructure Development Act, 2014 (Act No. 23 of 2014).</p>				
4	Name of Person in control of the land:	Erf 23631 & Erf 12399: Get Alloys (Pty) Ltd		

	Name of contact person for person in control of the land:	
	Postal address:	
	Telephone:	Postal code:
	E-mail:	Cell:
		Fax: ()
5	Duplicate this section where there is more than one Municipal Jurisdiction Municipality in whose area of jurisdiction the proposed activity will fall: Contact person: Postal address: Telephone: E-mail:	<p>City of Cape Town</p> <hr/> <p>Fundiswa Sandi, Air Quality Directorate</p> <p>264 Voortrekker Road, Vasco</p> <hr/> <p>Postal code: 7299</p> <hr/> <p>021 590 5200 Cell: 06 480 9870</p> <hr/> <p>Fundiswa.sandi@capetown.gov.za Fax: (022) 487 9440</p>

B. Section B: CONFIRMATION OF SPECIFIC PROJECT DETAILS AS INCLUDED IN THE APPLICATION FORM

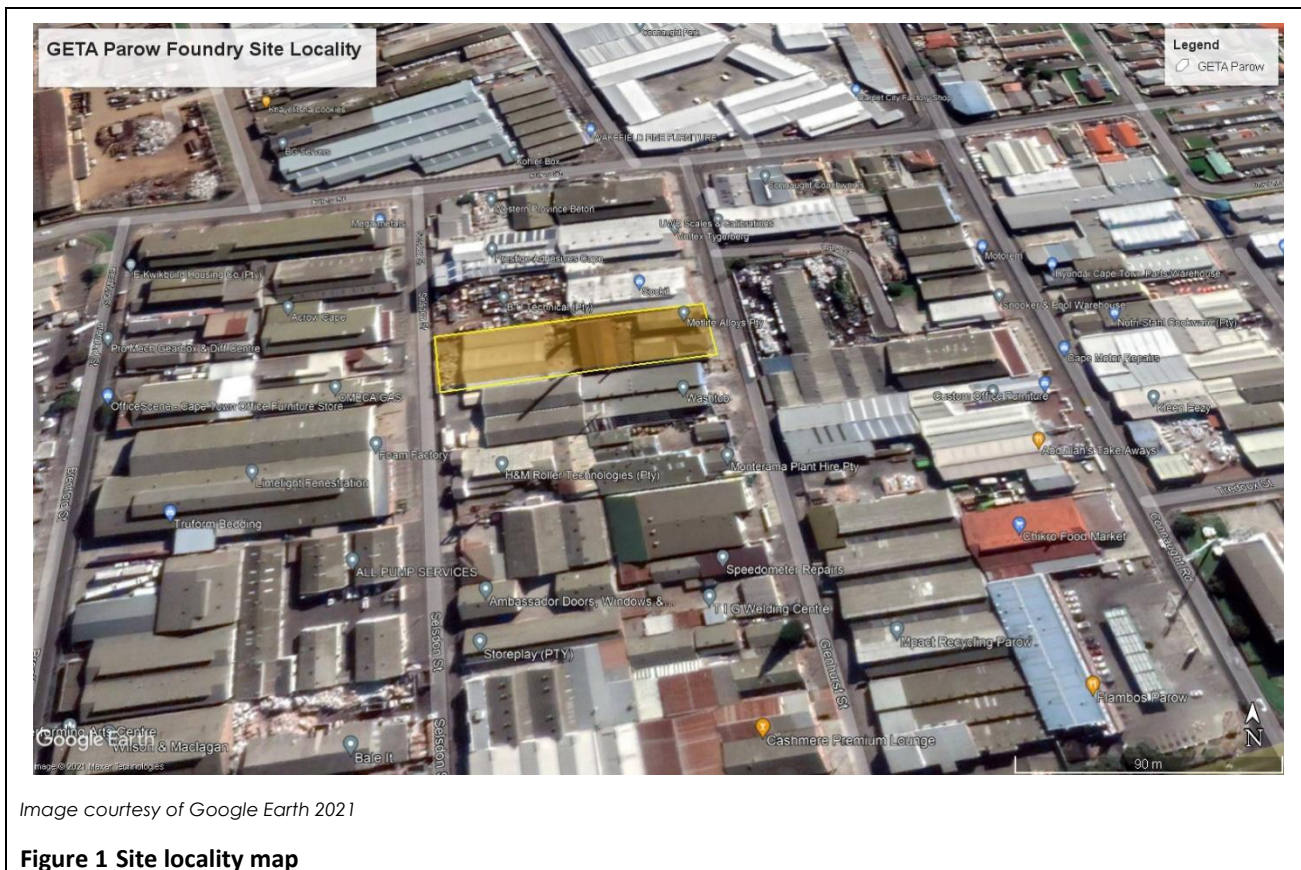
1.	Is the proposed development (please tick):	New		Expansion	X
2.	Is the proposed site(s) a brownfield of greenfield site? Please explain.				
The proposed site is a brownfield site. The sites (Erven 12399, 23631) have been used for industrial purposes for many years. The site and its surrounds are also zoned as Industrial Zone 2 for general industrial purposes.					
3.	For Linear activities or developments N/A				
4.	Other developments				
4.1.	Property size(s) of all proposed site(s):				±3814 m ²
4.2.	Developed footprint of the existing facility and associated infrastructure (if applicable): (buildings and transformed yards and storage tanks, etc. covers entire site)				±3814 m ²
4.2.	All current infrastructure is installed in the current, existing buildings, with a building footprint of ±2867 m ² . The current infrastructure includes two aluminium melting furnaces (10 -tonnes and 5-tonnes respectively) together with its associated machinery including conveyor belts and extraction units.				±3814 m ²
4.3.	Development footprint of the proposed development and associated infrastructure size(s) for all alternatives:				±3814 m ²
4.3.	All available space on the foundry site will be utilised for buildings, storage areas, loading and offloading areas, workshops, etc. All surfaces are hardened (concrete or similar).				±3814 m ²
4.4.	Provide a detailed description of the proposed development and its associated infrastructure (This must include details of e.g. buildings, structures, infrastructure, storage facilities, sewage/effluent treatment and holding facilities).				
<p>The proposal is to expand current operations at the Get Alloys scrap aluminium alloying foundry, in order to increase the aluminium alloy production capacity. This will also include melting scrap copper for copper alloy production, and improved infrastructure for dross recovery.</p> <p>The proposed site and development have been used for many years (since the 1980s) as an aluminium foundry. There are currently two oil-fired furnaces in place. The proposal, is to expand throughput capacity with the addition of furnaces to a total of four fuel oil- fired melting furnaces (one 5-tonne and three 8-tonne). Each 8-tonne melting furnace will operate in combination with a 10-tonne holding furnace from which casting takes place. The alloy is cast into moulds via one of three casting machines to form ingots.</p> <p>One 2.5-tonne or two 1-tonne box type furnaces will also be installed in order melt copper scrap and produce copper alloy. Copper alloy will be tapped and cast into moulds on a carousel system to form copper ingots. The plant will produce up to 250 tonnes of copper alloy per month from up to 300 tonnes per month of scrap.</p> <p>With regards to aluminium alloy production, it is expected that the final output of aluminium will be 1750 tonnes per month, derived from melting about 2100 tonnes of scrap aluminium.</p> <p>Both aluminium and copper alloy ingots are packed and dispatched via truck.</p>					

All furnaces are and will be fitted with fume extraction, both from the furnaces themselves and via hoods to capture fumes during charging and/or tapping. Fugitive emissions are furthermore be extracted from the building roof at its apex. All extracted fumes/air (30 000 Nm³/h) are mixed to lower the temperature of the off gas before it passes through a bagfilter to reduce the PM load. It is then vented to atmosphere 30 m above ground level. Bagfilter dust is bagged and disposed of by a waste disposal contractor.

Dross is a by-product of the scrap aluminium melting process (the oxidized metal impurities that are skimmed off the top of the aluminium melt). With the throughput capacity expansion, about 20 tonnes per day of dross will be removed from the furnaces and cooled in a covered cooling bay in 2 to 3 tonne batches before treatment at the dross recovery plant.

The foundry is licensed in terms of their current Atmospheric Emissions Licence to recover their dross. The dross recovery process has very recently been improved and this improved system will continue to be used when the foundry expansion takes place. Aluminium is recovered from dross by a cold process at a 10% to 15% recovery rate. Cooled dross is passed through a vibratory screen, and, depending on size, passed through a ball mill or pulveriser. Aluminium is separated from other metals in the dross with a magnetic drum. Recovered aluminium is then returned to the melting process. Materials remaining after the recovery of aluminium (approximately 548 tonnes per month) is bagged and disposed of by a waste disposal contractor. The entire dross recovery process takes place within an enclosed building fitted with dust extraction. Extracted, dust-laden air will be ducted and passed through the foundry bagfilter to reduce the PM load before being vented to atmosphere via the foundry stack.

4.5.	Indicate how access to the proposed site(s) will be obtained for all alternatives.			
Access will be obtained via the current site access points, being via Glenhurst Street and Selsdon Road, Parow.				
4.6.	SG Digit code(s) of the proposed site(s) for all alternatives:	C01600420002363100000 (existing) C01600420001239900000 (existing)		
4.7.	Coordinates of the proposed site(s) for all alternatives:			
	Latitude (S)	33°	55'	9.76"
	Longitude (E)	18°	35'	9.08"



C. SECTION C: LEGISLATION/POLICIES AND/OR GUIDELINES/PROTOCOLS

1. Exemption applied for in terms of the NEMA and the NEMA EIA Regulations

Has exemption been applied for in terms of the NEMA and the NEMA EIA Regulations. If yes, include a copy of the exemption notice in Appendix E18.	YES	NO X
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2. Is the following legislation applicable to the proposed activity or development.

The National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008) ("ICMA"). If yes, attach a copy of the comment from the relevant competent authority as Appendix E4 and the pre-approval for the reclamation of land as Appendix E19.	YES	NO X
The National Heritage Resources Act, 1999 (Act No. 25 of 1999) ("NHRA"). If yes, attach a copy of the comment from Heritage Western Cape as Appendix E1.	YES	NO X
The National Water Act, 1998 (Act No. 36 of 1998) ("NWA"). If yes, attach a copy of the comment from the DWS as Appendix E3.	YES	NO X
The National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("NEM:AQA"). If yes, attach a copy of the comment from the relevant authorities as Appendix E13.	YES X	NO
The National Environmental Management Waste Act (Act No. 59 of 2008) ("NEM:WA")	YES X	NO
The National Environmental Management Biodiversity Act, 2004 (Act No. 10 of 2004 ("NEMBA").	YES	NO X
The National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) ("NEMPAA").	YES	NO X
The Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983). If yes, attach comment from the relevant competent authority as Appendix E5.	YES	NO X

3. Other legislation

List any other legislation that is applicable to the proposed activity or development.
NA

4. Policies

Explain which policies were considered and how the proposed activity or development complies and responds to these policies.
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5. Guidelines

List the guidelines which have been considered relevant to the proposed activity or development and explain how they have influenced the development proposal.

DEA Integrated Environmental Management Guideline Series, Guideline 5: Assessment of Alternatives and Impacts in support of the Environmental Impact Assessment Regulations, 2006	This guideline was consulted during the impact assessment phase of the Basic Assessment and guided the impact assessment criteria and methodology used.
DEA&DP Guideline Document: Guideline on Public Participation, 2013	The public participation requirements contained in Chapter 6 of the NEMA EIA Regulations were interpreted in conjunction with the recommendations contained in this guideline.
DEADP Guideline Document: Guideline on Alternatives, 2013	The investigation and / or assessment of alternatives, including the No-Go Option, was guided by this guideline.
DEA&DP Guideline Document: Guideline on Need and Desirability, 2013	The investigation into the Need and Desirability of the facility was closely informed by this guideline.
DEA&DP Guideline for determining the scope of specialist involvement in the EIA process, June 2005	This guideline was used in determining which specialists were required for this Basic Assessment process.
DEA&DP Guideline for the review of specialist input in the EIA process, June 2005	All specialist inputs were reviewed and summarized by the EAP, with the guidance of this document.
The Provincial Urban Edge Guideline, December 2005	The investigation into the appropriateness of the development given the receiving environment was guided by this document.
The Western Cape Provincial Spatial Development Framework (PSDF), 2014	The principles governing development in the Western Cape, which are contained in the PSDF, were referred to in the investigation of the Need and Desirability of the plant expansion.
DEA (2010) Companion to the EIA Regulations 2010, Integrated Environmental Management Guideline Series 5, Department of Environmental Affairs	The NEMA EIA Regulations relevant to this application were interpreted with the assistance of this guideline documents.
City of Cape Town Municipality's Municipal Planning By-Law, 2016	The investigation into the appropriateness of the development given the receiving environment was guided by this document.
City of Cape Town Municipal Spatial Development Framework 2017 - 2022	The principles governing development in the City of Cape Town, which are contained in the municipal SDF, were referred to in the investigation of the Need and Desirability of the plant expansion.
Tygerberg District Plan Technical Report's Spatial Development Framework, 2012	The principles governing development in the Tygerberg region, which are contained in the municipal SDF, were referred to in the investigation of the Need and Desirability of the plant expansion.

6. Protocols

Explain how the proposed activity or development complies with the requirements of the protocols referred to in the NOI and/or application form

The DEFF Screening Tool and the subsequent Site Sensitivity Verification exercise that was undertaken by the EAP and specialists (see **Appendix C**), identified that only certain of the specialist protocols are relevant to this application. This is due to the entirely transformed, long-developed nature of the site, as well as the fully-developed, industrialised nature of the immediate surrounds. Therefore, only the following specialist studies have been undertaken:

- An Air Quality Impact Assessment has been undertaken.

D. Section D: APPLICABLE LISTED ACTIVITIES

List the applicable activities in terms of the NEMA EIA Regulations

Activity No(s):	Provide the relevant Basic Assessment Activity(ies) as set out in Listing Notice 1	Describe the portion of the proposed development to which the applicable listed activity relates.
34	The expansion of existing facilities or infrastructure for any process or activity where such expansion will result in the need for a permit or licence or an amended permit or licence in terms of national or provincial legislation governing the release of emissions, effluent or pollution, excluding— (i) where the facility, infrastructure, process or activity is included in the list of waste management activities published in terms of section 19 of the National Environmental Management: Waste Act, 2008 (Act 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies; (ii) the expansion of or changes to existing facilities or infrastructure for the treatment of effluent, wastewater, polluted water or sewage where the capacity will be increased by less than 15 000 cubic metres per day; or (iii) the expansion is directly related to aquaculture facilities or infrastructure where the wastewater discharge capacity will be increased by 50 cubic meters or less per day.	The proposed project entails the expansion of an existing aluminium foundry. It is the opinion of the EAP that as scrap aluminium and copper is considered 'general waste', this activity, specifically 34(i), is most likely not triggered.
Activity No(s):	Provide the relevant Basic Assessment Activity(ies) as set out in Listing Notice 3	Describe the portion of the proposed development to which the applicable listed activity relates.
	.	
Note: <ul style="list-style-type: none"> The listed activities specified above must reconcile with activities applied for in the application form. The onus is on the Applicant to ensure that all applicable listed activities are included in the application. If a specific listed activity is not included in an Environmental Authorisation, a new application for Environmental Authorisation will have to be submitted. Where additional listed activities have been identified, that have not been included in the application form, and amended application form must be submitted to the competent authority. 		

List the applicable waste management listed activities in terms of the NEM:WA

Activity No(s):	Provide the relevant Basic Assessment Activity(ies) as set out in Category A	Describe the portion of the proposed development to which the applicable listed activity relates.
None		

List the applicable listed activities in terms of the NEM:AQA

Activity No(s):	Provide the relevant Listed Activity(ies)	Describe the portion of the proposed development to which the applicable listed activity relates.
Subcategory 4.2	Combustion installations in the metallurgical industry	The Get Alloys foundry holds an AEL for their foundry activities. However, the AEL does not yet include this activity. Consultation with the municipal air quality officer has determined that it is not known why this activity is not yet included in the AEL. The expansion application therefore includes application for this activity.
Subcategory 4.4	Secondary aluminium production	The Get Alloys foundry is already licensed in terms of the NEMAQA for secondary aluminium production. This proposal pertains to a throughput capacity expansion.

A **Waste Licence** will also be applied for. The activities triggering NEMWA are listed in the table below.

Activity No(s):	The relevant Listed Activity(ies) as set out in Gazette 35718, List of Waste Management Activities Category A:	Describe the portion of the proposed development to which the applicable listed activity relates.
5	The recovery of waste... in excess of 10tpd and less than 100tpd general waste...	The foundry was first developed in 1980, pre-ECA and NEMWA.

		They are currently licensed i.t.o. NEMAQA to process 25tpd scrap aluminium. No scrap copper is yet processed at the facility. The new total scrap metal mass processed with the expansion will be +-78tpd.
13	The expansion of a waste management activity...	Capacity expansion is increasing from 25tpd to +-78tpd.
Activity No(s):	The relevant Listed Activity(ies) as set out in Gazette 35718, List of Waste Management Activities Category B:	Describe the portion of the proposed development to which the applicable listed activity relates.
3	The recovery of hazardous waste in excess of 1tpd, except when an integral part of an internal manufacturing process.	About 20tpd aluminium dross will be processed on site. But the dross is processed immediately after exiting the furnaces, and the recovered aluminium is returned to the melt. The process is therefore an integral part of the foundry manufacturing process and so this activity is not triggered.

E. SECTION E: PLANNING CONTEXT AND NEED AND DESIRABILITY

1.	Provide a description of the preferred alternative.
<p>The proposal is to expand current operations at the Get Alloys scrap aluminium alloying foundry, in order to increase the aluminium alloy production capacity. This will also include melting scrap copper for copper alloy production, and improved infrastructure for dross recovery.</p> <p>The proposed site and development have been used for many years (since the 1980s) as an aluminium foundry. There are currently two oil-fired furnaces in place. The proposal, is to expand throughput capacity with the addition of furnaces to a total of four fuel oil- fired melting furnaces (one 5-tonne and three 8-tonne). Each 8-tonne melting furnace will operate in combination with a 10-tonne holding furnace from which casting takes place. The alloy is cast into moulds via one of three casting machines to form ingots.</p> <p>One 2.5-tonne or two 1-tonne box type furnaces will also be installed in order melt copper scrap and produce copper alloy. Copper alloy will be tapped and cast into moulds on a carousel system to form copper ingots. The plant will produce up to 250 tonnes of copper alloy per month from up to 300 tonnes per month of scrap.</p> <p>With regards to aluminium alloy production, it is expected that the final output of aluminium will be 1750 tonnes per month, derived from melting about 2100 tonnes of scrap aluminium.</p> <p>Both aluminium and copper alloy ingots are packed and dispatched via truck.</p> <p>All furnaces are and will be fitted with fume extraction, both from the furnaces themselves and via hoods to capture fumes during charging and/or tapping. Fugitive emissions are furthermore be extracted from the building roof at its apex. All extracted fumes/air (30 000 Nm³/h) are mixed to lower the temperature of the off gas before it passes through a bagfilter to reduce the PM load. It is then vented to atmosphere 30 m above ground level. Bagfilter dust is bagged and disposed of by a waste disposal contractor.</p> <p>Dross is a by-product of the scrap aluminium melting process (the oxidized metal impurities that are skimmed off the top of the aluminium melt). With the throughput capacity expansion, about 20 tonnes per day of dross will be removed from the furnaces and cooled in a covered cooling bay in 2 to 3 tonne batches before treatment at the dross recovery plant.</p> <p>The foundry is licensed in terms of their current Atmospheric Emissions Licence to recover their dross. The dross recovery process has very recently been improved and this improved system will continue to be used when the foundry expansion takes place. Aluminium is recovered from dross by a cold process at a 10% to 15% recovery rate. Cooled dross is passed through a vibratory screen, and, depending on size, passed through a ball mill or pulveriser. Aluminium is separated from other metals in the dross with a magnetic drum. Recovered aluminium is then returned to the melting process. Materials remaining after the recovery of aluminium (approximately 548 tonnes per month) is bagged and disposed of by a waste disposal contractor. The entire dross recovery process takes place within an enclosed building fitted with dust extraction. Extracted, dust-laden air will be ducted and passed through the foundry bagfilter to reduce the PM load before being vented to atmosphere via the foundry stack.</p> <p>Bulk engineering services</p> <p>Current infrastructure and supply from the municipality will be used to power the plant. Stormwater will discharge to the municipal system and will supply the development with potable water.</p> <p>Please see Appendix E for confirmation of bulk engineering services supply capacity from the municipality.</p> <p>Site access</p> <p>The trucks travelling to and from the site will utilise the access gate in Glenhurst street.</p>	

Water uses	
Groundwater will be extracted at the rate of ±10 000 litres per month and is used for cooling the moulds	
2.	Explain how the proposed development is in line with the existing land use rights of the property as you have indicated in the NOI and application form? Include the proof of the existing land use rights granted in Appendix E21.
Erven 23631 and 12399 are zoned Industrial Zone 1 in terms of the City of Cape Town Municipality Spatial Development Plan and the City of Cape Town Map Viewer ¹ . The Tygerberg District Plan 2012 Spatial Development Framework shows that the Beaconvale area is zoned for General Industrial use.	
3.	Explain how potential conflict with respect to existing approvals for the proposed site (as indicated in the NOI/and or application form) and the proposed development have been resolved.
See E2	
4.	Explain how the proposed development will be in line with the following?
4.1	The Provincial Spatial Development Framework.
The development aligns with the City of Cape Town's SDF and so should align with the PSDF.	
4.2	The Integrated Development Plan of the local municipality.
The site is situated in the established industrial area of Parow which, together with Epping and CTIA, is considered the "industrial heart of the city".	
4.3.	The Spatial Development Framework of the local municipality.
The site is situated in the established industrial area of Parow which, together with Epping and CTIA, is considered the "industrial heart of the city".	
4.4.	The Environmental Management Framework applicable to the area.
Appendix J 1.5	
5.	Explain how comments from the relevant authorities and/or specialist(s) with respect to biodiversity have influenced the proposed development.
N/A – the site and surrounds are fully developed and no natural environment features / terrestrial or aquatic biodiversity features can be impacted by the proposed foundry expansion. This is based on the EAP's review of available desktop biodiversity resources. Please see the attached Site Sensitivity Verification Report.	
6.	Explain how the Western Cape Biodiversity Spatial Plan (including the guidelines in the handbook) has influenced the proposed development.
The site is full transformed and is situated in an established industrial area. The site is not located within a Critical Biodiversity Area that could be affected by the proposed expansion (See Appendix D)	
7.	Explain how the proposed development is in line with the intention/purpose of the relevant zones as defined in the ICMA.
N/A.	
8.	Explain whether the screening report has changed from the one submitted together with the application form. The screening report must be attached as Appendix I.
No, the Screening Report has not changed.	
9.	Explain how the proposed development will optimise vacant land available within an urban area.
The development entails the expansion of an existing scrap aluminium foundry, and will cover already developed / transformed land.	
10.	Explain how the proposed development will optimise the use of existing resources and infrastructure.
The development entails the expansion of an existing scrap aluminium foundry, and will cover already developed / transformed land. The site is already serviced by the municipality and existing services will be made use of.	
11.	Explain whether the necessary services are available and whether the local authority has confirmed sufficient, spare, unallocated service capacity. (Confirmation of all services must be included in Appendix E16).
Existing municipality capacity will be made use of. This applies to stormwater and effluent discharge, and to water and electricity supply.	
12.	In addition to the above, explain the need and desirability of the proposed activity or development in terms of this Department's guideline on Need and Desirability (March 2013) or the DEA's Integrated Environmental Management Guideline on Need and Desirability. This may be attached to this BAR as Appendix J.
See Appendix J .	

F. SECTION F: PUBLIC PARTICIPATION

The Public Participation Process ("PPP") must fulfil the requirements as outlined in the NEMA EIA Regulations and must be attached as Appendix F. Please note that If the NEM: WA and/or the NEM: AQA is applicable to the proposed development, an advertisement must be placed in at least two newspapers.

1. Exclusively for linear activities: Indicate what PPP was agreed to by the competent authority. Include proof of this agreement in Appendix E22.

N/A

¹ <https://gis.elsenburg.com/apps/cfm/> accessed on 04/01/2022

2. Confirm that the PPP as indicated in the application form has been complied with. All the PPP must be included in Appendix F.

To be confirmed in the Draft BAR. Please see identified stakeholder table and Public Participation Plan contained in **Appendix F**.

3. Confirm which of the State Departments and Organs of State indicated in the Notice of Intent/application form were consulted with.

City of Cape Town Air Quality Directorate Fundiswa Sandi	fundiswa.sandi@capetown.gov.za	021 590 5222
City of Cape Town Environmental Management Directorate, Region D Dimitri Georgeades	2nd floor, Media City c/o Hertzog Blvd & Heerengracht Cape Town 8000 dimitri.georgeades@capetown.gov.za	Tel. 021 400 6518 Cell. 072 765 1781 Fax. 021 425 4448
DEA&DP Waste Directorate (competent authority) Etienne Roux	6th Floor, Property Centre, 3 Dorp Street, Cape Town Etienne.Roux@westerncape.gov.za	021 483 8378
DEA&DP Air Quality Directorate Dr Joy Leaner	joy.leaner@westerncape.gov.za	021 483 2888
DEA&DP Development Management Directorate, Region 1 Saa-rah Adams	Saa-rah.adams@westerncape.gov.za 6th Floor Utilitas Building 1 Dorp Street, Cape Town	021 483 0773
Department of Water Affairs Nelisa Ndobeni	NdobeniN2@dws.gov.za 52 Voortrekker Road Bellville 7530	021 941 6033

4. If any of the State Departments and Organs of State were not consulted, indicate which and why.

This Pre-application Draft BAR is the first report to be distributed for stakeholder review. The Organs of State listed in Section F3 will be notified of the opportunity to comment on this report.

5. If any of the State Departments and Organs of State did not respond, indicate which.

N/A

6. Provide a summary of the issues raised by I&APs and an indication of the manner in which the issues were incorporated into the development proposal.

To be provided in the Draft BAR

Note:

A register of all the I&AP's notified, including the Organs of State, and all the registered I&APs must be included in Appendix F. The register must be maintained and made available to any person requesting access to the register in writing.

The EAP must notify I&AP's that all information submitted by I&AP's becomes public information.

Your attention is drawn to Regulation 40 (3) of the NEMA EIA Regulations which states that "Potential or registered interested and affected parties, including the competent authority, may be provided with an opportunity to comment on reports and plans contemplated in subregulation (1) prior to submission of an application but **must** be provided with an opportunity to comment on such reports once an application has been submitted to the competent authority."

All the comments received from I&APs on the pre -application BAR (if applicable and the draft BAR must be recorded, responded to and included in the Comments and Responses Report and must be included in Appendix F.

All information obtained during the PPP (the minutes of any meetings held by the EAP with I&APs and other role players wherein the views of the participants are recorded) and must be included in Appendix F.

Please note that proof of the PPP conducted must be included in Appendix F. In terms of the required "proof" the following is required:

- a site map showing where the site notice was displayed, dated photographs showing the notice displayed on site and a copy of the text displayed on the notice;
- in terms of the written notices given, a copy of the written notice sent, as well as:

- if registered mail was sent, a list of the registered mail sent (showing the registered mail number, the name of the person the mail was sent to, the address of the person and the date the registered mail was sent);
- if normal mail was sent, a list of the mail sent (showing the name of the person the mail was sent to, the address of the person, the date the mail was sent, and the signature of the post office worker or the post office stamp indicating that the letter was sent);
- if a facsimile was sent, a copy of the facsimile Report;
- if an electronic mail was sent, a copy of the electronic mail sent; and
- if a "mail drop" was done, a signed register of "mail drops" received (showing the name of the person the notice was handed to, the address of the person, the date, and the signature of the person); and
- a copy of the newspaper advertisement ("newspaper clipping") that was placed, indicating the name of the newspaper and date of publication (of such quality that the wording in the advertisement is legible).

G. SECTION G: DESCRIPTION OF THE RECEIVING ENVIRONMENT

Please refer to the Site Sensitivity Verification Report contained in Appendix C for a full description of the site and surrounds and any natural or cultural sensitivities identified, including photos of the site and surrounds.

All specialist studies must be attached as Appendix G.

1. Groundwater²

1.1.	Was a specialist study conducted?	YES	NO X
1.2.	Provide the name and or company who conducted the specialist study.		
N/A			
1.3.	Indicate above which aquifer your proposed development will be located and explain how this has influenced your proposed development.		
See 1.4			
1.4.	Indicate the depth of groundwater and explain how the depth of groundwater and type of aquifer (if present) has influenced your proposed development.		
According to CapeFarmMapper, the site is underlain by a Major aquifer (classified as Intergranular) of High susceptibility and Most vulnerability. According to the resource database, depth to groundwater is 7.08 m.			
An existing borehole on the site will be made use of. Groundwater is abstracted to cool moulds. approximately 10 000 litres per month is abstracted.			
Impact on the aquifer is therefore considered to be acceptable, provided Standard Operating Procedures and Preventative Maintenance Plans for prevention of contamination, together with appropriate design of the dross and fuel storage infrastructure, are implemented. These should be incorporated into the Operational Phase Environmental Management Programme.			

2. Surface water

2.1.	Was a specialist study conducted?	YES	NO X
2.2.	Provide the name and/or company who conducted the specialist study.		
N/A			
2.3.	Explain how the presence of watercourse(s) and/or wetlands on the property(ies) has influenced your proposed development.		
The Elsiekraal river is located approximately 1 km north of the site. A depression wetland is also situated more than 750 m south west from the proposed foundry expansion site. Neither of these aquatic features are Critical Biodiversity Areas (CBAs), Ecological Support Areas (ESAs) or Other Natural Areas (ONAs). There are no other aquatic CBAs, ESAs or ONAs on the site or its surrounds.			

3. Coastal Environment N/A

3.1.	Was a specialist study conducted?	YES	NO X
3.2.	Provide the name and/or company who conducted the specialist study.		
N/A			
3.3.	Explain how the relevant considerations of Section 63 of the ICMA were taken into account and explain how this influenced your proposed development.		
N/A			
3.4.	Explain how estuary management plans (if applicable) has influenced the proposed development.		
N/A			

² Groundwater Resource Assessment Phase 2 (GRA2, 2005), via CapeFarmMapper: <https://gis.elsenburg.com/apps/cfm/> accessed 14/04/2022

3.5.	Explain how the modelled coastal risk zones, the coastal protection zone, littoral active zone and estuarine functional zones, have influenced the proposed development.
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4. Biodiversity³

4.1.	Were specialist studies conducted?	YES	NO X
4.2.	Provide the name and/or company who conducted the specialist studies.		
N/A			
4.3.	Explain which systematic conservation planning and other biodiversity informants such as vegetation maps, NFEPA, NSBA etc. have been used and how has this influenced your proposed development.		
<p>Terrestrial biodiversity: The National Vegetation Map of SA, 2018, was referred to. The site and surrounds fall within the Critically Endangered Cape Flats Sand Fynbos ecosystem. However, due to extensive urbanisation and industrialization of the region, and based on biodiversity maps, the study area does not contain any terrestrial biodiversity or plant species.</p> <p>Aquatic biodiversity: The proposed site and development have been used for many years (since the 1980s) as an aluminium foundry. The Elsiekraal River is located approximately 1km north of the site. A depression wetland is also situated more than 750m south west from the proposed expansion. Neither of these aquatic features are Critical Biodiversity Areas (CBAs), Ecological Support Areas (ESAs) or Other Natural Areas (ONAs). There are no other aquatic CBAs, ESAs or ONAs on the site or its surrounds.</p>			
4.4.	Explain how the objectives and management guidelines of the Biodiversity Spatial Plan have been used and how has this influenced your proposed development.		
<p>Terrestrial Biodiversity: The site and surrounds fall within the Critically Endangered Cape Flats Sand Fynbos ecosystem. However, due to extensive urbanisation and industrialization of the region, and based on available biodiversity maps, the study area does not contain any terrestrial biodiversity or plant species</p> <p>Aquatic Biodiversity: The proposed site and development have been used for many years (since the 1980s) as an aluminium foundry. The Elsiekraal River is located approximately 1km north of the site. A depression wetland is also situated more than 750m south west from the proposed expansion. Neither these aquatic features are Critical Biodiversity Areas (CBAs), Ecological Support Areas (ESAs) or Other Natural Areas (ONAs). There are no other aquatic CBAs, ESAs or ONAs on the site or its surrounds.</p>			
4.5.	Explain what impact the proposed development will have on the site specific features and/or function of the Biodiversity Spatial Plan category and how has this influenced the proposed development.		
See 4.3 and 4.4			
4.6.	If your proposed development is located in a protected area, explain how the proposed development is in line with the protected area management plan.		
N/A			
4.7.	Explain how the presence of fauna on and adjacent to the proposed development has influenced your proposed development.		
The site is fully transformed and situated within an urban area			

5. Geographical Aspects^{4,5}

Explain whether any geographical aspects will be affected and how has this influenced the proposed activity or development.	
According to the 1:1 000 000 scale Geological map of South Africa, the geology of the area comprises unconsolidated calcareous sand (coasted dunes), and minor palaeosols.	
According to the Cape Farm Mapper, the geology of the area is of the SANDVELD GROUP; and the lithology is: Quartzose sand, pelletal phosphorite, gravel, sandy silt, grey-black carbonaceous kaolinitic clay, peat, shelly limestone and sandstone, shelly sand and (aeolian) calcarenite, coquinite, light grey to reddish sandy soil, loamy sand	
The proposed site and development have been used for many years (since the 1980s) as an aluminium foundry and is fully transformed and developed. Therefore, the expansion will not impact on geological aspects (such as erosion; development on steep slopes; etc.)	

6. Heritage Resources

6.1.	Was a specialist study conducted?	YES	NO X
6.2.	Provide the name and/or company who conducted the specialist study.		
N/A			

³ VegMap2018, SANBI via CapeFarmMapper: <https://gis.elsenburg.com/apps/cfm/> accessed 14/04/2021

⁴ From the 1:1 000 000 scale Geological Map of SA

(<https://www.arcgis.com/home/webmap/viewer.html?useExisting=1&layers=52754dd08c3345fb9f6a968a5d571f4a&layerId=0>) accessed 14/04/2021

⁵ Geology Classification (1:1M), Council for Geoscience via CapeFarmMapper <https://gis.elsenburg.com/apps/cfm/> accessed 14/04/2021

6.3.	Explain how areas that contain sensitive heritage resources have influenced the proposed development.
	No Heritage Notice of Intent to Develop was required as this is a developed industrial site and no change of character of the site will result from the proposed capacity expansion.

7. Historical and Cultural Aspects

Explain whether there are any culturally or historically significant elements as defined in Section 2 of the NHRA that will be affected and how has this influenced the proposed development.
The property is situated within 2km of a Grade II heritage site. But the proposed <u>capacity</u> expansion cannot be considered to impact this site.

8. Socio/Economic Aspects⁶

8.1.	Describe the existing social and economic characteristics of the community in the vicinity of the proposed site.
	<p>The site is surrounded by commercial and industrial development. Residences can be found to the east and south of the Beaconvale industrial area.</p> <p>The area is mainly industrial (car spare parts manufacturers, glass and steel manufacturers, a mechanic, among others), but just beyond the industria is high density residences.</p> <p>The Beaconvale industrial area fall under City of Cape Town's Ward 26, which has a population of 38 576 people with 10844 households. The annual average household income is R115 100, while the annual average income is R117 00.</p>
8.2.	Explain the socio-economic value/contribution of the proposed development.
	<p>Get Alloys has identified a need in the market for aluminium and copper recovery facilities. The foundry is aimed at meeting that need. Get Alloys has also identified operational efficiencies and cost savings to be had with establishing multiple facilities across South Africa.</p> <p>Metals such as aluminium and copper are in high demand both in the local and in international construction and production industries. Producing these metals through a process of diverting scrap metal from landfill and adding to the waste-to-value chain, is a significant benefit for the environment. It is accepted that the carbon footprint of recycling metals is lower than the footprint associated with mining and processing the virgin metals.</p> <p>A successful business in the Beaconvale industrial area, could attract additional investment into the area: businesses which provide goods and services to GeT Alloys, the scrap providers (companies and individuals), and construction-related businesses which use GeT Alloys' aluminium alloy and copper in their manufacturing and construction processes.</p> <p>GeT Alloys will increase their market share and profitability. Not only will there be knock-on benefits for Get Alloys staff in terms of job and income security, and benefits to the owners of GeT Alloys, but the new plant will require the employment of potentially 50 new staff members.</p>
8.3.	Explain what social initiatives will be implemented by applicant to address the needs of the community and to uplift the area.
	See above
8.4.	Explain whether the proposed development will impact on people's health and well-being (e.g. in terms of noise, odours, visual character and sense of place etc) and how has this influenced the proposed development.
	Please see the Air Quality Impact Assessment Report in Appendix G and the impact assessment in Section H4 below for more detail.

H. SECTION H: ALTERNATIVES, METHODOLOGY AND ASSESSMENT OF ALTERNATIVES

1. Details of the alternatives identified and considered

1.1.	Property and site alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.
	Provide a description of the preferred property and site alternative.
	Erf 12399 and Erf 23631, 13 Glenhurst Street, Cape Town.
	Please see the Site Sensitivity Verification Report in Appendix C , as well as Section G , for more detail on the site. There are no aspects of the site and surrounds which suggest that the plant expansion should not proceed on Erf 12399 and Erf 23631,

⁶ Wazimap, Ward 26, City of Cape Town. Accessed 14/04/2022 <https://wazimap.co.za/profiles/ward-19100026-city-of-cape-town-ward-26-19100026/>

provided that mitigation is implemented. Specialist recommended and best practice mitigation measures have been included in the development proposal and in the EMPr.
Provide a description of any other property and site alternatives investigated.
<p>Towards the beginning of the project planning phase, the applicant considered incorporating neighbouring Erf 12388, at No. 10 Selsdon Road, into the expanded foundry development proposal. Erf 12388 is ideally located to allow a footprint expansion of the foundry and enable ancillary metallurgical-industry activities to be developed. Erf 12388 is also already developed for industrial purposes, and is zoned for industrial use.</p> <p>However, the applicant and the current landowner could not reach agreement on the terms of sale of Erf 12388. Therefore, Erf 12388 has been excluded from the development proposal, and the proposal includes only an expansion in <u>capacity</u> and not an expansion in footprint.</p>
Provide a motivation for the preferred property and site alternative including the outcome of the site selection matrix.
<p>There are no environmental sensitivities identified on or nearby Erf 12399 and Erf 23631 which should prevent the plant expansion from proceeding.</p> <p>The site is already owned and operated by GeT Alloys, and therefore meets their urgent need to provide additional scrap alloys and copper processing facilities to the market.</p>
Provide a full description of the process followed to reach the preferred alternative within the site.
N/A: the entire Erf 12399 and Erf 23631 are already developed for the purposes of the existing foundry, and will be utilised for the purposes of the capacity expansion.
Provide a detailed motivation if no property and site alternatives were considered.
<p>When GeT Alloys reviewed their market position and demand for their products and determined that an expansion of operations would be necessary and profitable, they determined at that time that Beaconvale Industria, and specifically Erf 12399 and Erf 23631, is the optimal location to expand the existing foundry operations already present at the location.</p> <p>This is due to:</p> <ul style="list-style-type: none"> - Proximity to potential scrap material suppliers: there are many sources of scrap metal in the Western Cape region. As a result, GeT Alloys will have a stable supply of raw materials for their operation. - Proximity to customers: GeT Alloys' operational plant will be in close proximity to many potential clients as Western Cape is an industry hub in South Africa, and Parow is a key industrial area. - Appropriate land use rights: the foundry has the potential to cause nuisance dust together with harmful combustion emissions and so can be considered a noxious activity. Both Erf 12399 and Erf 23631 is zoned as a General Industrial 1 zone. According to the City of Cape Town (CoCT)'s Development Management Scheme, as a part of the Municipal Planning By-Law (2015, as amended), such a zoning is in place "to accommodate manufacturing and related processes, ranging from general industrial uses which may have some impact on surrounding areas, to hazardous or noxious uses which have a potentially high impact and must be carefully managed. Industrial development has particular requirements for road and waste infrastructure, and industrial-zoned land should generally be reserved for industrial purposes to optimise this infrastructure and mitigate potential impacts" (p. 19) - Sensitive natural and cultural-historical environment features: an investigation of the site by the EAP using available desktop data, showed that the site is not sensitive from a natural or cultural-historical perspective. This is elaborated on further in Section G of this report, and in the Site Sensitivity Verification Report contained in Appendix C. - Buildings and past land use: Erf 12399 and Erf 23631 already has all the bulk engineering services infrastructure needed for the development of the foundry. There are also office and workshop buildings already on site, reducing the number of structures which need to be constructed to house the development. Further, the site has been used for industrial purposes for many years. The development of the foundry will thus be in line with the past land use practices on Erf 12399 and Erf 23631.
List the positive and negative impacts that the property and site alternatives will have on the environment.
<p>Negative Impacts associated with the foundry:</p> <ul style="list-style-type: none"> - Increased combustion emissions, as well as pollutant emission from burning the coatings off the scrap and from the additives used in the melt. These include sulphur dioxide, nitrogen dioxide and particulate matter, which are all considered as criteria air pollutants for their potential to adversely impact air quality. Poor air quality has well-documented negative impacts on human and environmental health. - Increased fugitive dust emissions from material handling at the site. Dustfall similarly has the potential to impact air quality adversely. - The foundry will have associated additional trucks on the road, transporting scrap aluminium and copper to the plant while also transporting alloy to customers. There will be associated exhaust emissions and contribution to road congestion. - The furnaces use fuel oil and there are bulk fuel storage tanks on site. If the tank bunding, tanks, fuel lines and other associated infrastructure are not monitored and maintained regularly, and if fuel storage and handling is not managed appropriately, infrastructure failure and unnecessary leaks and spills could cause soil or groundwater contamination.

- The foundry has significant associated risks in terms of health and safety of workers (working with extreme temperature machinery and molten metal; furnace emissions in the workplace; handling hazardous dross (corrosive; skin and lung irritant; potential for harmful and explosive fumes when wet).

Positive Impacts associated with the foundry:

- GeT Alloys will increase their market share and profitability. Not only will there be knock-on benefits for Get Alloys staff in terms of job and income security, and benefits to the owners of GeT Alloys, but the new plant will require the employment of potentially 50 new staff members.
- GeT Alloys provides a service to downstream production and construction industries. These are essential industries which support human activities.
- It can be argued that successful businesses in the Beaconvale industrial area, could attract additional investment into the area: businesses which provide goods and services to GeT Alloys, the scrap providers (companies and individuals), and construction-related businesses which use GeT Alloys' aluminium alloy and copper in their manufacturing and construction processes.
- An expanded and financially stable and profitable industry generates tax revenue for the government, which is an essential aspect of the economy.
- The metal recovery process has significant benefits in terms of the waste-to-value chain and diversion of waste from landfill and avoiding the impacts associated with mining and processing of virgin materials

1.2.	Activity alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.
------	--

Provide a description of the preferred activity alternative.

The expansion of a scrap aluminium foundry, and the introduction of scrap copper alloying, in order to meet increased market demand. See **Section E1** of this report.

Provide a description of any other activity alternatives investigated.

The applicant, Get Alloys, is part of the Get Group, an established scrap metal dealer with sites across the greater Cape Town metro. As such, Get Alloys is ideally positioned to analyse trends in market demand for beneficiated scrap metals.

The foundry is currently only an aluminium foundry. At the start of the development planning process, Get Alloys investigated expanding only the aluminium alloying capacity of the foundry. Based on their market research, however, a need for scrap copper processing was identified. Scrap copper processing was also identified as a financially viable and profitable option. Owing to the existing infrastructure at the foundry; the very similar nature of scrap copper and scrap aluminium processing; the ability to apply the same air emissions abatement technology to both processes; plus, the ideal location and developed nature of the foundry site, no impediments were identified to including copper processing into the development proposal.

Therefore, the development proposal was amended to include the processing of scrap copper as well as increasing the throughput capacity of the aluminium foundry.

Provide a motivation for the preferred activity alternative.

See above

Provide a detailed motivation if no activity alternatives exist.

See above

List the positive and negative impacts that the activity alternatives will have on the environment.

See **Section 1.1**

1.3.	Design or layout alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts
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Provide a description of the preferred design or layout alternative.

The development proposal as shown in the site layout plan in **Appendix B**, is the preferred development layout. Please note: this is not a detailed design drawing but shows the design and layout principles on which the plant will be expanded. Approval of the site layout plan should therefore factor in that changes within the specialist-recommended and best-practice parameters may need to occur during detailed design.

Provide a description of any other design or layout alternatives investigated.

No other design or layout alternatives were investigated. This is because the entire site has already been developed for the purposes of a foundry. The site is not especially large and so working within the confines of the existing buildings and yard areas proved to be the most operationally efficient means of proceeding, as well as the most cost effective.

Provide a motivation for the preferred design or layout alternative.

See above

Provide a detailed motivation if no design or layout alternatives exist.

The development layout shown in the site plan in **Appendix B** is preferred due to the restricted space available on Erf 23631 and Erf 12399, which is the only suitable site alternative as described already.

List the positive and negative impacts that the design alternatives will have on the environment.

– See **Section 1.1**

1.4. **Technology** alternatives (e.g., to reduce resource demand and increase resource use efficiency) to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.

Provide a description of the preferred technology alternative:

Introduction

The most significant potential impact of a foundry is from on ambient air quality due to air emissions.

Air emissions from combustion of fuel to heat the furnace; toxic pollutants from burning off the coatings on the scrap (typically mineral oils and paints); and particulate emissions from the melt and from the casting process, have the potential to adversely impact ambient air quality. Emissions from the foundry therefore need to be treated in some way in order to reduce pollutant concentrations to within statutory limits before discharge to atmosphere.

The statutory limits for pollutants associated with scrap aluminium recovery using a combustion-heated furnace, which are contained in the Minimum Emissions Standards published in terms of the Air Quality Act, are:

Table 1 Statutory pollutant concentration limits for scrap aluminium recovery

Pollutant	Emission concentration limit (mg/Nm³ under normal conditions of 273Kelvin and 101.3kPa)
Particulate matter (PM)	30
Sulphur dioxide (SO ₂)	500
Oxides of nitrogen (NO _x expressed as NO ₂)	50
Total fluorides measured as hydrogen fluoride (F as HF)	1
Total volatile organic compounds (TVOC)	40
Ammonia (NH ₃)	30

Consideration of emissions abatement technologies

Various technologies are available for emissions abatement. But not all technologies are suitable for a particular application, given the characteristics of the exit gases (heat, exit velocity, pollutant concentration, pollutant types) that need to be treated.

GeT Alloys' abatement system engineers considered such factors as:

- Whether the system is fit for purpose in terms of the foundry operating conditions
- Whether the system is efficient in treating scrap metal processing and melting emissions and can reduce pollutant concentrations to within statutory limits
- Affordability; and
- Availability of critical spares and maintenance support

Description of types of air emissions abatement systems

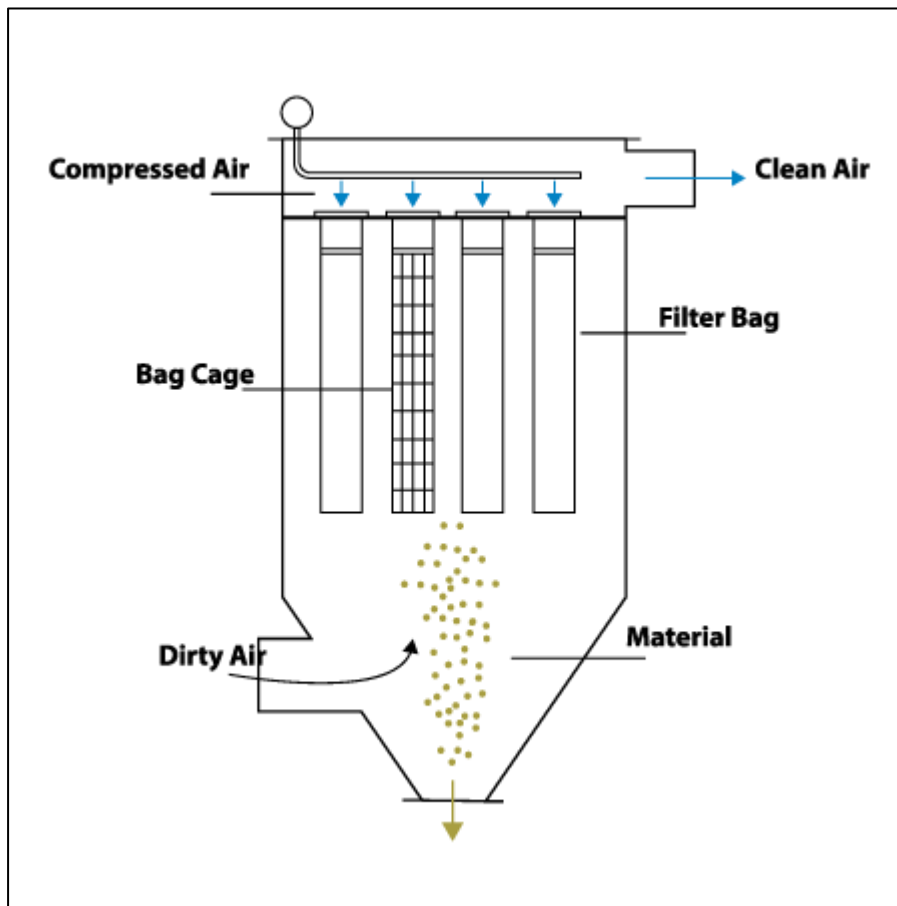
GeT Alloys' engineers investigated several different types of emission abatement technology that are suitable for the types of emissions discharged from the foundry, namely combustion emissions (PM, SO₂, NO_x, CO, etc.) and other emissions (TVOC's, NH₃, HF). A brief description of each technology type follows. All of the abatement systems work on the principle that pollutant-laden exhaust gas from the dryer is forced through the system by means of an extraction fan. The system then treats the emissions, removing the pollutant particles in the gas stream, before the gas exhausts via a stack, or chimney, to atmosphere.

Bag filter

A bag filter system comprises a chamber containing multiple fabric filters. Exhaust gas from the dryer is forced through the filters by means of a fan. Particulate in the gas clings to the outside of the filter bags, whilst the treated gas exhausts to atmosphere.

The particulate is removed from the exterior of the bags regularly and collected for disposal. Often, the bags are cleaned by means of a built-in shake-off or pulse system, whereby the bags vibrate and the particulate falls to a collector for disposal⁷.

Figure 2 Typical bag filter⁸



Cyclone filter

A cyclone filter comprises a chamber with a spiral formation, which moves the exhaust gas from the dryer in a spiral vortex. Heavier particles in the gas stream have more inertia and so are not as easily influenced by the vortex. These heavier particles fall out of the gas stream to the sides of the cyclone chamber and down to a collector box. The lighter (cleaned) gas is more easily influenced by the vortex, which carries the lighter air up and out of the cyclone to exhaust to atmosphere via a stack⁹.

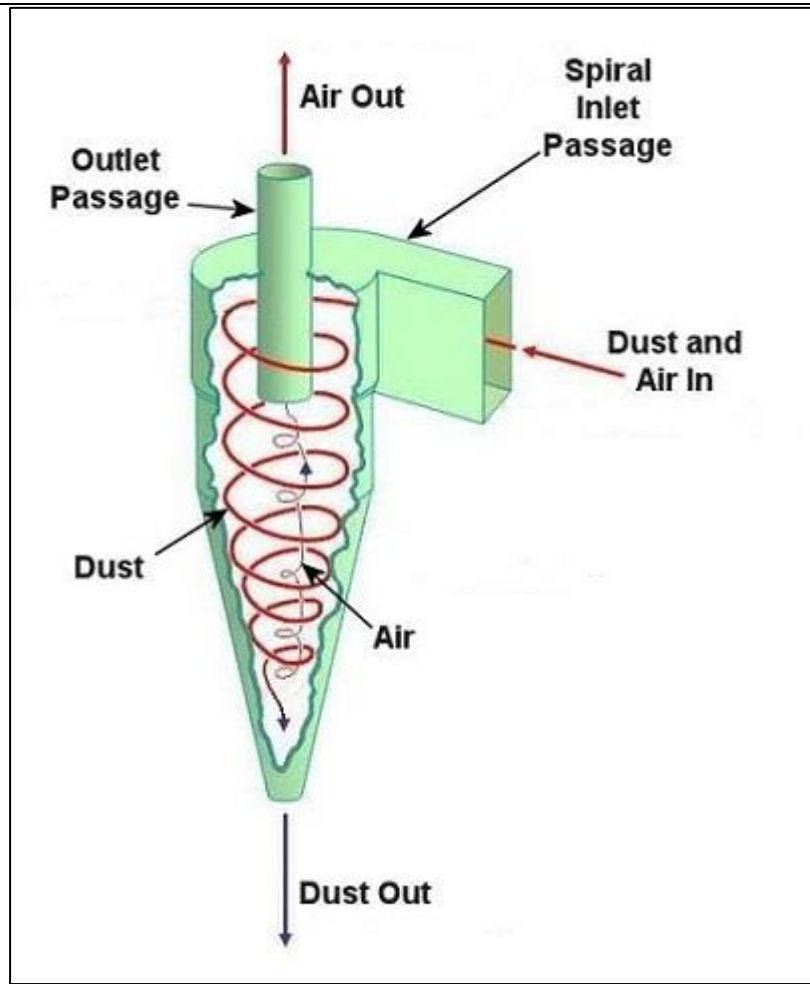
Figure 3 Typical cyclone filter¹⁰

⁷ <https://www.britannica.com/technology/air-pollution-control/Scrubbers#ref1084073>

⁸ <https://www.indiamart.com/proddetail/bag-house-dust-collectors-13919316173.html>

⁹ https://energyeducation.ca/encyclopedia/Cyclone_separator

¹⁰ <http://www.engineeringexpert.net/Engineering-Expert-Witness-Blog/industrial-ventilation-%E2%80%93-local-exhaust-ventilation-filters-and-air-cleaners-ii>



Settling box

A settling box or chamber is a simplistic system whereby pollutant-laden exhaust gas is directed through a chamber, which slows the velocity of the gas. At this slower velocity, particles are able to settle to the floor of the chamber via gravity¹¹.

Electrostatic precipitator

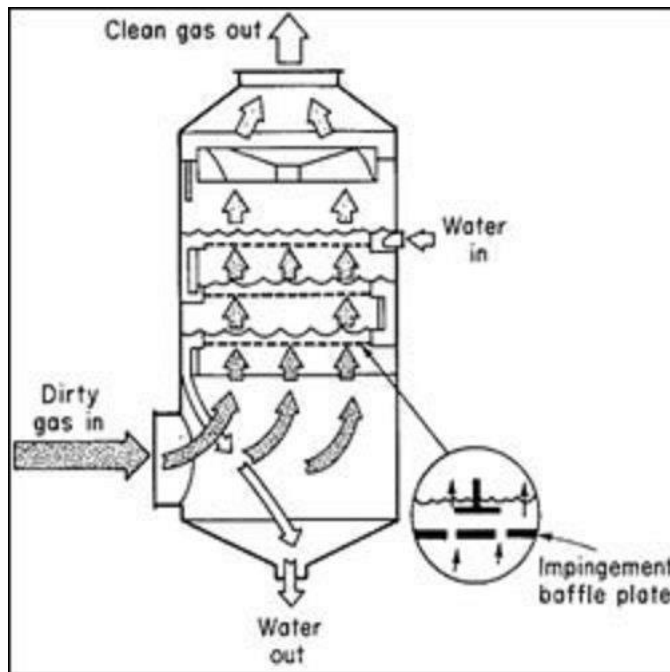
Electrostatic precipitators function by means of charging the particles in the gas stream, and then removing the charged particles by means of an electric field. The ESP unit comprises a chamber in which are discharge electrodes – to which current is applied in order to charge the particles. Then there are oppositely-charged collection electrodes in the chamber, to which the charged particles cling. The system also includes a dust collection system, and baffles for distributing airflow¹².

Wet scrubbers

A wet scrubber treats emissions through contact of the polluted gas stream with water or other liquids. Through contact, particles and gaseous pollutants become entrained in the solution and are thus removed from the gas stream. The scrubber solution is usually reused a number of times before being discharged as effluent to an appropriate effluent treatment system, or to sewer.

Figure 4 Typical wet impingement scrubber¹³

¹¹ <https://authors.library.caltech.edu/25069/9/AirPollution88-Ch7.pdf>
¹² <https://www.britannica.com/technology/air-pollution-control/Scrubbers#ref1084073>
¹³ <https://www.indiamart.com/proddetail/water-scrubber-8932167755.html>



Preferred abatement system included in development proposal

GeT Alloys' engineers have indicated that a bag filter system is considered to be the most efficient system for use in a foundry application. They have advised as follows with regards to the system included in the development proposal:

Hall Fume Extraction:

- Each furnace will have its own dedicated hood extraction system. Each of the hood extraction elements will feed to a central extraction manifold where this gas will serve as the primary flue gas cooling medium. The hood system will include an automated pneumatic valve system that will increase extraction velocity whenever a furnace door is opened.
- In addition to the individual furnace extraction hoods, there will also be an apex extraction system to ensure fumes that have escaped the hood system will be drawn out in the apex of the structure.

Flue Gas Extraction:

- Furnace flue gases will be consolidated and blended into the main extraction system. This blending ratio will ensure that gas temperatures entering the baghouse filter will be below 180 degrees centigrade this system will have the added advantage of ensuring optimal air fuel mixtures for the furnaces resulting in a cleaner burn.
- The primary extraction fans will be located between the baghouse filtration and the stack. This will ensure negative pressure throughout the extraction system and the filtration of all air prior to expulsion.
- A section of the large non lagged ducting will be reused to increase the dwell time of the consolidated Flue gases allowing further cooling prior to blending with the Hall Fume cooling gases.

System Capacities:

- The system will be capable of extracting 30,000 Nm³/h air per hour and will be upgradable in 15,000 Nm³/h increments.

Baghouse Filtration:

- This installation will call for two standard 15,000 Nm³/h baghouse units that will operate in parallel. Each of the baghouse units will be equipped with 81 filtration elements offering a total filtration area of 160 m² per unit.
- This system has been designed to ensure that there is air velocity of less than 1.3 metres per minute within the baghouse filtration chamber, which remains well below the permeability requirements for the filtration media.
- The system will be equipped with a reverse pulse bag cleaning system and hopper units for dust recovery.
- The filtration media will be Crosible Nomex with PTFE membrane

The Air quality impact assessment contained in **Appendix G**; states as follows with regards to the abatement system included in the development proposal:

"As per the planned Turnkey Modular air pollution control system design, all furnaces must be fitted with fume extraction, both from the furnaces itself and via hoods to capture fumes during charging and/or tapping. Fugitive emissions must furthermore be extracted from the foundry building roof at its apex as well as the dross recovery plant. The system design must ensure the PM concentration in the plume exiting the 30 m stack meets the MES of 30 mg/Nm³".

<p>With this proviso, and coupled with other recommended mitigation such as good housekeeping and weatherproofing of the dross cooling area, the AQIA found that the significance of the air quality impacts predicted for the expanded foundry, are of Low significance.</p> <p>Therefore the air emission abatement system as described above, has been included in the development proposal.</p>	
Provide a description of any other technology alternatives investigated.	
See above	
Provide a motivation for the preferred technology alternative.	
See above	
Provide a detailed motivation if no alternatives exist.	
See above	
List the positive and negative impacts that the technology alternatives will have on the environment.	
<ul style="list-style-type: none"> - Impacts on ambient air quality associated with the foundry expansion, including implementation of the preferred technology alternative for emissions abatement, has been found to be of Low significance. 	
1.5.	Operational alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.
Provide a description of the preferred operational alternative.	
<p>With a heavy industrial activity such as a foundry, correct operating procedures are critical for the prevention of health, safety and environmental impacts. Preventative maintenance of key infrastructure is similarly critical to avoid injury and excessive pollution due to equipment and infrastructure failure.</p> <p>As such, the operational-phase Environmental Management Programme has specified that the following should be in place during the operational phase of the foundry expansion. For the prevention and minimisation of identified risks, it is not considered reasonable or feasible to operate the foundry in any other manner:</p> <ul style="list-style-type: none"> - Standard Operating Procedures and Preventative Maintenance Plans for prevention of contamination, together with appropriate design of the dross and fuel storage infrastructure, must be compiled by the applicant and implemented. These should be incorporated into the Operational Phase Environmental Management Programme. - The applicant should compile Standard Operating Procedures for all aspects of the operation where significant health and safety risks are attendant, including a Dross Management Procedure to ensure adequate ventilation of dross-handling areas, weatherproofing of dross handling areas, etc. The Dross Management Procedure should address all hazards and risks identified in available Material Safety Data Sheets for dross. Please see the Fugitive Emissions Management Plan attached in Appendix H, which has been compiled for the current foundry operation and which includes a Dross Management Procedure which aligns with the recent upgrades to the recovery process. - Get Alloys will need to prepare standard operating procedures for the various foundry processes (e.g., furnace charging, tapping, casting, dross handling and storage), as well as prepare preventative maintenance plans for all infrastructure associated with the foundry activities, in order to ensure that best-practice health and safety measures are implemented, and that infrastructure does not become derelict and unsafe to operate. These should be incorporated into the Operational Phase Environmental Management Programme. <p>Similarly, the following air quality specialist-recommended mitigation measures for operating the foundry, have been included in the operational-phase EMPr. It is not considered to be reasonable or feasible to operate the foundry in any other manner:</p> <ul style="list-style-type: none"> - Good housekeeping, e.g., avoiding and cleaning up spillages of fine materials such as baghouse dust and dross. - Keep vehicle driveways clean and free of dust to avoid entrainment. - Avoid unnecessary handling of dry fine materials such as dross as it is removed from the foundry to the cooling bay to the recovery plant. - Ensure cooling dross stockpiles are not exposed to wind to avoid windblown dust. - Fugitive ammonia emissions must be avoided by keeping dross dry i.e., covered within the cooling bay dross recovery building. - To reduce vehicle exhaust emissions, avoid unnecessary idling of vehicles on-site. 	
Provide a description of any other operational alternatives investigated.	
See above	
Provide a motivation for the preferred operational alternative.	
<ul style="list-style-type: none"> - See above 	
Provide a detailed motivation if no alternatives exist.	
See above	
List the positive and negative impacts that the operational alternatives will have on the environment.	
<ul style="list-style-type: none"> - See Section H 1.1 	

1.6.	The option of not implementing the activity (the 'No-Go' Option).
Provide an explanation as to why the 'No-Go' Option is not preferred.	
<p>The No-Go Option is the alternative of not proceeding with the development, in this case the expansion of the foundry operating on Erf 23631 and 12399. The No-Go Option includes Erf 23631 and 12399 remaining in its current state – a foundry without any expansion of production capability.</p>	
<p><u>Negative impacts associated with the No-Go Option</u></p>	
<ul style="list-style-type: none"> - From the investigation of the need and desirability of the development that has been undertaken in Appendix K, the No-Go Option does not support the regional planning imperatives for the Beaconvale and greater Tygerberg area in terms of investment in Parow. - The No-Go Option could curtail the profitability and therefore financial stability of GeT Alloys. - The No-Go Option does not represent jobs and associated income, to the benefit of the surrounding Parow community. - There is market demand from the construction and manufacturing sectors for GeT Alloys' product, namely recycled aluminium alloy and copper. The No-Go Option would mean that necessary support for these sectors would be limited. - The South African scrap aluminium recovery industry would not receive much-needed investment and growth with the establishment of a technologically-advanced, larger-scale foundry. The scrap could potentially need to be transported to other countries for processing. - Increased pressure on the aluminium industry for the continued mining of aluminium at the detriment of the environment and natural stocks. - The No-Go Option represents less contribution to the waste-to-value sector and less diversion of scrap from landfill, relative to the expanded foundry included in the development proposal. 	
<p><u>Benefits associated with the No-Go Option</u></p>	
<ul style="list-style-type: none"> - The additional air emissions and possible fugitive dust emissions associated with the proposed foundry expansion would not occur associated with the No-Go Option. - The proposed development design, including appropriate process and abatement technology, as well as dust control measures, however, are expected to reduce emissions to within statutory and therefore acceptable limits. This benefit is not considered significant enough to warrant not expanding the plant. The results of Air Quality Impact Assessment support this finding. - The identified health and safety risks associated with operating a larger-scale foundry would not occur. <p>But these impacts can be readily avoided with standard, best-practice measures and adherence to statutory requirements contained in the Occupational Health and Safety Act. This benefit is therefore not considered significant enough to warrant not expanding the foundry.</p> <ul style="list-style-type: none"> - The risk of contamination due to dross and fuel handling, would not increase proportional to the larger scale of the expanded foundry. 	
<p>According to the Need and Desirability assessment and Site Sensitivity Verification Report, however, there are no nearby freshwater and vegetation features which could be negatively impacted by the larger-scale foundry. And with implementation of industry best-practice design measures for the dross and fuel storage and handling infrastructure, as well as best-practice operating procedures, the risk of contamination to soil, groundwater and the stormwater system can readily be minimized to acceptable levels. This benefit is therefore not considered significant enough to warrant not expanding the foundry.</p>	
1.7.	Provide an explanation as to whether any other alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist.
<p>Process alternatives:</p>	
<p>The scrap aluminium melting process entails the production of dross as a by-product. The Get Alloys proposal includes a dross recovery plant, which will extract about 10 - 15 % of the residual aluminium content in the dross once it is removed from the furnaces. The recovered aluminium is returned as feedstock to the alloying process.</p>	
<p>This represents a cost savings for Get Alloys, as well as having such materials- and waste management benefits as: reducing the bulk of the dross that is transported elsewhere for further recovery, thereby reducing transport costs and associated transport emissions; and providing an on-site feedstock, thereby reducing to a small extent, feedstock transportation costs and associated emissions.</p>	
<p>Owing to these benefits, the development proposal includes a dross recovery step.</p>	
1.8.	Provide a concluding statement indicating the preferred alternatives, including the preferred location of the activity.
<p>The development proposal as described in Section E1 and shown in the site development plan in Appendix B, is for the expansion of the current scrap aluminium and copper foundries on both Erf 12399 and Erf 23631.</p>	

The development proposal that is being put forward is anticipated to be a low-impact proposal with the implementation of best practice technologies, basic fugitive dust control design measures, and operational-phase management procedures. This is due to the following investigations that have been undertaken by the development planning team in formulating the proposal:

- 1) The investigation of whether Erf 23631 and 12399 in Beaconvale is appropriate for a potentially-noxious activity such as scrap aluminium and copper recycling, which is a heavy industrial activity with associated noise, combustion emissions dust emissions and heavy vehicle traffic for raw material and metal transportation to and from site.
- 2) The investigation of the negative impacts and benefits of expanding GeT Alloys' foundry operation and their operational processes.
- 3) The investigation of whether to include scrap copper processing in the development proposal; and whether to include aluminium dross recovery in the proposal.
- 4) The investigation of alternative emissions abatement technologies which can reduce pollutant emissions to within statutory limits.

In summary, then, the development proposal going forward is as follows:

- A foundry expansion that will enable GeT Alloys to expand their operation in response to market demand: 1750 tonnes per month of aluminium alloy will be produced from about 2100 tonnes per month of scrap; and 250 tonnes per month of copper will be produced from about 300 tonnes per month of copper scrap. The expanded foundry will include four melting furnaces: one 5 – tonne and three 8-tonne furnaces. Each 8-tonne furnace will operate in tandem with a 10-tonne holding furnace from which the melt is poured and cast. Copper alloy will be produced using either one 2.5-tonne or two 1-tonne box type furnaces. All furnaces will be fuel-oil fired.
- The operation will include aluminium dross recovery.
- The plant will be situated on General Industrial 1-zoned Erf 23631 and 12399, Glenhurst Street, Beaconvale Industrial area.
- The emissions abatement technology will be purpose-designed a bag filter system with localised as well as roof apex extraction, as described in **Section E1**.

In summary, the development proposal, site and layout have been informed by market demand for scrap aluminium and copper processing facilities; by the suitability of Erf 12399 and Erf 23631 to accommodate the plant expansion; by the lack of sensitive environmental aspects that could be adversely impacted by the plant expansion; and by specialist-recommendations and industry best-practice for minimising disturbance and wellbeing, health and safety and environmental impacts associated with the plant expansion.

The development proposal is therefore the preferred alternative for this application.

2. "No-Go" areas

Explain what "no-go" area(s) have been identified during identification of the alternatives and provide the co-ordinates of the "no-go" area(s).

No "no-go" areas have been identified: the expansion site is fully transformed and developed as a foundry already.

3. Methodology to determine the significance ratings of the potential environmental impacts and risks associated with the alternatives.

Describe the methodology to be used in determining and ranking the nature, significance, consequences, extent, duration of the potential environmental impacts and risks associated with the proposed activity or development and alternatives, the degree to which the impact or risk can be reversed and the degree to which the impact and risk may cause irreplaceable loss of resources.

Enviroprac impact assessment methodology:

Introduction

The assessment of the significance of predicted impacts associated with the aluminium and copper scrap plant expansion is based on the Department of the Environment, Forestry and Fisheries' 1998 *Guideline on the Implementation of Sections 21, 22 & 26 of ECA*; on the DEFF's 2006 *Guideline on Assessing Impacts & Alternatives*; on the DEA&DP's 2005 *Guideline for Involving Biodiversity Specialists in EIA*; and on T Hacking's 1998 IAIA SA Conference Paper, *An Innovative Approach to Structuring EIA Reports*.

The impact assessment is based on specialist input where required, as well as on the EAP's research as required, and past experience and professional judgement.

Nature of impact

The source of a potential impact needs to be clearly defined, as well as what particular aspect of the receiving environment would be impacted. The nature of the impact should also include whether the impact is positive or negative; to what degree

the impact is reversible; during which phase of the development life cycle the impact will occur; and whether the impact is direct or indirect; and whether the impact is cumulative:

Table 2 Nature of impact

Nature of impact	
Source	Particular aspect of the development proposal that could give rise to the impact.
Aspect of environment impacted	<ul style="list-style-type: none"> ▪ Socio-economic ▪ Biophysical (freshwater, geohydrological, botanical, etc.) ▪ Heritage & cultural – historical ▪ Visual & landscape ▪ Ambient noise levels ▪ Ambient air quality
Positive	An aspect of the receiving environment benefits.
Negative	An aspect of the receiving environment is adversely affected.
Degree of reversibility	The possibility or difficulty or impossibility of returning the affected aspect of the environment to its original state after an impact has occurred -either with or without human intervention.
Lifecycle phase in which impact will occur	<ul style="list-style-type: none"> ▪ Planning and design phase* ▪ Construction phase ▪ Operational phase ▪ Decommissioning phase <p>*It should be noted that impacts can arise during the construction and operational phases if the planning and design of the development does not adequately factor in required impact mitigation and management</p>
Intermittent or continuous; immediate or delayed	An indication should be given of whether the impact will only occur intermittently; and whether the impact will be experienced immediately or on a delayed basis.
Direct	The impact is a direct result of development activities.
Indirect	Downstream, secondary or "knock-on" impacts resulting from a direct impact.
Cumulative	A cumulative impact adds to similar impacts already experienced in the receiving environment.

Parameters used to predict impact significance

In the methodology used here, impact significance is a function of consequence and probability of occurrence, where consequence considers the duration, spatial extent and magnitude (or severity or intensity) of the identified impact.

The following rankings have been used for the parameters which factor into determining **consequence**:

Table 3 Parameters used to determine consequence

Consequence			
Parameter	Ranking		
	Low	Medium	High
Spatial extent	Localised Within site boundary Site	Fairly widespread Beyond site boundary Local	Widespread Far beyond site boundary Regional/national
Duration	Quickly reversible Less than the project life Short-term	Reversible over time Life of the project Medium-term	Permanent Beyond closure Long-term
Magnitude (or severity or intensity): negative	Minor deterioration. Nuisance or minor irritation. Where the impact affects the environment in such a way that natural, cultural and social functions and processes are not affected.	Moderate deterioration. Discomfort. Where the affected environment is altered by natural, cultural and social functions and processes continue albeit in a modified way.	Substantial deterioration. Death, illness or injury. Where natural, cultural or social functions or processes are altered to the extent that it will temporarily or permanently cease.
Magnitude (or severity or intensity): positive	Minor improvement.	Moderate improvement.	Substantial / significant improvement.

Once the parameters that determine an impact consequence have been ranked, the overall consequence of impacts can be determined as follows (from Hacking):

Table4 Overall consequence of impacts

Magnitude (or intensity or severity): Low
--

Duration	High			
	Medium			
	Low			
Severity/intensity		Low	Medium	High
Spatial Extent				

Magnitude (or intensity or severity): Medium

Duration	High			
	Medium			
	Low			
Severity/intensity		Low	Medium	High
Spatial Extent				

Magnitude (or intensity or severity): High

Duration	High			
	Medium			
	Low			
Severity/intensity		Low	Medium	High
Spatial Extent				

The probability of an impact occurring is ranked as follows:

Table 5 Probability rankings

Probability	
Improbable	Where the possibility of the impact to materialise is very low either because of design or historic experience;
Probable	Where there is a distinct possibility that the impact will occur
Definite	Where the impact will occur regardless of any prevention measures.

Methodology for predicting impact significance

In the methodology used, predicted impact significance is a function of the impact consequence considered together with the probability of the impact occurring. Impact significance is ranked as follows:

Table 6 Impact significance ranking

Impact significance	
Low	Will never exceed legislation or standards. Unlikely to cause significant negative impacts. Where it will not have an influence on the decision.
Medium	Has characteristics that could cause negative impacts. Where it should have an influence on the decision unless it is mitigated.
High	Will always/often exceed legislation or standards. Has characteristics that could cause significant negative impacts. Where it would influence the decision regardless of any possible mitigation.

Impact significance, as a function of consequence and probability, is determined as follows:

Table 7 Determination of impact significance

Probability	Definite			
	Probable			
	Unlikely			
		Low	Medium	High
Consequence				

Degree of confidence

When predicting environmental impacts, the level of confidence of the practitioner in making the prediction should be provided. Confidence can be affected by the availability and quality of data and any assumptions that need to be made. Confidence is ranked as follows:

Table 8 Confidence ranking

Degree of confidence	
Low	Where there is little confidence in the prediction, due to inherent uncertainty about the likely response of the receiving environment, or inadequate information.
Medium	Where there is a moderate level of confidence in the prediction.
High	Where the impact can be predicted with a high level of confidence.

Mitigation hierarchy

Once impacts have been identified associated with a development proposal, any significant negative impacts need to be mitigated in such a way as to reduce these impacts to acceptable levels.

The hierarchy of mitigation should be as follows, in order of priority:

Table 9 Mitigation hierarchy

Mitigation hierarchy	
1	Avoiding or preventing the impact.
2	Mitigating (reducing or minimizing) negative impacts and enhancing (maximising) benefits, by considering alternatives.
3	Rectifying negative impacts by restoring the affected environment to its previous condition, or rehabilitating it for a different land use.
4	Providing an offset to compensate for the residual negative impact, to ensure that there is 'no net loss' of ecosystem resources / environmental attributes.

It can be noted that both avoiding and minimising negative impacts, should be factored into the consideration by the proponent of alternative means of achieving the development goals. In this way, the development proposal put before the authorities for their decision-making purposes, should have the minimum possible residual (i.e. after-mitigation) impacts on the environment.

The investigation of alternatives that was undertaken during the development planning process, as far as possible considered avoiding and minimising adverse impacts associated with the aluminium and copper foundry expansion. **Section H1** provides more detail on the investigation of alternatives in order to determine a low impact development proposal.

4. Assessment of each impact and risk identified for each alternative

Note: The following table serves as a guide for summarising each alternative. The table should be repeated for each alternative to ensure a comparative assessment.

Please see Appendix K

I. Section I: FINDINGS, IMPACT MANAGEMENT AND MITIGATION MEASURES

1.	Provide a summary of the findings and impact management measures identified by all Specialist and an indication of how these findings and recommendations have influenced the proposed development.
Please see Section J (1.1) for specialist-recommended mitigation measures.	
2.	List the impact management measures that were identified by all Specialist [and the EAP, based on industry best practice] that will be included in the EMPr
See Section J (2.3)	
3.	List the specialist investigations and the impact management measures that will not be implemented and provide an explanation as to why these measures will not be implemented.
None.	
4.	Explain how the proposed development will impact the surrounding communities.
The following impacts identified, described and assessed in this report, will be experienced by the surrounding communities:	
<ul style="list-style-type: none"> - Ambient air quality impacts – low - Traffic – low - Soil and groundwater contamination – low - Health and safety – low - Noise – low - Waste management – low 	
5.	Explain how the risk of climate change may influence the proposed activity or development and how has the potential impacts of climate change been considered and addressed.
<ul style="list-style-type: none"> - The development site is not sensitive to sea level rise, being situated in an inland city. - The expanded foundry is a waste-to-value industry, therefore contributing to the region's climate resilience. 	

6.	Explain whether there are any conflicting recommendations between the specialists. If so, explain how these have been addressed and resolved.
None	
7.	Explain how the findings and recommendations of the different specialist studies have been integrated to inform the most appropriate mitigation measures that should be implemented to manage the potential impacts of the proposed activity or development.
All specialist-recommended mitigation measures have been included in the development proposal (technology, design and layout) and in the EMPr. Specialist findings have also determined that there are no constraints to expanding the aluminium, and copper foundry on Erf 23631 and 12399 in the manner described in the development proposal.	
8.	Explain how the mitigation hierarchy has been applied to arrive at the best practicable environmental option.
The fully-developed foundry site, situated in an industrial area, avoids sensitive natural areas, sensitive heritage areas, and areas that are not appropriate for industrial development in terms of land use precedent and land use planning. Risk of fire and explosion and other health and safety impacts, as well as risk of soil and groundwater contamination, are minimised by the inclusion of industry best practice and mandatory design measures for the fuel storage, dross storage and handling infrastructure in the development proposal. Rectification and offsetting are not required for this application.	

J. SECTION J: GENERAL

1. Environmental Impact Statement

1.1.	Provide a summary of the key findings of the EIA.
<p><u>Summary of Key Findings of the EIA</u></p> <p>The development proposal (including the technology, site, process and activity alternatives that were found on investigation to be the best practicable options for the minimisation of health, safety, and environmental impacts) was assessed against the no-go option, or the option of not expanding the foundry on Erf 23631 and Erf 12399.</p> <p>The impacts which were identified as associated with the proposed plant expansion are:</p> <p>OPERATIONAL PHASE IMPACTS</p> <p>1. Potential risk of soil, groundwater, and surface water contamination (Indirect)</p> <p>Handling and storage of hydrocarbons, as well as fuel and refuelling activities to be done in accordance with standard operating procedures will result in a Low significance impact with mitigation.</p> <p>2. Impacts on air quality / pollutants</p> <p>Increased particulate matter and gaseous emissions may occur from aluminium scrap pre-heating and oil-fired furnaces, resulting in poor ambient air quality. At sufficiently high concentrations, these pollutants may result in potential health, nuisance, dust, and odour impacts without mitigation. Regional air quality may be negatively affected as a result of the cumulative impacts associated with these emissions. This may lead to a potentially more widespread negative impact for residents within proximity to the facility. A Low significance impact is expected with mitigation.</p> <p>3. Increase traffic and congestion – nuisance</p> <p>The foundry will have associated additional trucks on the road, transporting scrap aluminium and copper to the plant while also transporting alloy to customers. This will add to the cumulative impacts associated with the movement of heavy vehicles within the industrial area and localised surrounds. Effects are likely to only be felt on a localised level and in keeping with the design capacity of the surrounding road network. Low significance impacts are predicted.</p> <p>4. Adverse occupational health effects on staff due to significant levels and periods of exposure</p> <p>The foundry has significant associated risks in terms of health and safety of workers (working with extreme temperature machinery and molten metal; furnace emissions in the workplace; handling hazardous dross (corrosive; skin and lung irritant; potential for harmful and explosive fumes when wet). The facility needs to be designed and operated in such a way as to effectively avoid and manage health and safety risks.</p> <p>Get Alloys will need to prepare standard operating procedures for the various foundry processes (e.g., furnace charging, tapping, casting, dross handling and storage), as well as prepare preventative maintenance plans for all infrastructure associated with the foundry activities, in order to ensure that best-practice health and safety measures are implemented, and that infrastructure does not become derelict and unsafe to operate. With the implementation of mitigation, the impact is expected to be of Low significance.</p>	

5. Noise resulting in nuisance factors / potential complaints

Potential noise impact related to the operation of the facility. This may be significant at start up and shut down procedures but is compatible with the existing land use planning objectives for the property (zoned for industrial use).

6. Waste impacts

The operation of the foundry will generate small quantities of general waste such as office and some kitchen waste. This will be disposed of in the municipal waste stream [normal solid waste collection services as provided by the Municipality in the area].

The dross that remains after 10 -15% aluminium recovery (the recovery process also includes separating out of steel and magnetic metals from the dross for resale) is disposed of to landfill. With the dross recovery process and with implementation of best practice waste management methods, the impact is expected to be of **Low** significance.

7. Socio-economic benefits

The components making up the socio-economic benefits are highlighted below – the result of the associated impacts is expected to have a **Medium positive** impact.

8. Socio-economic (employment opportunities)

GeT Alloys will increase their market share and profitability. Not only will there be knock-on benefits for GeT Alloys' staff in terms of job and income security, and benefits to the owners of GeT Alloys, but the new plant will require the employment of potentially 50 new staff members.

9. Socio-economic (contribution to capital investment)

GeT Alloys provides a service to downstream production and construction industries. These are essential industries which support human activities.

It can be argued that successful businesses in the Beaconvale industrial area, could attract additional investment into the area: businesses which provide goods and services to GeT Alloys, the scrap providers (companies and individuals), and construction-related businesses which use GeT Alloys' aluminium alloy and copper in their manufacturing and construction processes.

10. Socio-economic (contribution to the economy)

An expanded and financially stable and profitable industry generates tax revenue for the government, which is an essential aspect of the economy.

11. Impact on natural resources (positive) - contribution to green economy and national waste diversion from landfill objectives and targets

The operation of the facility will result in a positive impact on the use of natural resources:

Both aluminium and copper are non-renewable / finite natural resources. The proposed development thus addresses this through the smelting and moulding of scrap aluminium and copper, thereby reducing the demand for mining of these metals. Recovering aluminium and copper from scrap is commonly known to have a smaller carbon footprint and to be less energy intensive than mining these virgin ores.

In addition, scrap metal will be diverted from landfill, thereby saving on scarce landfill airspace. The foundry will therefore have environmental benefits.

Also, the furnaces to be installed shall use fossil fuel, such as low sulphur oil (LSO). The consideration of replacing hydrocarbon furnace oil with a biofuel, provided that the quality, performance, competitive costs, and security of supply can be assured, has been assured by the Applicant.

A summary of the findings of the impact assessment is contained in **Table 10** below. It has been found that any negative impacts associated with expanding and operating the existing foundry can be avoided altogether or can be reduced to acceptable levels through appropriate mitigation. All of the negative impacts are of **Low** significance.

The identified benefits associated with the proposed foundry were found to be of **Medium benefit** during the operational phase.

The activity proposal has been assessed against the no-go option, which is the option to not expand the existing foundry. The no-go option has thus provided a baseline against which to assess the benefits and drawbacks of the proposed expansion.

With the no-go option, no benefits of sufficient significance were identified to warrant not expanding the foundry.

However, the no-go option has the drawback of constraining GeT Alloy's service offering to the construction industry, as well as their profitability. The no-go option also represents the loss of potential investment, income, job opportunities and service to downstream industries, which could be realised with the expansion of the existing facility.

1.2.	Provide a map that that superimposes the preferred activity and its associated structures and infrastructure on the environmental sensitivities of the preferred site indicating any areas that should be avoided, including buffers. (Attach map to this BAR as Appendix B2)
	See Appendix B .
1.3.	Provide a summary of the positive and negative impacts and risks that the proposed activity or development and alternatives will have on the environment and community.

Table 10: Summary of Operational Phase Impacts Associated with the Plant Expansion

Impact	Before mitigation	After mitigation
Ambient air quality	Medium (-ve)	Low (-ve)
Traffic	Low (-ve)	Low (-ve)
Soil and groundwater contamination	Medium (-ve)	Low (-ve)
Health and safety risk	High (-ve)	Low (-ve)
Noise	Medium (-ve)	Low (-ve)
Waste management	Medium (-ve)	Low (-ve)
Socio-economic benefits	Medium (+ve)	

2. Recommendation of the Environmental Assessment Practitioner (“EAP”)

2.1.	Provide Impact management outcomes (based on the assessment and where applicable, specialist assessments) for the proposed activity or development for inclusion in the EMPr
	<ul style="list-style-type: none"> – Minimise adverse impacts on ambient air quality. – Avoid health and safety impacts associated with a heavy industrial activity such as a foundry (high-temperature processes, heavy equipment and machinery, handling molten metals, handling hazardous dross, etc.). – Avoid and minimise soil and groundwater contamination associated with fuel and hazchems storage and handling. – Manage waste (such as hazardous dross) in a lawful and low-impact manner.
2.2.	Provide a description of any aspects that were conditional to the findings of the assessment either by the EAP or specialist that must be included as conditions of the authorisation.
	None
2.3.	Provide a reasoned opinion as to whether the proposed activity or development should or should not be authorised, and if the opinion is that it should be authorised, any conditions that should be included in the authorisation.
	<p>The Environmental Practice recommends that the proposed expansion of an aluminium and copper foundry on Erf 23631 and Erf 12399 should be authorized. This recommendation is based on the outcome of the impact assessment process, which has been informed by Enviroprac’s professional experience in environmental management as well as on specialist input and detailed process information provided by the Applicant.</p> <p>The facility should be designed and operated with the implementation of all the mitigation measures recommended by the specialists and EAP. All of these measures are contained in the EMPr, which is attached as Annexure H The implementation of the EMPr should therefore be the condition of the environmental authorisation.</p> <p>Once the foundry has been expanded, all ongoing emissions monitoring and other ongoing management measures contained in the EMPr should be reported on to DEA&DP and to the City’s Air Quality branch by the applicant on a basis reflected in the environmental authorisation. On a five-yearly basis, the facility should be audited against the conditions of the EMPr by an independent Environmental Control Officer (ECO). These audit reports should be submitted to the DEA&DP for their record-keeping purposes.</p> <p>These recommendations for monitoring and auditing of operations against the EMPr are contained in the EMPr and should therefore be a condition of authorisation.</p>
2.4.	Provide a description of any assumptions, uncertainties and gaps in knowledge that relate to the assessment and mitigation measures proposed.
	<ul style="list-style-type: none"> – The following uncertainties, assumptions and gaps in knowledge pertain to this impact assessment: – It has been assumed that the specialist findings are accurate and impartial; that mapping data from sources including Google Earth and the Council for Geosciences is accurate, and that information on all aspects of the proposed a new aluminium alloy and copper scrap foundry provided by the applicant is accurate. – Besides the above, there are no assumptions, uncertainties or gaps in knowledge that are material to this application.
2.5.	The period for which the EA is required, the date the activity will be concluded and when the post construction monitoring requirements should be finalised.
	<p>The application is for a facility expansion where impacts are experienced during the operational phase. The EA should therefore be valid for the lifetime of the foundry operation.</p> <p>Expansion activities should be completed within 5 years of issuing the EA.</p> <p>Post-construction (expansion) monitoring can then be finalised within 8 months of the expansion.</p>

3. Water

Since the Western Cape is a water scarce area explain what measures will be implemented to avoid the use of potable water during the development and operational phase and what measures will be implemented to reduce your water demand, save water and measures to reuse or recycle water.

Groundwater is extracted at the rate of $\pm 10\,000$ litres per month and is used for cooling the moulds. The water is continuously re-used in a closed-loop system and water is only lost to evaporation.

4. Waste

Explain what measures have been taken to reduce, reuse or recycle waste.

- The activity itself is a general waste (scrap metal) recovery activity
- A significant waste stream associated with the recovery of aluminium is the substance dross. Aluminium is recovered from dross by a cold process at a 10% to 15% recovery rate.

5. Energy Efficiency

8.1. Explain what design measures have been taken to ensure that the development proposal will be energy efficient.

The new furnaces will be fuel powered and so the additional electricity needed to power fans, etc. is not expected to be significant at all. In terms of fuel efficiency, the new furnaces will be the most modern technology available and therefore as fuel efficient as possible.

K. SECTION K: DECLARATIONS

DECLARATION OF THE APPLICANT

Please see end of document

I, **Ebrahim Khan**, ID numberin my personal capacity or duly authorised thereto hereby declare/affirm that all the information submitted or to be submitted as part of this application form is true and correct, and that:

- I am fully aware of my responsibilities in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"), the Environmental Impact Assessment ("EIA") Regulations, and any relevant Specific Environmental Management Act and that failure to comply with these requirements may constitute an offence in terms of relevant environmental legislation;
- I am aware of my general duty of care in terms of Section 28 of the NEMA;
- I am aware that it is an offence in terms of Section 24F of the NEMA should I commence with a listed activity prior to obtaining an Environmental Authorisation;
- I appointed the Environmental Assessment Practitioner ("EAP") (if not exempted from this requirement) which:
 - meets all the requirements in terms of Regulation 13 of the NEMA EIA Regulations; or
 - meets all the requirements other than the requirement to be independent in terms of Regulation 13 of the NEMA EIA Regulations, but a review EAP has been appointed who does meet all the requirements of Regulation 13 of the NEMA EIA Regulations;
- I will provide the EAP and any specialist, where applicable, and the Competent Authority with access to all information at my disposal that is relevant to the application;
- I will be responsible for the costs incurred in complying with the NEMA EIA Regulations and other environmental legislation including but not limited to –
 - costs incurred for the appointment of the EAP or any legitimately person contracted by the EAP;
 - costs in respect of any fee prescribed by the Minister or MEC in respect of the NEMA EIA Regulations;
 - Legitimate costs in respect of specialist(s) reviews; and
 - the provision of security to ensure compliance with applicable management and mitigation measures;
- I am responsible for complying with conditions that may be attached to any decision(s) issued by the Competent Authority, hereby indemnify, the government of the Republic, the Competent Authority and all its officers, agents and employees, from any liability arising out of the content of any report, any procedure or any action for which I or the EAP is responsible in terms of the NEMA EIA Regulations and any Specific Environmental Management Act.

Note: If acting in a representative capacity, a certified copy of the resolution or power of attorney must be attached.

Signature of the Applicant:

Date:

GeT Alloys (Pty) Ltd

Name of company (if applicable):

DECLARATION OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER ("EAP")

I, **Colleen McCreadie**, EAPASA Registration number **2018/166** as the appointed EAP hereby declare/affirm the correctness of the:

- Information provided in this BAR and any other documents/reports submitted in support of this BAR;
- The inclusion of comments and inputs from stakeholders and I&APs;
- The inclusion of inputs and recommendations from the specialist reports where relevant; and
- Any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested and affected parties, and that:
- In terms of the general requirement to be independent:
 - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the activity or application and that there are no circumstances that may compromise my objectivity; or
 - am not independent, but another EAP that meets the general requirements set out in Regulation 13 of NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review EAP must be submitted);
- In terms of the remainder of the general requirements for an EAP, am fully aware of and meet all of the requirements and that failure to comply with any the requirements may result in disqualification;
- I have disclosed, to the Applicant, the specialist (if any), the Competent Authority and registered interested and affected parties, all material information that have or may have the potential to influence the decision of the Competent Authority or the objectivity of any report, plan or document prepared or to be prepared as part of this application;
- I have ensured that information containing all relevant facts in respect of the application was distributed or was made available to registered interested and affected parties and that participation will be facilitated in such a manner that all interested and affected parties were provided with a reasonable opportunity to participate and to provide comments;
- I have ensured that the comments of all interested and affected parties were considered, recorded, responded to and submitted to the Competent Authority in respect of this application;
- I have ensured the inclusion of inputs and recommendations from the specialist reports in respect of the application, where relevant;
- I have kept a register of all interested and affected parties that participated in the public participation process; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations;



10 May 2022

Signature of the EAP:

Date:

The Environmental Practice (Pty) Ltd

Name of company (if applicable):

DECLARATION OF THE SPECIALIST – SEE DECLARATION IN ATMOSPHERIC IMPACT REPORT ATTACHED