



environmental affairs

Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

**RISK MANAGEMENT PLAN IN TERMS OF REGULATION 10 OF
WASTE EXCLUSION REGULATIONS**

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| APPLICANT | Assmang (Pty) Ltd | | |
| SOURCE (S) OF WASTE | Smelting of Manganese Ore | | |
| WASTE TO BE BENEFICIATED | Slag | | |
| BENEFICIAL USE/S | Aggregate Replacement | | |
| HAZARDOUS? | <input checked="" type="checkbox"/> | NO | The slag is not deemed to be hazardous |
| WASTE GENERATING FACILITY | Assmang | | |
| PHYSICAL ADDRESS | Eddie Hagan Drive | | |
| | Cato Ridge | | |
| GPS CO-ORDINATES OF WASTE GENERATING FACILITY | 29°42'16.55"S | | |
| | 30°36'55.92"E | | |
| | 29°42'25.51"S | | |
| | 30°37'08.34"E | | |
| | 29°43'20.72"S | | |
| | 30°36'24.07"E | | |
| | 29°43'23.92"S | | |
| | 30°36'40.55"E | | |

RISK MANAGEMENT PLAN

| Activity | Risk Description | Action(s) to minimise/ manage the risk | Responsibility (Who is responsible to carry out the action) |
|---------------------------------|---|---|---|
| Storage of the slag (Generator) | Dust generation Water pollution Soil contamination Health impacts Visual impacts | <ul style="list-style-type: none"> • Appropriate PPE must be worn and workers trained in this regard • Assmang must comply with the provisions of their environmental management system and Surface and Groundwater management plan • Slag will only be stored in the approved areas which have appropriate water containment systems • Slag will be contained in this area by means of bunds – no slag will be permitted to outside this area • Clean and dirty water separation must be undertaken on site • Stockpiles will be sprayed with water if dust becomes a nuisance • Any material spilled outside the storage area will be immediately swept up and placed on the stockpile | Assmang |
| Slag handling (Generator) | Dust generation Water pollution Soil contamination Health impacts Visual impacts Noise | <ul style="list-style-type: none"> • Appropriate PPE must be worn and workers trained in this regard • Water will be used in the crushing processes in order to reduce dust production • Processing areas will be regularly swept to reduce dust on the ground which can be mobilized • Water from the washing plant will be recycled and re-used in the processing activities • Stockpiles of crushed slag will be contained • Each load will be consigned using standard consignment notes by Assmang or its appointed contractors. • Records for dispatch and receipt of the slag will be controlled and retained • Daily dispatch consolidations will be collated weekly and monthly for audit purposes | Assmang |

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| APPLICANT Assmang (Pty) Ltd | |
| SOURCE (S) OF WASTE Smelting of Manganese Ore | |
| WASTE TO BE BENEFICIATED Slag | |
| BENEFICIAL USE/S Aggregate Replacement | |
| <input type="checkbox"/> | The slag is not deemed to be hazardous |
| WASTE GENERATING FACILITY Assmang | |
| PHYSICAL ADDRESS Eddie Hagan Drive Cato Ridge | |
| GPS CO-ORDINATES OF WASTE GENERATING FACILITY 29°42'16.55"S 30°36'55.92"E 29°42'25.51"S 30°37'08.34"E 29°43'20.72"S 30°36'24.07"E 29°43'23.92"S 30°36'40.55"E | |

RISK MANAGEMENT PLAN IN TERMS OF REGULATION 10 OF WASTE EXCLUSION REGULATIONS



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 Environmental Affairs
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| TELEPHONE | | 031 782 5100 | CELL: | 082 453 6361 |
| CONTACT PERSON | | Wessel Oosthuizen | | |
| POSTAL ADDRESS | | PO Box 21 | | |
| | | Cato Ridge | | |
| | | 3680 | | |

RISK MANAGEMENT PLAN

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| | | <ul style="list-style-type: none"> • Slag users and transporters will be audited regularly • Any significant incidents reported to the Authorities in terms of S30(5) of NEMA. • All vehicles will be maintained in a good condition in order to reduce emissions and the likelihood of spills • Workers will be trained with regard to the correct first aid treatment required in case of exposure to slag dust • Damp dust will not be stored in closed containers | |
| <p>Transportation of the slag</p> | <p>Dust generation Water pollution Soil contamination Health impacts Traffic impacts Visual impacts Noise</p> | <ul style="list-style-type: none"> • Trucks will not be overloaded • Loads will be covered • Trucks will be maintained in a roadworthy condition • Transporter will have a spill procedure in place • Each transporter must have a procedure which must be followed in the event of a material spill. Training and verification on this procedure must be undertaken for all drivers. • Truck drivers will have the required driving licences and undergo regular driver training • All documentation must be in place in accordance with the provisions of the National Road Traffic Act and Regulations • Appropriate PPE must be worn and workers trained in this regard • The Risk Management plan must accompany the slag and be handed to the slag user along with the slag • Any significant incidents reported to the Authorities in terms of S30(5) of NEMA. | <p>Waste Transporter</p> |
| <p>Storage of the slag (user)</p> | <p>Dust generation Water pollution Soil contamination Health impacts Visual impacts</p> | <ul style="list-style-type: none"> • The Slag user will comply with the requirements of the Slag Management Plan • Slag will be offloaded directly into the appropriate storage bins • Slag will be stored on a concrete base and contained by bunding and walls • Slag volumes stored will be restricted to the capacity of the bins • The storage will be limited to 2 weeks supply • Any spillages will be immediately swept up and material placed in storage bins | <p>Blockmakers/ concrete companies and other users</p> |

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| | | <ul style="list-style-type: none"> Water runoff from the storage areas must be contained and re-used in the process Clean and dirty water separation must be undertaken on site Stockpiles must be covered or sprayed with water if dust creates a nuisance The product must be kept out of watercourses to avoid silting Appropriate PPE must be worn and workers trained in this regard | |
| Slag handling (user) | Dust generation Water pollution Soil contamination Health impacts Visual impacts Noise | <ul style="list-style-type: none"> Slag will only be used for the approved activities and will not be sold as loose stone Appropriate PPE must be worn and workers trained in this regard Clean and dirty water separation must be undertaken on site, all handling areas will be considered to be 'dirty' and water contained and re-used Each site will have an incident and complaints register in which all incidents and complaints are recorded together with a description of corrective action taken. Any significant incident must be reported to Assmang who must in turn, report the incident to the Authorities in terms of S30(5) of NEMA. Workers will be trained with regard to the correct first aid treatment required in case of exposure to slag dust Damp dust will not be stored in closed containers | Blockmakers/ concrete companies and other users |
| Use of final product | Dust generation Water pollution Soil contamination Health impacts Socio-economic impacts | <ul style="list-style-type: none"> Local labour will be used wherever possible Appropriate PPE must be worn and workers trained in this regard Dust generation must be kept to a minimum and dust must not be allowed to clog drains or enter stormwater or watercourses Broken blocks, waste concrete etc will be disposed of appropriately in accordance with waste legislation and best practice. | Recipient of final products (blocks, concrete etc) |

| | | | |
|------------------|----------------|------------|---------------------------------|
| Reference Number | | | |
| Date Received | Decision Taken | Authorised | Not authorised (provide reason) |
| | | | |

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DECLARATION

I, Paul Botha hereby declare that I have read the completed a Risk Management form and hereby confirm that the information is to the best of my knowledge true and correct.

Furthermore, I declare that I am fully aware of my responsibilities in terms of the Waste Exclusion Regulations, and that failure to comply with these Regulations may constitute an offence in terms of the National Environmental Management: Waste Act, 2008 (Act 59 of 2008).

Applicant (Full names) Asmans - Cato Ridge Smelting

Designation General Works Manager

Signature [Signature]

Date 9 January 2019 Place Cato Ridge

