

Appendix 1: PPC Declaration

Name of Company: **PPC Cement Ltd**

Declaration of accuracy of information provided:

I, _____, declare that the information provided in this report is in all respects factually true and correct to the best of my knowledge and as at the date of signature. The basis of PPC submission is outlined in the attached APPENDIX.

Signed at _____ on this _____ day of _____

Signature

Capacity of Signatory

Department of Environmental Affairs
Private Bag X447
Pretoria
0001

SUBMISSION OF POLLUTION PREVENTION PLANS

PPC hereby submit its Pollution Prevention Plans in terms of National pollution prevention regulations of 2017. The Plans were prepared in terms of the guidelines for the development of pollution prevention plan in respect of the greenhouse gases 2017.

The following was used as approach to emission calculations:-

- Projected values are based on the production plans with 3% increase on the current financial year sales forecast (FY runs April to end March)
- Forecasted demand is the basis of the emission increases over the short term;
- The efficiency improvements of new facilities have been included in the projections as this will inform the emission reduction strategy
- The absolute emission measure does not reflect the efficiencies of the plants as this is impacted by total production in the specific year.

Table 1: Planned mitigation measures

| | | | | | Anticipated emission reduction (tonnes CO ₂ e) | | | |
|----------------------------|---|---------------------------------|--|------------------|---|-----|-----|--------------------------------|
| | | | | | FY1 | FY2 | FY3 | Total tonnes CO ₂ e |
| Mitigation measure | Description of mitigation measure | Anticipated implementation date | Assumptions used to estimate anticipated GHG emission reduction | Affected GHG | | | | |
| Product strategy Energy | <ul style="list-style-type: none"> • Mega Plant strategy • Product extension strategy – use of fly ash, limestone, slags and other MAC's • Implementation of Energy Management system (EnMS) to drive operational efficiencies • Energy project roadmap | Annually | Emissions were based on projected production capacities Stable economic conditions | CO ₂ | | | | 1,067,162 |
| Product strategy Energy | <ul style="list-style-type: none"> • Mega Plant strategy • Product extension strategy – use of fly ash, limestone, slags and other MAC's • Implementation of Energy Management system (EnMS) to drive operational efficiencies | Annually | CO ₂ emissions are from coal and factor used to calculate CH ₄ Although this is reported Cement kilns combust CH ₄ completely in the process | CH ₄ | | | | 1268 |
| Product strategy Energy | <ul style="list-style-type: none"> • Mega Plant strategy • Product extension strategy – use of fly ash, limestone, slags and other MAC's • Implementation of Energy Management system (EnMS) to drive operational efficiencies • Energy project roadmap | Annually | CO ₂ emissions are from coal and factor used to calculate N ₂ O | N ₂ O | | | | 2267 |

Table 2: Total annual emissions from each activity measured as CO₂-eq for the preceding calendar year (FY2017)

| Activity | Production processes | Year | (CO ₂) tonnes | (CH ₄) CO ₂ e tonnes | (N ₂ O) CO ₂ e tonnes | Methodology and GHG emission factors | Total GHG emissions in CO ₂ equivalents |
|----------------------------|---|---------|---------------------------|---|---|--------------------------------------|--|
| 1A1f Non-Metallic Minerals | Energy Start-up fuel and coal combustion for process | FY 2017 | 1,736,951 | N/A | N/A | IPCC | 1,736,951 |
| 2A1 IPPU | Cement Production – Calcination of limestone to produce Clinker | FY 2017 | 1,255,317 | 3,266 | 5,839 | IPCC | 1,264,422 |
| | | | | | | | |
| | Total by gas | | 2,992,268 | 3,266 | 5,839 | | 3,001,373 |

- It must be noted that 60% of emissions from cement originates from calcination translates into 525 kgCO₂/tonne of clinker and consequently a large part of specific emission cannot be mitigated.
- FY2017 emissions cannot be used as baselines as emissions were dependent on plant utilisation and demand.
- Reporting will be based on annual emission (Jan – Dec)
- The reporting methodology will be based on Tier 2

Should you have any enquiries please contact 