Lime Manufacturing

Subpart S, Greenhouse Gas Reporting Program

Measure these parameters for each kiln:

What Must Be Monitored?

If NOT using a continuous emissions monitoring system (CEMS):

For determining the monthly emission factor (EF) for each type of lime produced:

- ☐ Calcium oxide (CaO) content for each lime type (metric tons CaO/metric tons lime), analyzed monthly.
- ☐ Magnesium oxide (MgO) content for each lime type (metric tons MgO/metric tons lime), analyzed monthly.

For determining the monthly EF for each type of by-product/waste sold (including lime kiln dust):

- ☐ CaO content for each solid lime by-product/waste type (metric tons CaO/metric tons lime), analyzed monthly.
- ☐ MgO content for each solid lime by-product/waste type (metric tons MgO/metric tons lime), analyzed monthly.

For determining annual carbon dioxide (CO_2) emissions from each type of by-product/waste that is not sold (including lime kiln dust and scrubber sludge):

- ☐ CaO content for each unsold lime by-product/waste type (metric tons CaO/metric tons lime), analyzed annually.
- ☐ MgO content for each unsold lime by-product/waste type (metric tons MgO/metric tons lime), analyzed annually.
- ☐ Annual weight or mass of unsold by-products/wastes for each lime type (tons).

For determining annual CO_2 process emissions for all kilns:

- ☐ Monthly weight or mass of each lime type produced (tons).
- ☐ Monthly weight or mass of by-products/waste sold (such as lime kiln dust) for each lime type (tons).

For all kilns combined (i.e. for the whole facility):

- ☐ Annual average EFs for each calcined by-product/waste sold.
- ☐ Annual average EFs for each lime product type produced.
- ☐ Annual quantity (tons) of lime product sold.
- ☐ Annual amount of CO_2 captured for use in the on-site process (if applicable).
- ☐ Beginning and end of year inventories for each lime product.
- ☐ Beginning and end of year inventories for lime by-products/wastes.
- ☐ Annual average results of chemical composition analysis of each type of lime product produced and calcined by-product/waste sold.
- ☐ Annual lime production capacity (tons).

If using a CEMS, in addition to the monitoring requirements under 40 CFR Subpart C for the Tier 4 Calculation Methodology, measure:

- ☐ Annual amount of lime product sold, by type (tons).
- ☐ Annual amount of lime by-product/waste sold, by type (tons).
- ☐ Annual amount of lime by-product/waste not sold, by type (tons).
- ☐ Annual amount of lime product not sold, by type (tons).
- ☐ Beginning and end of year inventories for each lime product.
- ☐ Beginning and end of year inventories for lime by-products/wastes.

For More Information

For additional information and resources on Subpart S, please visit the Subpart S webpage.

This monitoring checklist is provided solely for informational purposes. It does not replace the need to read and comply with the regulatory text contained in the rule. Rather, it is intended to help reporting facilities and suppliers understand key provisions of the GHGRP. It does not provide legal advice; have a legally binding effect; or expressly or implicitly create, expand, or limit any legal rights, obligations, responsibilities, expectations, or benefits with regard to any person or entity.