

**Landfill Project Monitoring Report**

*This report must be used when landfill projects elect to take a zero-credit reporting period (see Reserve Program Manual, section 3.3.3). This report can also be used to inform the development of a project Monitoring Plan. Please refer to the Landfill Project Protocol (Section 6) for Monitoring Plan content requirements.*

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| --- | --- |
| **Project Developer** |  |
| **Project Name and CAR Number** |  |
| **Name of Individual Completing Report** |  |
| **Date** |  |
| **Reporting Period Covered by Report[[1]](#footnote-1)** |  |
| **Protocol Version** |  |

**Calculated Reductions**

*List all estimates in units of tCO2e. If the reporting period spans multiple vintages, please list the calculated reductions per vintage.*

|  |  |  |
| --- | --- | --- |
| **Vintage:**  |  |  |
| **Baseline Emissions:** |  |  |
| **Project Emissions:** |  |  |
| **Total Quantity of Metered and Destroyed Methane:** |  |  |
| **Total Emission Reductions:** |  |  |

**Project Information**

1. **Project Description**

*Description of the project, the baseline system and the gas collection and destruction system.*

1. **Project Emission Sources**

*Description of emission sources within the GHG Assessment Boundary for the current reporting period, highlighting any differences from the previous reporting period.*

1. **Performance Standard:**

*Does the project meet the Performance Standard test as defined in Section 3.4.1 of the protocol?*

1. **Ownership of Reductions**

*How is clear and explicit ownership of GHG reductions from the project demonstrated for the current reporting period? Include references to relevant contracts/documents.*

1. **Regulatory Compliance**

*Description of personnel and processes used to ensure that the project is in material compliance with all applicable regulations. Include a list of all project-related non-compliance events, their duration and whether they are considered material. Please reference relevant documents:*

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| **Non-Compliance Event** | **Duration** | **Material or Immaterial?** |
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1. **Record Keeping**

*Brief description of how project data is recorded and maintained.*

1. **Operational/Personnel Changes**

*Describe any changes to project equipment, management systems, or personnel that have occurred during the current reporting period.*

1. **Operational Disruptions**

*List all operational disruptions during the current reporting period.*

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| **Monitoring Equipment / Destruction Device** | **Time Period** | **Event** | **Compensatory Measures** |
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1. **Calculation Method**

*Briefly describe the methods and software used to perform emission reduction calculations. [[2]](#footnote-2)*

1. **QA/QC Project Personnel**

*List the name, title, and responsibilities of those performing Quality Assurance/Quality Control functions.*

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| **Personnel Name** | **Organization and Title** | **Responsibilities** |
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**Instrument QA/QC Summary**

*(Based on protocol Section 6.2.)*

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| --- | --- | --- | --- | --- |
| **Date** | **Equipment (Type, S/N)** | **QA/QC Activity** | **Results (As Found/As Left)** | **Responsible Personnel** |
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**Monitoring Summary Table**

*(Based on protocol Table 6.1, not comprehensive and some parameters may not be applicable.)*

| **Parameter** | **Description** | **Data Unit** | **Measurement Frequency** | **Calculated (c)****Measured (m)****Reference (r)****Operating records (o)** | **Measurement Instrument/ Method** | **Date(s) of Measurement** **(if applicable)** | **Other Notes** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| ER | GHG emission reductions during the reporting period | tCO2e |  | c |  |  |  |
| BE | Baselineemissions duringthe reportingperiod | tCO2e |  | c |  |  |  |
| PE | Project emissionsduring thereporting period | tCO2e |  | c |  |  |  |
| LFGi,t | Adjusted volume of landfill gas fed to the destruction device i, in time intervalt | scf | Continuous | m/c |  |  |  |
| LFGunadjusted | Unadjusted volume of landfill gas collected for the given time interval | acf | Continuous | m |  |  |  |
| CH4DestPR | Total methane destroyed by the project landfill gas collection and destruction system during the reporting period | tCH4 |  | c |  |  |  |
| DF | Discount factor to account for uncertainties associated with the monitoring equipment | 0-1.0 |  | r |  |  |  |
| OX | Factor for the oxidation of methane by soil bacteria | 0, 0.1 |  | r |  |  |  |
| Destbase | Adjustment to account for the baseline methane destruction associated with a baseline destruction device | tCO2e |  | c |  |  |  |
| CH4Desti | The net quantity of methane destroyed by destruction device i during the reporting period | scf CH4 |  | c |  |  |  |
|  | Total quantity of landfill methane sent to destruction device i during the reporting period | scf CH4 | Daily/Weekly | c |  |  |  |
| DEi | Default methane destruction efficiency for device i | % | Once | r/m |  |  |  |
| t | Time interval for which LFG flow and concentration measurements are aggregated  | week, day, or smaller interval | Continuous/ Daily/ Weekly | r |  |  |  |
| PRCH4,t | The average methane fraction of the landfill gas in time interval t  | scf CH4 / scf LFG | Continuous/ Weekly | m |  |  |  |
| Closeddiscount | Adjustment to account for the methane which would have been combusted in the baseline flare from baseline wells at a closed landfill | scf CH4 | Yearly | c |  |  |  |
| NQdiscount | Adjustment to account for the methane which would have been combusted in the baseline, non-qualifying combustion device | scf CH4 | Yearly | c |  |  |  |
| Destmax | Deduction of the un-utilized capacity of the baseline destruction device  | scf CH4 | Weekly, Monthly, or Per reporting period (no more than weekly) | c |  |  |  |
| LFGB1 | Landfill gas from the baseline landfill gas wells that would have been destroyed by the qualifying destruction system during the reporting period | scf LFG | Yearly | c |  |  |  |
| BCH4,closed | Methane fraction of landfill gas destroyed by baseline flares at a closed landfill | scf CH4 / scf LFG | Continuously/ Weekly | m |  |  |  |
| LFGB2 | Landfill gas that would have been destroyed by the original, non-qualifying destruction system during the reporting period | scf LFG / yr | Yearly | c |  |  |  |
| BCH4,NQ | Methane fraction of landfill gas destroyed by non-qualifying devices in the baseline | scf CH4 / scf LFG | Continuously/ Weekly | m |  |  |  |
| LFGBmax,t | The maximum landfill gas flow capacity of the baseline methane destruction device in time interval t | scf | At beginning of first reporting period | c |  |  |  |
| LFGB3, t | The actual landfill gas flow of the baseline methane destruction device in time interval t | scf | Continuous | m |  |  |  |
| FFCO2 | Total carbon dioxide emissions from the destruction of fossil fuel during the reporting period | tCO2 | Per reporting period | c |  |  |  |
| ELCO2 | Total carbon dioxide emissions from the consumption of electricity from the grid during the reporting period | tCO2 |  | c |  |  |  |
| NGemissions | Total quantity of emissions from supplemental natural gas, including both uncombusted methane and carbon dioxide emissions during the reporting period | tCO2 |  Per reporting period | c |  |  |  |
| FFPR,j | Total fossil fuel consumed by the project landfill gas collection and destruction system during the reporting period, by fuel type j | volume fossil fuel | Monthly | o |  |  |  |
| EFFF,j | Fuel specific emission factor | kg CO2 / volume fossil fuel |  Per reporting period | r |  |  |  |
| ELPR | Total electricity consumed by the project landfill gas collection and destruction system during the reporting period | MWh |  | m/o |  |  |  |
| EFEL | Carbon emission factor for electricity used  | lbCO2 / MWh |  Per reporting period | r |  |  |  |
| NGi | Total quantity of supplemental natural gas delivered to the destruction device i during the reporting period | scf | Continuous | m |  |  |  |
| NGCH4 | Average methane fraction of the supplemental natural gas as provided for by fuel vendor | scf CH4 / scf NG |  | r |  |  |  |
| T | Temperature of the landfill gas | °C | Continuous | m |  |  |  |
| P | Pressure of the landfill gas | atm | Continuous | m |  |  |  |

1. The reporting period is the period of time that a project developer quantifies and reports GHG reductions for the project. Under the landfill protocol, there is a 12 month limit for the reporting period. See Section 7.3 of the protocol for more information. Please enter the dates for the12 month reporting period covered by this report. [↑](#footnote-ref-1)
2. If requested by the Reserve, the project developer must supply a copy of the emission reduction calculations for the reporting period covered by this report. [↑](#footnote-ref-2)