



Environmental Impact Assessment (EIA) Screening Decision Medical Incinerators.

1 SUMMARY OF THE PROPOSED PROJECT

Mahdia District Hospital, Kato Cottage Hospital, Kamarang District Hospital, Suddie Public Hospital, Lethem District Hospital, Annai Hospital, Aishalton District Hospital, Kumaka District Hospital, Port Kaituma District Hospital, and Mabaruma Regional Hospital are Medical Facilities – Medical Incinerators – managed by the Ministry of Health. The hospitals are located in Regions One, Two, Eight, and Nine. The predominant activities in these areas are residential, forestry, and mining. With the exception of Region Two, the land surrounding the project locations is sparsely populated, with the nearest residences located within an approximately 25m radius of the project boundary.

2 POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS AND SCREENING DECISION

The EPA, based on existing data, its technical review, observations/field inspections, screening tool, and exercise of its discretion, has determined that the impacts on the environment will not be significant nor deemed environmentally sensitive, given the implementation of the following measures to mitigate impacts to air and noise quality:

The Addfield MP200 incinerator is equipped with several features designed to mitigate air emissions:

1. **Advanced Combustion Technology:** The incinerator utilizes advanced combustion technology to burn waste materials efficiently, reducing the formation of harmful pollutants.
2. **Emission Control Systems:** It is equipped with emission control systems such as particulate matter filters, stack scrubbers, and catalytic converters to capture and neutralize pollutants before they are released into the atmosphere.
3. **Temperature Monitoring and Control:** The incinerator is equipped with temperature monitoring and control systems to ensure optimal combustion conditions, which helps minimize the formation of pollutants. It is also developed to have a two-second retention time at 1100°C as per World Health Organisation (WHO) guidelines to suit the requirements of the waste being disposed of.
4. **Airflow Management:** The airflow within the incinerator is carefully managed to promote the complete combustion of waste materials and minimize the release of unburned gases and particulates.
5. **Secondary Combustion Chamber:** The MP200 incinerator features a secondary combustion chamber, where additional combustion of gases and particulates occurs, further reducing emissions. “Optimization of controlled air incinerators includes thorough fuel and air mixing in the secondary chamber and prolonging residence time for complete combustion” (US EPA, 1993).
6. **Continuous Monitoring and Compliance:** The incinerator is equipped with monitoring systems to continuously track emissions levels and ensure compliance with environmental regulations and emission standards.



7. **Regular Maintenance and Servicing:** The incinerator will be regularly maintained and serviced to ensure optimal performance and emission control. This includes cleaning filters, inspecting combustion chambers, and replacing worn parts as needed.
8. Restriction of operating hours from 8:00 am to 4:30 pm, from Monday-Saturday.
9. The incinerator must be serviced periodically to ensure optimum operation.

Conclusion and recommendations

The environmental impacts that may originate from the operation of the project activities are considered **not significant** given that the appropriate mitigation measures will be in place to reduce and avoid the above impacts. Therefore, this proposed project is exempt from the conduct of an Environmental Impact Assessments (EIA), as set out in section 11(2) of the Environmental Protection Act, Cap. 20:05, Laws of Guyana.