



SENSIA RedLook System Mileva 33F OGI Camera

Alternative Test Method Application Executive Summary

Focus: This document is part of the SENSIA RedLook System (utilizing the Mileva 33F OGI camera) application package for regulatory approval as periodic screening alternative test method as per NSPS OOOO Rules Section §60.5398b(d).



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1. Alternative Test Method Submission Details

Alternative Test Method Submission Details

Company name	SENSIA Solutions, S.L.
Product name	RedLook System (Mileva 33F OGI)
Applicability	Broadly applicable
Work Practice	Periodic Screening
Measurement Type	Remote
Emission Rate Threshold	≤ 1 kg CH ₄ /hr
Spatial Resolution	Component-level
Technology Type	Fixed (in-situ measurements)
Request numbers of any connected submitted Requests	N/A

2. Technical Summary

SENSIA Solutions, S.L. (hereafter referred to as “SENSIA”) is seeking approval for the RedLook System (hereafter referred to as “RedLook”) as a broadly applicable, fixed alternative test method (ATM) for periodic screening. RedLook is an autonomous, continuous monitoring solution that uses artificial intelligence-based detection algorithms to detect and quantify emissions in Optical Gas Imaging (OGI) video footage collected by the RedLook OGI camera, the Mileva 33F. RedLook has been deployed for a wide range of application cases, but this alternative test method application focuses on its use for leak detection and repair (LDAR) and monitoring operational emissions. SENSIA, founded in 2008 and headquartered in Madrid, Spain, is a company specializing in advanced infrared imaging technology offering artificial intelligence integrated technological solutions for gas detection and quantification, flame detection, flare monitoring, intelligent thermography, and infrared surveillance.

The Mileva 33F is an uncooled OGI camera equipped with sensors which detect infrared light from methane and other organic gases. The video footage captured by the Mileva 33F is analyzed by RedLook’s artificial intelligence-based algorithms which quantifies emissions by analyzing large quantities of radiometric information contained within each frame of the video footage. When operating, the Mileva 33F is mounted on a pan and tilt device which autonomously tours the camera through predefined positions with different field of views, specified by the operator, to ensure comprehensive coverage of equipment requiring emissions monitoring. With use of the Mileva 33F, SENSIA aims to reduce the time necessary to perform leak detection and repair surveys and increase monitoring coverage by accessing equipment components which are otherwise less accessible to monitoring by means of handheld OGI cameras. SENSIA is seeking

approval for a periodic screening alternative test method work practice based on a minimum detection threshold of ≤ 1 kg/hr and component-level resolution. Within the Description of Technology document, a comprehensive explanation of the technical specifications and operational capabilities of the Mileva 33F, supported by independently reviewed information.

SENSIA infrared imaging products have been deployed globally across more than countries in sectors including oil and gas, industrial chemical manufacturing, security, and defense.

3. Notes of the MATM Review Team

N/A

4. Applicability

RedLook has been deployed successfully in various sites across the US. Examples of successful RedLook deployments are as follows:

Campaign Dates	Location	Campaign Description
Summer 2022 – Winter 2023	Texas and Louisiana, US (multiple sites)	Monitoring methane emissions
Winter 2022 – Winter 2023	Midland, Texas, US	Monitoring methane emissions
Summer 2022 – Winter 2023	Permian Basin, US (multiple sites)	Monitoring methane emissions
Fall 2022 – Winter 2023	Eagle Ford Basin, Texas, US (multiple sites)	Monitoring methane emissions
2024 – Present	Kennecott Smelter - South Magna, Utah, US	Monitoring methane emissions

Note: Each campaign corresponds to a different client operator who are kept anonymous for this application. Further details on the deployment can be provided upon request.

5. Updates to the Application

N/A

6. Summary of Documents Submitted

A list of all documents submitted, separated by website submission bucket, with a brief summary of each document.

6.1. Description of Technology

Document Title	Description
SENSIA _ Description of Technology – Mileva 33F.pdf	SENSIA technology summary document.
SENSIA _ Visual Workflow.pdf	Figures illustrates the screening workflow from pre-deployment to screening report.

6.2. Formal Alternative Test Method

Document Title	Description
SENSIA_Formal Alternative Test Method – Mileva 33F.pdf	SENSIA Formal Alternative Test Method

6.3. Confidential Business Information

All supporting documents have been submitted as confidential business information (CBI). These documents support the information provided in the Description of Technology document submitted as part of this application. As the supporting documentation, all CBI files compiled were assigned an ID (CBI-XX) for easy reference.