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REVIEWER'S REPORT

Manuscript No.: IJAR-59904

Title: Maintenance Optimization for Municipal Solid Waste Sorting and Recycling Facilities in Saudi Arabia: Improving Reliability and Operational Efficiency.

Recommendation:

Accept as it is .....

Accept after minor revision.....

Accept after major revision .....

Do not accept (*Reasons below*) .....

Rating	Excel.	Good	Fair	Poor
Originality		Good		
Techn. Quality		Good		
Clarity		Good		
Significance	Excellent			

Reviewer's ID: JPR-274

Detailed Reviewer's Report

The manuscript addresses an important and relevant topic concerning maintenance optimization in municipal solid waste sorting and recycling facilities in Saudi Arabia. It presents an evidence-informed framework connecting equipment reliability, maintenance strategies, material recovery quality, operational efficiency, and circular economy objectives under Vision 2030. The review discusses preventive, condition-based, and predictive maintenance approaches and explains their relevance to equipment such as conveyors, screens, optical sorters, balers, and supporting utilities. A notable strength is its emphasis on saleable material recovery rather than equipment availability alone. The proposed performance indicators, equipment-maintenance decision matrix, implementation sequence, and conceptual framework provide useful guidance for facility managers and engineering professionals. The manuscript also appropriately distinguishes analytical illustrations from actual facility outcomes and acknowledges the absence of primary Saudi facility data and the need for prospective validation. Overall, the paper is logically organized, technically relevant, and contributes a practical perspective to sustainable waste management. Minor revision is recommended to improve the presentation and consistency of the methodology, tables, figures, and technical terminology.