

ABSTRAK

Analisis Efektivitas Penerapan Sistem Manajemen Lingkungan ISO 14001:2015 di PT BASF *Care Chemical* Indonesia (PT BCCI) Pada Pengelolaan Kualitas Lingkungan di Depok-Jawa Barat.

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PT. BCCI telah melakukan implementasi SML ISO 14001:2015 dan mendapatkan sertifikat SML ISO 14001:2015 sejak tahun 2015 yang mencakup seluruh kegiatan produksi dan pendukungnya sebagai upaya untuk melakukan pencegahan pencemaran lingkungan serta untuk meningkatkan kinerja lingkungan. Data pemantauan udara untuk parameter karbon monoksida (CO) cenderung mengalami peningkatan yang signifikan meskipun masih di bawah nilai baku mutu yang dipersyaratkan namun dikhawatirkan berdampak pada kinerja instalasi pengolahan air limbah sehingga perlu dilakukan kajian efektivitas penerapan ISO 14001:2015, menganalisis kinerja lingkungan berdasarkan pemantauan kualitas limbah cair dan kualitas udara dan menganalisis hubungan antara SML ISO 14001:2015 dengan kualitas air limbah dan kualitas udara serta menyusun strategi kebijakan peningkatan kualitas lingkungan. Penelitian ini merupakan penelitian *mix methode*. Analisis efektivitas penerapan ISO 14001:2015 menggunakan GEMI. Analisis kinerja lingkungan berdasarkan kualitas limbah cair dan kualitas udara yang dibandingkan dengan regulasi. Analisis korelasi antara implementasi ISO 14001:2015 dengan kinerja lingkungan dilakukan menggunakan uji korelasi berganda. Analisis penentuan kebijakan dilakukan dengan analisis SWOT. Hasil menunjukkan bahwa penerapan ISO 14001:2015 di PT. BCCI berjalan dengan efektif, dengan nilai efektivitas setiap klausulnya berada di angka lebih dari 75%. Hasil kinerja lingkungan berjalan dengan baik di bawah baku mutu dan uji korelasi menunjukkan tidak adanya korelasi antara ISO 14001:2015 Sementara untuk nilai korelasi dengan kualitas udara pada parameter NO₂ sebesar 0.727 dan SO₂ sebesar 0.582. Strategi peningkatan kualitas lingkungan berkelanjutan berfokus pada strategi terkait dengan *recycle* dan *reuse* air limbah, edukasi terkait dengan target pengurangan emisi gas CO₂, serta peningkatan kualitas audit internal dalam pemenuhan setiap klausul ISO 14001:2015.

Kata kunci: implementasi SML ISO 14001:2015, Kinerja lingkungan, korelasi, efektivitas ISO 14001:2015. Kualitas limbah cair dan udara, SWOT

Abstract

Analysis of the Effectiveness of Environmental Management System Implementation ISO 14001:2015 at PT BASF Care Chemical Indonesia (PT. BCCI) On Environmental Quality Management in Depok- West Java.

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PT. BCCI has implemented ISO 14001:2015 EMS and received an ISO 14001:2015 EMS certificate from 2015 to 2022, which covers all production and supporting activities in an effort to prevent pollution and improve environmental performance. The air monitoring results for the carbon monoxide parameter tend to experience a significant increase in the second semester of 2020, even though it is still below the required quality standard value, but it is feared that this will have an impact on the performance of the wastewater treatment plant since it is necessary to study the effectiveness of implementing ISO 14001: 2015, analyze environmental performance based on monitoring the quality of liquid waste and air quality, also analyzing the relationship between EMS ISO 14001:2015 and the quality of wastewater and air quality as well as analyzing policy strategies to improve environmental quality at PT. BCCI. This research is quantitative and qualitative. The analysis of the effectiveness of implementing ISO 14001:2015 uses GEMI. Environmental performance analysis based on wastewater quality and air quality compared to regulations. Correlation analysis between the implementation of ISO 14001:2015 and environmental performance is carried out using multiple correlation tests. Policy determination analysis is done by SWOT analysis. This study's results indicate the application of ISO 14001:2015 at PT. BCCI is running effectively, with the effectiveness value of each clause being more than 75%. The results of the environmental performance went well under the quality standard and the correlation test showed no correlation between ISO 14001:2015. Meanwhile, the correlation value with air quality in the NO₂ parameter was 0.727 and SO₂ was 0.582. As for the strategy to improve sustainable environmental quality, PT. BCCI focuses on strategies related to the recycling and reuse of wastewater, education related to CO₂ gas emission reduction targets, as well as improving the quality of internal audits in fulfilling each clause of ISO 14001: 2015.

Keywords: implementation of EMS ISO 14001:2015, environmental performance, correlation, the effectiveness of ISO 14001:2015. Wastewater and air quality, SWOT.