

HAZARD IDENTIFICATION DAN RISK ASSESSMENT (HIRA) DI BOILER PT. IPMOMI-PLTU UNIT 7&8 PROBOLINGGO

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**ABSTRACT**

Hazard Identification and Risk Assessment (HIRA) is the primary step in risk management, which it's one of the clause in occupational health and safety management system OHSAS 18001. The result of the hazard identification and risk assessment (HIRA) is used to give the recommendation to determinate and implement the right risk control, in the effort to prevent the accident and occupational disease in workplace.

General purpose of this research was to do Hazard Identification and Risk Assessment (HIRA) at Boiler PT. IPMOMI PLTU Unit 7&8, while the specific goal were to identify the company policy about implementation of HIRA, to learn the production process in Boiler, to describe the implementation of HIRA, to identify hazard, to evaluate and analyze the risk level at Boiler PT. IPMOMI-PLTU Unit 7&8.

Based on the place, the research categorized as an observational research. By the duration it can be categorized as cross-sectional research. Based on data collected, this research was an observational research that analyzed in descriptive. The object of the research was Hazard Identification and Risk Assessment (HIRA) in Operational Unit and Maintenance Unit of Boiler PT. IPMOMI-PLTU Unit 7&8. The data used in this research are primary and secondary data, primary data was taken from observation and interviews, while secondary data was taken from the company. This research took place in Boiler PT. IPMOMI-PLTU Unit 7&8 Probolinggo. The periods of this research was April-May 2009.

Risk assessment which conducted at Boiler PT. IPMOMI-PLTU Unit 7&8 is using likelihood and severity criteria. The method used in this risk assessment is based on the method from PT. IPMOMI. The result of hazard identification in Operational Unit of Boiler found 58 hazards, which the risk level are 64% tolerable risks, 29% moderate risks, 7% substantial risks. Whereas in Unit Maintenance of Boiler found 125 hazards which the risk level are 4% trivial risk, 64% tolerable risk, 31% moderate risk and 1% substantial risk. Most of risks in Boiler PT. IPMOMI are tolerable.

PT. IPMOMI has already implemented HIRA in routine, non-routine and emergency activities. The team personnel have already got trained in HIRA. The team personnel should be structurally arranged so the authority and responsibility

became clear and hazards should be identified in each step of activities to easier the risk identification and control implementation.

Keywords: Hazard Identification, Risk Assessment, Boiler

## ABSTRAK

*Hazard Identification* dan *Risk Assessment* (HIRA) merupakan tahapan awal dalam manajemen risiko, yang menjadi salah satu klausul dalam penerapan sistem manajemen keselamatan dan kesehatan kerja OHSAS 18001. Hasil dari HIRA digunakan sebagai bahan pertimbangan dalam menentukan dan menerapkan pengendalian yang tepat dalam upaya mencegah terjadinya kecelakaan dan penyakit akibat kerja di tempat kerja.

Tujuan umum dari penelitian ini adalah melakukan *Hazard Identification* dan *Risk Assessment* (HIRA) di Boiler PT. IPMOMI-PLTU Unit 7&8, sedangkan tujuan khususnya adalah mengidentifikasi kebijakan PT. IPMOMI terkait HIRA, mempelajari proses produksi, mendeskripsikan penerapan HIRA, mengidentifikasi hazard, melakukan penilaian risiko dan menganalisis tingkat risiko di Boiler PT. IPMOMI-PLTU Unit 7&8.

Ditinjau dari segi tempatnya maka penelitian ini termasuk penelitian lapangan. Bila ditinjau dari segi waktu penelitian ini termasuk penelitian cross sectional. Berdasarkan cara pengumpulan datanya, penelitian ini merupakan penelitian observasional yang dianalisis secara deskriptif. Objek penelitian ini adalah *Hazard Identification* dan *Risk Assessment* (HIRA) di Unit Operasional dan Unit Maintenance Boiler PT. IPMOMI-PLTU Unit 7&8. Data yang dipakai dalam penelitian ini adalah data primer dan sekunder. Data primer diperoleh dari observasi dan wawancara sedangkan data sekunder yang diperoleh di perusahaan. Penelitian ini diadakan di Boiler PT. IPMOMI-PLTU Unit 7&8 Probolinggo. Waktu penelitian adalah April-Mei 2009.

Risk assessment yang dilakukan di Boiler PT. IPMOMI- PLTU Unit 7&8 menggunakan kriteria kekerapan (*likelihood*) dan keparahan (*severity*), dengan mengacu pada metode yang digunakan oleh PT. IPMOMI. Dari hasil identifikasi hazard di Unit Operasional Boiler diperoleh 58 temuan bahaya dengan tingkat risiko 64% tergolong *tolerable*, 29% tergolong *moderate* dan 7% tergolong *substansial*, sedangkan di Unit Maintenance Boiler diperoleh 125 temuan bahaya dengan tingkat risiko 4% risiko tergolong *trivial*, 64% risiko tergolong *tolerable*, 31% tergolong *moderate* dan 1% tergolong *substansial*. Jadi mayoritas risiko di Boiler PT. IPMOMI adalah *tolerable*.

PT. IPMOMI sudah menerapkan HIRA pada aktivitas rutin, non rutin dan emergency. Personil tim sudah mendapatkan pelatihan tentang HIRA. Personil tim seharusnya disusun secara struktural sehingga wewenang dan tanggungjawabnya menjadi jelas dan hazard sebaiknya diidentifikasi pada setiap tahap dalam aktivitas sehingga memudahkan dalam identifikasi risiko dan menerapkan pengendaliannya.

Kata kunci: *Hazard Identification, Risk Assessment, Boiler*

