

## ABSTRAK

### **ANALISIS PENGELOLAAN AIR LIMBAH RUMAH POTONG HEWAN DAN DAMPAKNYA TERHADAP LINGKUNGAN DITINJAU DARI PERSPEKTIF *ONE HEALTH* (Studi kasus pada UPTD Rumah Potong Hewan Jone)**

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Industri pemotongan hewan jika tidak dikelola dengan baik dapat menimbulkan dampak negatif yang merusak lingkungan dan mengganggu kehidupan manusia. Air limbah rumah potong hewan (RPH) sangat berbahaya bagi lingkungan. Pengelolaan air limbah ditinjau dari perspektif *One Health* bertujuan untuk mencapai hasil kesehatan yang optimal dengan mengenali interkoneksi antara manusia, hewan, dan lingkungan secara bersama salah satunya pada lingkungan RPH dimana hewan, manusia, dan lingkungan saling berhubungan. Penelitian ini mencoba menganalisis fasilitas yang ada di RPH, pengelolaan air limbah, kualitas air limbah, dan dampaknya terhadap lingkungan. Penelitian dilaksanakan di RPH Jone yang merupakan unit kerja dari Dinas Perkebunan dan Peternakan Kabupaten Paser. Sumber informasi dan populasi pada penelitian ini terdiri atas bangunan dan fasilitas RPH, pengelola RPH, air limbah RPH, dan masyarakat yang bermukim di sekitar RPH. Penelitian ini menggunakan pendekatan metode deskriptif kualitatif, dengan cara pengumpulan data melalui observasi, wawancara, kuesioner, dan uji laboratorium. Hasil penelitian untuk kesesuaian lokasi dan kesesuaian sarana dan prasarana telah memenuhi persyaratan, adapun pada kesesuaian tata letak desain dan konstruksi belum terdapatnya kandang isolasi untuk ternak yang sakit, belum terpisahnya daerah kotor dan daerah bersih, tidak adanya fasilitas pemusnahan bangkai, ruang istirahat pekerja, kantin dan mushola begitu pula pada kesesuaian peralatan telah memenuhi persyaratan, hanya pakaian pelindung diri bagi penjagal yang belum dipergunakan sebagaimana mestinya. Pengelolaan air limbah RPH belum berjalan optimal, kualitas air limbah pada inlet dan outlet IPAL pada indikator BOD, COD, TSS, minyak dan lemak, dan pH masih dalam kategori rendah atau tidak melebihi dari baku mutu, sedangkan pada indikator NH<sub>3</sub>-N telah melewati batas baku mutu. Dampak air limbah terhadap masyarakat seperti dampak bau, timbulnya lalat, pencemaran air dan kekhawatiran terhadap gangguan kesehatan yang ditimbulkan dari limbah RPH, secara umum masyarakat merasa tidak terganggu. Ditinjau dari perspektif *One Health* kecukupan fasilitas RPH, pengelolaan air limbah, kualitas air limbah, dan dampak terhadap masyarakat memiliki implikasi yang signifikan terhadap keterkaitan antara kesehatan lingkungan, manusia, dan hewan.

**Kata Kunci:** Rumah Potong Hewan, pengelolaan air limbah, kualitas air limbah, *One Health*

## ABSTRACT

### ANALYSIS OF SLAUGHTERHOUSE WASTEWATER MANAGEMENT AND ITS ENVIRONMENTAL IMPACT FROM A ONE HEALTH PERSPECTIVE

(A Case Study of the Animal Slaughterhouse, Jone)

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Improper management of the livestock slaughter industry can lead to negative environmental impacts and disrupt human life. Slaughterhouse wastewater poses significant hazards to the environment. The management of wastewater, viewed from a One Health perspective, aims to achieve optimal health outcomes by recognizing the interconnectedness between humans, animals, and the environment. This is particularly relevant in the context of slaughterhouse environments, where humans, animals, and the environment are closely interconnected. This study aims to analyze the existing facilities in the Jone Slaughterhouse, wastewater management practices, wastewater quality, and their impact on the environment. The research was conducted at the Jone Slaughterhouse, which is a unit under the Department of Plantation and Animal Husbandry in Paser Regency. The sources of information and the study population included the slaughterhouse buildings and facilities, slaughterhouse management, slaughterhouse wastewater, and the surrounding community. A qualitative descriptive approach was employed, with data collected through observations, interviews, questionnaires, and laboratory tests. The research findings indicate that the location suitability and facilities in the slaughterhouse meet the required standards. However, there are shortcomings in terms of layout design and construction, such as the absence of isolation pens for sick livestock, inadequate separation of dirty and clean areas, a lack of carcass disposal facilities, worker restrooms, cafeterias, and prayer rooms. Similarly, although the equipment meets the required standards, the proper utilization of personal protective equipment by butchers is lacking. The management of slaughterhouse wastewater is not optimized, as the quality of wastewater at the inlet and outlet of the wastewater treatment plant (WTP), based on indicators such as BOD, COD, TSS, oil and grease, and pH, falls within the low category or does not meet the water quality standards. However, the NH<sub>3</sub>-N indicator has exceeded the water quality limits. The impact of wastewater on the surrounding community, including odor, the presence of flies, water pollution, and concerns about health issues arising from slaughterhouse waste, is generally perceived as non-disruptive. From a One Health perspective, the adequacy of slaughterhouse facilities, wastewater management, wastewater quality, and their impact on the community have significant implications for the interconnectedness of environmental health, humans, and animals.

**Keywords:** Slaughterhouse, wastewater management, wastewater quality, One Health