

# **KAJIAN PENENTUAN STATUS MUTU AIR DI KALI CODE DENGAN METODE STORET DAN METODE INDEKS PENCEMARAN**

Andung Sulistyio, Puji Utomo ST.,M.Eng.

Program Studi Teknik Sipil, Fakultas Sains dan Teknologi  
Universitas Teknologi Yogyakarta  
e-mail: <sup>[1]</sup>Andungsulistyio11@gmail.com, <sup>[2]</sup>puji.utomo@staff.uty.ac.id

## **ABSTRAK**

Pencemaran air dapat disebabkan oleh limbah, baik limbah industri, pertanian, maupun peternakan. Hal tersebut merupakan salah satu penyebab penurunan kualitas air sungai, Pada Kali Code ini penelitian yang saya ambil adalah Kajian Penentuan Status Mutu Air Di Kali Code Dengan Metode Storet dan Metode Indeks Pencemaran, bertujuan untuk mengetahui kualitas air, trend pencemaran dan parameter yang menyebabkan pencemaran di Kali Code.

Metode yang digunakan yaitu metode STORET dan metode Indeks Pencemaran dengan tiga titik penelitian yaitu pada Jembatan Boyong, Jembatan Sayidan, dan Jembatan Pacar. Adapun parameter yang dipakai yaitu Suhu, Ph, Residu Tersuspensi, Residu Terlarut, Oksigen Terlarut, BOD, COD, Khorin Bebas, Nitrat, Nitrit, Sulfida, Phospat, Fenol, Detergent, Minyak dan Lemak, Cadmium, Seng, Tembaga, Timbal, Krom Hexavalent, Bakteri Koli Tinja, Bakteri Total Koli. Dengan dua kelas baku mutu yaitu Baku Mutu Kelas satu dan Baku Mutu Kelas dua.

Berdasarkan hasil perhitungan dengan dua metode tersebut didapatkan hasil Cemar Berat dari tahun 2007 s/d 2016 tiga titik sekaligus dengan metode STORET baik Baku Mutu Kelas Satu maupun pada Baku Mutu Kelas Dua, dan dari tiga titik penelitian tahun 2009, 2012, 2013, 2014, 2015, 2016 memiliki status air Cemar Sedang pada titik penelitian Jembatan Boyong. Trend pencemaran di Kali Code relatif stabil tidak mengalami banyak peningkatan dan penurunan untuk metode STORET dan Indeks Pencemaran.

**Kata Kunci:** Metode STORET, Indeks Pencemaran, Kali Code, Mutu Air.

# **STUDY OF WATER QUALITY STATUS AT KALI CODE WITH STORET METHOD AND POLLUTION INDEX METHOD**

Andung Sulisty, Puji Utomo ST.,M.Eng.

Department of Civil Engineering, Faculty of science and Technology  
University of Technology Yogyakarta  
e-mail: <sup>[1]</sup>Andungsulistyo11@gmail.com, <sup>[2]</sup>puji.utomo@staff.uty.ac.id

## **ABSTRACT**

Water pollution can be caused by waste, both industrial waste, agricultural, and livestock. This is one of the causes of degradation of river water quality so that river water cannot be used for everyday purposes. A research that I take at Kali Code is a Study of Determination of Water Quality Status In Code River With Storet Method and Pollution Index Method. The main purpose of this research is to know the water quality, the pollution trend and the parameter causing pollution in Code River.

This research uses two methods that is STORET method and Pollution Index method with three research points, namely Boyong Bridge, Sayidan Bridge, and Pacar Bridge. The parameters used are Temperature, Ph, Suspended Residue, Dissolved Residue, Dissolved Oxygen, BOD, COD, Free Khorin, Nitrate, Nitrite, Sulfide, Phosphate, Phenol, Detergent, Oil and Fat, Cadmium, Zinc, Copper, Lead, Chromium Hexavalent, Koli Stool Bacteria, Total Koli Bacteria. With two classes of quality standards as a comparison of Quality Standard Class One and Quality Standard Class Two.

Based on the calculation with two methods we got the results of heavy pollution from 2007 until 2016 three points at once with the STORET method both First Class Quality Standard and the Second Class Quality Standard, and from three research points in 2009, 2012, 2013, 2014, 2015, 2016 the status is Medium Danger water at the research point of Boyong Bridge. The pollution trends in Kali Code are relatively stable and have increased and decreased for the STORET and Pollution Index methods.

**Keyword :** STORET Method, Pollution Index, Kali Code, Water Quality.