

**INDUSTRIAL WASTEWATER MANAGEMENT OF NHUE RIVER,
VIETNAM**

TUAN TONG ANH

**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE
(NATURAL RESOURCE MANAGEMENT)
FACULTY OF GRADUATE STUDIES
MAHIDOL UNIVERSITY
2006**

ISBN 974-04-6924-8

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TUAN TONG ANH 4737900 ENRM/M

M.Sc. (NATURAL RESOURCE MANAGEMENT)

THESIS ADVISORS: SITTIPONG DILOKWANICH, Ph.D. (HUMAN GEOGRAPHY), RAYWADEE ROACHANAKANAN, Ph.D. (ECOLOGY, EVOLUTION AND SYSTEMATICS).

ABSTRACT

At this stage of industrial development, the Vietnamese government has focused on the balance of socio-economic development and environmental protection through national plan and policies. However, industrial wastewater has severely degraded water resources, especially the Nhue River. Hence, this study aimed to investigate industrial wastewater management measures and the role of stakeholders, and to analyze industrial wastewater management at national and provincial levels.

This study employed mainly literature reviews and in-depth interviews of 16 key respondents in the public sector, one NGO, 34 respondents in the manufacturing sector, and 21 from the Huu Hoa Commune.

The study found that Vietnam has implemented an environmental agenda favoring the use of environmental impact assessment (EIA), environmental standards, regulations, and economic instruments. Vietnam has also employed methods such as restructuring administrative organizations, increasing budgets for wastewater management, considering human resource development of all agencies, raising motivation for wastewater treatment, and conducting environmental campaigns with NGOs. However, there are a number of constraints in wastewater management such as unclear guidelines for policy implementation, low administrative penalties for offenders, weak environmental standard enforcement, inadequate volunteer environment initiatives, overlapping jurisdiction amongst agencies, and flaws in EIA implementation. In addition, there is a lack of finance, facilities, and human resources in most organizations.

Hence, further actions to mitigate constraints and enhance potential are necessary for ensuring that industrial pollution is effectively controlled in Hanoi.

KEY WORDS: INDUSTRIAL WASTEWATER MANAGEMENT / MEASURES / INSTITUTION

103 pp. ISBN 974-04-6924-8