



UNIVERSITY OF SWAZILAND
Faculty of Health Science

Department of Environmental Health
Sciences

Final Examination 2009

Title of paper: ENVIRONMENTAL POLLUTION

Course code: EHS 550

Time allowed: 2 hours

Marks allocation: 80 Marks

Instructions:

- 1) Read the questions and instructions carefully
- 2) Answer ANY FOUR (4) questions
- 3) Each question is weighted 25 marks
- 4) Write neatly and clearly
- 5) Begin each question on a separate sheet of paper

This paper is not to be opened until the invigilator has granted
permission

QUESTION ONE

- (a) Consider the elements of the Stockholm Convention and outline the corresponding importance of this convention to environmental pollution control. [5]
- (b) Describe the three philosophical approaches to environment. In each case indicate how each approach helps in ones attitude towards the environment [10]
- (c) Complete the following matrix indicating under which paradigm each of these falls. Excreta and sewage management, solid waste management, air pollution control, global warming, vector borne diseases, urban air pollution, and safe water, biodiversity, rainforest depletion (5)

Modern hazard	Brown Agenda	Green Agenda	Traditional hazard

QUESTION TWO

- a. Distinguish between point and non point sources of pollution and list eight major categories of water pollutants giving an example of each category. [10]
- b. Plastics are considered very useful organic compounds and yet at the same time dangerous pollutants. Do you agree? Discuss [10]

QUESTION THREE

- a) Consider the four steps in the mining process and state corresponding environmental effects [8]
- b) Name three water pollution controls often considered by municipalities in Swaziland. With examples raise and discuss four points under each [8]
- c) In what way does the high grade of a particular mineral ore contribute to more environmental impact (4)

Question four

- a) Discuss the usual arguments for the continued poor hazardous waste management amongst nations of the world. [4]
- b) Using the principles of 'Waste life cycle" and the "Sustainable Waste Hierarchy" Explain how you can control and protect land from pollution [16]

Question Five

a) The Acronyms EIA, PCR, CMP, EA are familiar terms in environmental management. Explain what each stand for and discuss how the understanding of environmental pollutions helps you in carrying out objectives of these acronyms. [8]

b) Explain (in one paragraph and in your own words) what each of the following statements mean, and give examples which illustrate the point being made.

1. Swaziland is justified to use DDT [2]
2. Methods of cleaning up oil spills are both mechanical and chemical [2]
3. The responsibilities of the municipal councils can be viewed as the regulator and the regulated [2]
4. "Polluting ground water is such a big problem [2]
5. Pollution can result from contamination [4]