## CANADIAN BOARD OF EXAMINERS FOR PROFESSIONAL SURVEYORS

## E3 - ENVIRONMENTAL MANAGEMENT

October 2013

Note: This examination consists of 5 questions on 1 page.

Marks

Q. No	<u>Time: 3 hours</u>	<u>Value</u>	Earned
1	A man operating an automotive repair shop in an area zoned for light industrial use has decided to purchase the business from the owner who lives in a different province. For over a decade he has run a clean repair shop, with careful collection and recycling of oils, solvents, fuels and other waste liquids. The are no stains on the cement floor. When he approaches the financial institution he will need to commission an environmental site assessment.  a) should he worry even though he has been careful to avoid spills?  b) assuming this is in your province, what act or regulation is relevant here?  c) what would be involved in the first step in the assessment process?	5 5 5	
	d) describe the second stage of the process (assuming there is one).	5	
2	A pipeline carrying refined oil products is proposed across mountainous terrain in Northern Canada. Discuss the environmental impacts of such a project.	20	
3	A team of surveyors and engineers is working on a 64-unit mall in an area zoned retail-commercial. It is in a watershed that until now has had only low density housing with large lots and abundant tree cover. Residents are concerned about the effect of the mall on the hydrology of a stream downslope from the development. How could the mall affect the stream? Consider both quantity of water and quality.	20	
4	A couple own a 10 acre parcel in which the front 5 acres have been cleared and the back 5 acres remain heavily timbered (with trees 30 m tall) and borders on a stream. They want to log the remaining timber and build a summer cottage by the bank so they can enjoy fishing. However stream protection regulations are in force in this area. They are angry that there are regulations restrict them from cutting timber within 30 m of the stream, and building their cottage. Discuss the reasons for the stream protection regulations. Do you think the regulations are excessive? Why or why not?	20	
5	When a proponent plans a large mining project in Canada it is common to commission a baseline study relatively early in the feasibility and planning process. What is a baseline study, and why is it important?	20	
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