

# [Contamination and risk assessment in environmental law](https://assignbuster.com/contamination-and-risk-assessment-in-environmental-law/)

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Contamination and Risk Assessment in Environmental Law There are four basic steps involved in heath risk assessment. They are discussed as follows. Hazard identification is the process of determining the level of harm of a stressor to human health. The analysis involves Toxicokinetics, which refers to how the body absorbs and eliminates a substance, and Toxicodynamics that describes how the body is affected by the chemical substance. The second step is the dose response assessment that is meant to analyze the relationship between the exposure and effect. The potential risk in terms of the likelihood of disease or mortality is accessed. At the third level, the duration and levels of contact with the stressor are examined. Exposure assessment looks at the exposure and the timing. Exposure can be in terms of ingestion, through an open cut or inhale. Distance and time are also put into consideration while calculating the exposure assessment (Burt, 2011). In a nutshell, substance, range and quantity are key in this third level. The last stage involved risk characterization that looks at the data collected and its relevance to the environmental stressor. Transparency, clarity, consistency and reason are the principles that guide this stage. Ecological risk assessment is concerned with the potential risk f substances on a whole range of organisms including birds, mammals, and reptiles in the rivers. Human health risk assessment, on the other hand, is more interested with the lives of individual beings. Both of these concepts employ the same models, however, ecological risk assessment involved foraging range omitted in human health risk assessment. Ecological risk assessment heavily relies on physical impacts of the substance. For example, it considers the physical abnormalities on the animals, changes in color of the plants among others.   
The national resource damage assessment and restoration (NRDAR) projects aim to rehabilitate the environment mainly land and water sources from large oil spills and effects of mining activities. The program carries assessment on the damages to the environment and push for legal action from the relevant authority. The NRDA has continued to carry out many activities for the deepwater horizon spill. Some of its activities include assessing the damage the level of impacts from the spill. The project is also interested in implementing rehabilitation for the natural resources damaged during the spill. The final plan is restoration program, which will include compensation of individuals involved.   
The toothpick data is irrelevant as the real figures are thrice the estimate. The court should have assigned more time to evaluate the accuracy of the data. One of the setbacks in calculating the discount cost it used duration of injury instead of duration of exposure. For example if two people were exposed to a harmful chemical at the same time with one taking in larger amounts than the other does, the EPA would treat the cases similar despite the difference in duration of exposure (Burt, 2011). The human life is sacred and once lost cannot be retrieved. Many scientists in the past have researched on how to create life but have since failed, therefore, human life should be highly valued and taken care of. The EPA has continued to rejects measures that would save more human life at lower cost.   
References   
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Glicksman, R. L. (2007). Environmental protection: law and policy. New York, NY: Aspen Publishers.