

My last farewell – jose rizal essay sample

[People](#), [Jose Rizal](#)



**ASSIGN
BUSTER**

1. Briefly describe at least three strategies for noise mitigation for airports, highways, or railways. Under what circumstances would you considered each to be appropriate?

-The most fertile areas for the highways noise mitigation are in urban planning decisions, highway design, noise barrier design, speed control, surface pavement selection and truck restrictions. Speed control is effective since the lowest sound emissions arise from vehicles moving smoothly at 30 to 60 kph. Above that range, sound emissions double with each five miles per hour of speed. At the lowest speeds, braking and the engine of acceleration noise dominates.

Selection of road surface pavement can make a difference of a factor of two in sound levels, for the speed regime above 30 kph. Quieter pavements are porous with a negative surface texture and use medium to small aggregates. The loudest pavements have a transversely grooved surface or a positive surface texture and use larger aggregates. Surface friction and roadway safety are important considerations as well for pavement decisions.

Noise barriers can be applicable for existing or planned surface transportation projects. They are probably the single most effective weapon in retrofitting an existing roadway, and commonly can reduce adjacent land use sound levels by up to ten decibels. A computer model is required to design the barrier since terrain, micro meteorology and other locale specific factors make the endeavor a very complex undertaking. For example, a roadway in cut or strong prevailing winds can produce a setting where atmospheric sound propagation is unfavorable to any noise barrier.

2. Describe at least three facility designed modifications that maybe used to mitigate impacts on nearby wildlife habitat. -The Wildlife Habitat Mitigation establishes mitigation goals for each category of habitat and, depending upon the importance of the habitat, identifies preferred strategies to avoid or mitigate the impact of proposed actions on fish and wildlife habitat. The policy sets sideboards within which considers recommended options and alternatives for mitigation. The less important the habitat is, the more options that may be considered for mitigation. Based on the importance of the value of the habitat to wildlife, biologists may recommend avoiding all impact to the habitat or may recommend a variety of approaches or actions to offset or replace habitat affected by the proposed project. They provides the recommendations to the permitting agency as part of the permitting process. The permitting agency may choose to include the recommendations for mitigation as a requirement of the final permit.

3. Briefly describe the process of designing and constructing and artificial wetland. What civil engineering techniques are involved, and how are they combined with techniques derived from biological science to produce the final design?

-Constructed wetlands are generally built on uplands and outside floodplains or flood ways in order to avoid damage to natural wetlands and other aquatic resources. Wetlands are frequently constructed by excavating, backfilling, grading, diking and installing water control structures to establish desired hydraulic flow patterns. If the site has highly permeable soils, an impervious,

compacted clay liner is usually installed and the original soil placed over the liner. Wetland vegetation is then planted or allowed to establish naturally.

Civil Engineering involves in the process of constructing the wetland because they are part in designing the lakes and more. Moreover they are in field of drainage, and flooding authorities in respect to the biological aspects in continuing involvement in sustainable drainage systems and integrated constructed wetlands..

They are combined techniques in developing a more robust and sustainable approach to the use of constructed wetlands for treating pollution to protect local watercourses. Categorized as surface-flow type wetlands they are similar to natural free surface water wetlands. Their holistic approach termed ' Integrated Constructed Wetland' (ICW) has been successfully applied to deal with a range of effluent types – farmyard runoff, industrial waste and sewage, river pollution and flooding control. The lecture will describe the development of the ICW concept in Ireland.

4. Briefly describe at least three common techniques for the remediation of hazardous risk and contaminated soils?

– Many commercial and industrial processes can lead to the contamination of the environment with hazardous substances, including: painting operations; dry cleaning; solvent use & disposal; metal cleaning and fabrication; military operations; chemical storage, use & disposal; waste oil operations; paper making; shoe making; tanning; auto repair; wood preserving and disposal of commercial or industrial wastes. The following process is used in Maine to investigate and when necessary re mediate hazardous substance sites. The

following basic steps are used in the Uncontrolled Sites Program, Brown fields Program, Voluntary Response Action Program, Super-fund Program, and Federal Facilities Restoration Program.

Emergency Removal. Determine if at the site there are levels of hazardous substances that have or are in imminent danger of being released that are explosive, corrosive, toxic or are otherwise immediately dangerous to public health or the environment. If there are, immediately contact Response Services

Phase I Environmental Site Assessment. Determine if there was a potential for the release of hazardous substances or petroleum at the site by interviewing knowledgeable people, facility documents, and documents at DEP and EPA. In a Phase I Preliminary Assessment report, summarize this paper investigation and identify “ recognized environmental conditions” (RECs) that need further investigation. Phase I Preliminary Assessments should meet the standards in, “ ASTM E1527 – 05 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process”. (leave DEP) Contact: Nick Hodgkins (207) 287-4854 or 287-2651.

Phase II Environmental Site Assessment. For all RECs, obtain site samples or otherwise determine if there has been a release at the site. This may be done in an iterative manner, with initial data informing further investigation. The Phase II environmental assessment should summarize the nature and extent of contamination, make recommendations for further action, and otherwise meet the standards in: ASTM E1903 – 11 Standard Guide for

Environmental Site Assessments: Phase II Environmental Site Assessment Process. (leave DEP) Contact: Nick Hodgkins (207) 287-4854 or 287-2651.

References:

<http://www.maine.gov/dep/spills/publications/guidance/>

<http://www.mfe.govt.nz/publications/hazardous/risks-former-sheep-dip-sites-nov06/html/page8.html> <http://ascelibrary.org/doi/abs/10.1061/%28ASCE%29LA.1943-4170.0000046> <http://www.mfe.govt.nz/issues/managing-environmental-risks/contaminated-land/> http://www.dfw.state.or.us/lands/mitigation_policy.asp

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