

Standards for environmental parameters while construction of new buildings

[Literature](#), [Russian Literature](#)



The paper "Standards for Environmental Parameters While Construction of New Buildings" is an outstanding example of an assignment on environmental studies. City Environment Quality Review and Environmental protection Agency (EPA) of the United States of America have fixed minimum standards for environmental parameters to be followed while construction of new buildings. The existing industrial structures have become a source of higher energy consumption and atmospheric pollution. Hence, replacing the existing structures with new structures with eco-friendly materials is necessary for meeting the standards of environmental parameters. In the present project, the industrial site will be replaced by a 40 storied housing apartment. Various alternatives for existing structure have been reviewed and the most logical alternative will be green or eco-friendly building in place of existing industrial site.

The possible alternatives for the project are as follows:

- a) No construction in place of existing industrial site: It doesn't sound logical as it leads to higher energy and water consumption and doesn't serve the purpose of residential accommodation for several people.
- b) Construction of apartment but without the extension of train route: This is also not logical as it lacks the connectivity and communication among the people living in this area and it doesn't have green technology resulting in higher energy and water loss.
- c) Green or eco-friendly technology in place of existing structure: This is quite efficient among the three alternatives as it reduces the loss of energy and water significantly and at the same time meets the traffic requirement.

3-Identify possible actions involved in the project attributes that could be

logically impacted by each action, and explain physically, how the action impacts the attribute.

The best alternative i. e. green or eco-friendly technology involves the following actions during construction:

- a. Use of less amount of cement and iron
- b. Higher use of wood or tree by products for roof making
- c. Use of natural paints for inside and outside coloring
- d. Installation of solar panels on the roof of the apartment so that the natural energy is utilized efficiently.
- e. Rainwater harvesting on a roof has to be encouraged.

Attributes impacted by the above-suggested actions:

The use of less use of cement and iron reduces the pressure on mining activities and hence reduce atmospheric pollution.

The higher use of wood or tree products will make the radiation and energy loss to the rainwater minimum extent.

Use of natural paints will increase the utility of natural plant products and reduces environmental pollution.

Installation of solar panels will reduce the burden on electricity and hence enhances the energy use efficiency.

Rainwater harvesting on the roof will make the best utility of the rainwater and helps in groundwater recharge and increases the water use efficiency.

The mitigation of atmospheric pollution and water and energy loss can be achieved by the use of natural or plant products and best utilization of nonconventional or renewable energy sources like solar energy in the proposed building which makes it highly eco-friendly. Rainwater harvesting

on the roof and roof gardening with hydroponics technology would also help in mitigating the atmospheric pollution. Growing avenue plantations surrounding the apartment also mitigates the atmospheric pollution considerably.