



## Urban Planning and Industrial Territories Landscape Analysis

**Z. Kh. Adilov**

*Professor of TIACE*

**M. Sh. Zakirova**

*Doctoral student of TIACE*

**Abstract:** *This article discusses measures to mitigate and prevent environmental damage to industrial areas in urban planning and landscaping, and outlines ways to mitigate environmental problems.*

**Keywords:** *Industrial zone, environment, sanitation, urban planning and landscape, ecology, microclimate, sustainable development, anthropogenic pollution, settlements.*

*Date of Submission: 18-4-2022*

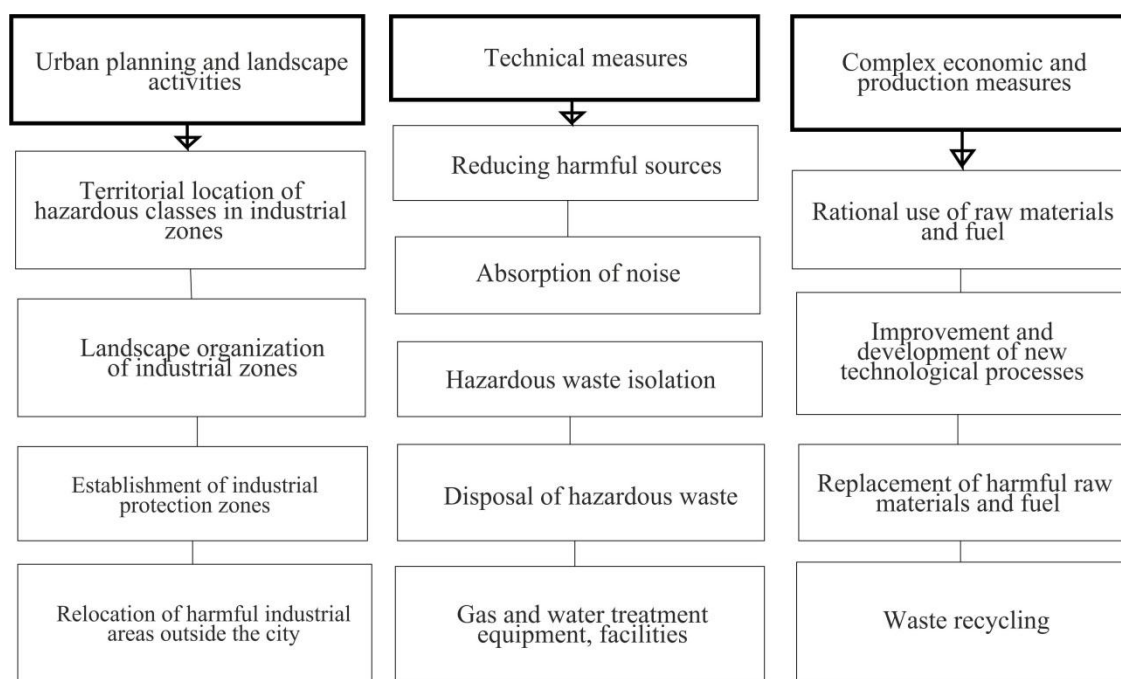
*Date of Acceptance: 20-5-2022*

**Introduction.** In the context of rapid development of industry, in the large-scale processes of environmental protection and rational use of natural resources, the problems of the environment of cities and towns are increasing, and finding solutions to them is becoming increasingly important.

With the increase in industrial types and changes in production technology, the probability and scale of the negative effects of urbanization will increase.

Due to the industrial sector, there is a lot of damage and economic damage to the environment, so the issue of establishing sanitary and hygienic conditions in cities has become part of the problem of environmental protection.

Types of anthropogenic pollution are classified according to the impact of the environment (water, air, soil). Air pollution is a major factor in the state of the environment affecting the sanitary and hygienic conditions in urban areas [1].

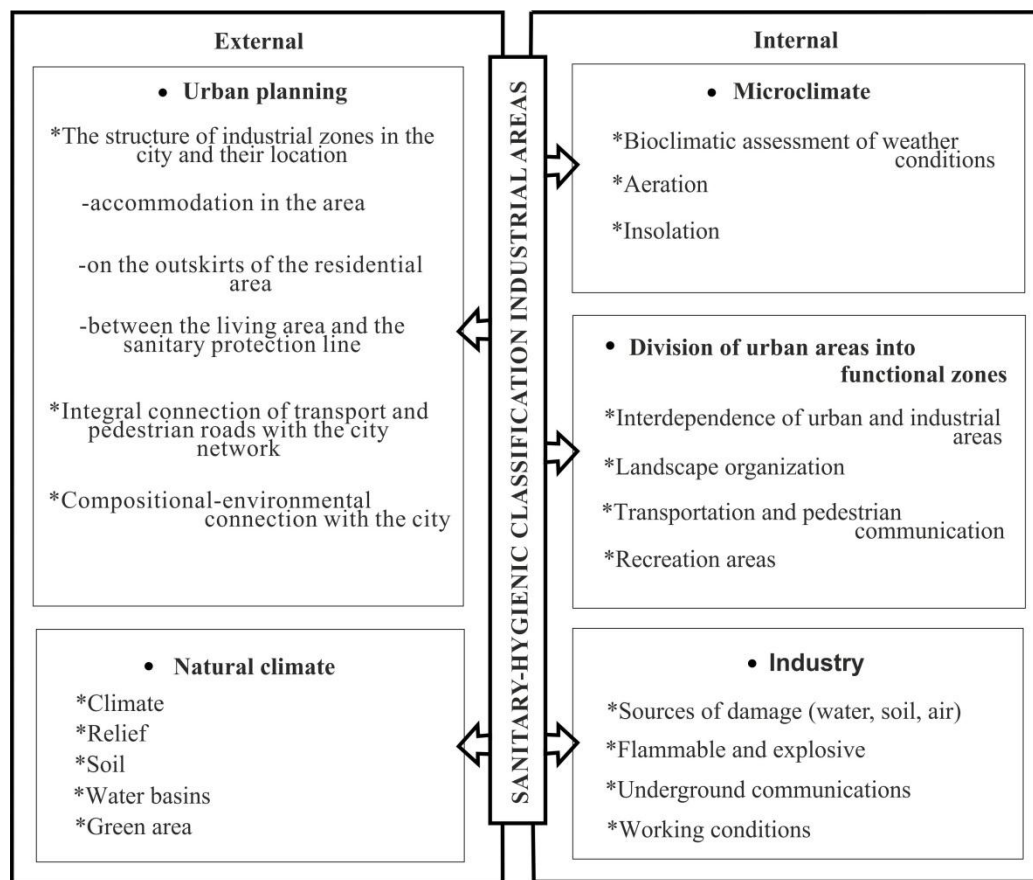
**Table 1. The main types of environmental protection measures.**

**Main part.** For urban industrial areas, the most effective way is to alleviate the sanitary and hygienic condition of the environment by means of urban planning. Sanitary protection zones between industrial and residential areas can be interconnected by landscaping the territory of industrial facilities and organizations.

A number of recommendations have been made to prepare a master plan for the industrial zones and to find an answer to the problem caused by the guidelines, which contain relevant information on the sanitary protection zones of the cities:

- methods of distribution of industrial waste;
- taking into account the sanitary and hygienic characteristics of enterprises;
- dividing the landscape into functional parts;
- ensuring the creation of sanitary and hygienic conditions in industrial and residential areas in cities (methods of urban planning and landscaping at industrial facilities);
- Methodology of landscape design in industrial areas.

The planning and landscaping of industrial areas should be based on the design taking into account the provision of sanitary and hygienic conditions. Its main purpose is to analyze the current state of the region in urban planning and landscape design.

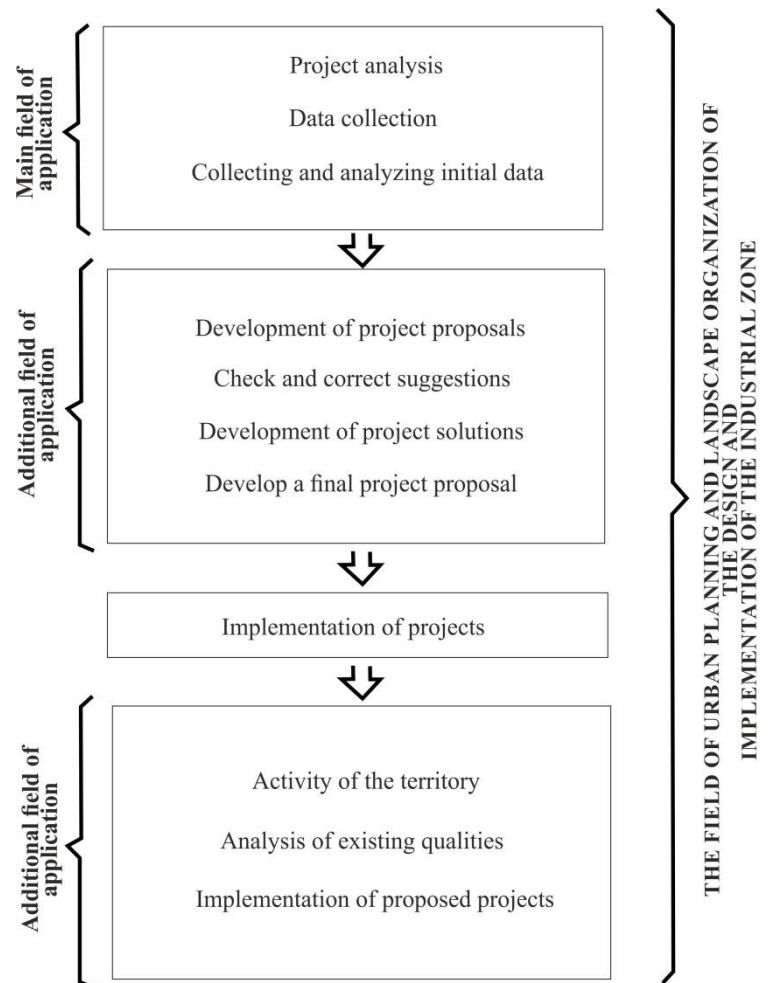
**Table 2. Factors influencing the urban planning and landscaping of industrial areas.**

The analysis of urban planning and landscape design includes the following procedure:

- ✓ description of natural features (complex climate, microclimate and sanitary-hygienic features, assessment of the landscape of the area);
- ✓ the structure and ecological, urban planning assessment of urban and industrial areas (characteristics of the structure of enterprises, a brief description of the factors that adversely affect the environment);
- ✓ basic recommendations on the cost-effectiveness of environmental protection measures.

Urban planning and landscape analysis have the following objectives:

- ✓ to create opportunities for the preservation and reconstruction of a favorable environment with the maximum mitigation of the negative impact of the microclimate regime and landscape conditions of the industrial zone;
- ✓ formation of a unified system of methods of landscape organization;
- ✓ Planning the placement of industrial and landscape elements, the system of functional connections between them, the design of transport and pedestrian systems [2].

**Table 3. Analyzes that can be applied in the field of urban planning and landscape**

Urban planning and landscape analysis are carried out in the following order:

- Solar radiation and wind mode; relief, vegetation, temperature and humidity regime determined by the presence of open water basins, sanitary-hygienic condition of the environment; climatic factors such as noise level are assessed.
- relief, orientation; green areas, their location in the territory, natural composition, condition, cover; evaluates landscape components such as reservoirs and drains, their location in the area, condition and modification options.

The assessment of the architectural potential of landscape elements is as follows:

- natural landscape, basic architectural elements; level of urbanization of the landscape, architectural significance; identify the components of the landscape.
- assessment of the sanitary and hygienic condition of the environment based on the characteristics of the area, which characterizes the climatic regime and the conditions of distribution of harmful compounds into the atmosphere from industrial wastes.

**Table 4. Permissible noise levels**

City area	Noise level, dB A	
	Evening time	Daytime
Accommodation area	45	60
Industrial area	55	65
Recreation area	35	50
Agriculture	45	50
Nature reserve	to 30	to 35

\* The radiation regime of an industrial area is assessed by the amount of ultraviolet radiation.

Based on the results of the natural-climatic assessment of the region, a microclimate zoning map will be developed, which will allow to determine urban planning measures to improve the zones, if necessary, to determine the most optimal boundaries of functional zones of industrial zones.

Ecological-urban assessment of the formation and development of the industrial zone is as follows:

- ✓ the structure of industrial zones;
- ✓ is determined on the basis of the analysis of the level of impact of hazardous wastes of industrial areas on neighboring areas and housing.

Analysis of the industrial structure It is necessary to study the sanitary and hygienic characteristics of the regions in accordance with the following criteria:

- ✓ level of danger (indicates the level of negative impact of production on the environment);
- ✓ the composition of substances (leads to the expansion of the zone of pollution in the environment);
- ✓ existence of pollutants, (increased harmful effects of substances on the environment).
- ✓ compliance with sanitary and hygienic conditions requires a reduction in the concentration of the substance and the imposition of additional restrictions on its release into the environment;
- ✓ possibility of formation of toxic substances.
- ✓ compliance with sanitary and hygienic conditions requires a reduction in the concentration of the substance and the imposition of additional restrictions on its release into the environment;
- ✓ possibility of formation of toxic substances.

The selection and use of environmental protection measures in design solutions requires a comprehensive economic rationale, taking into account the basics of urban planning. The economic framework includes:

- ✓ development of a system of requirements for environmental improvement and selection of directions for the implementation of environmental protection measures [3].

**Conclusion.** Given the complexity and versatility of environmental protection measures in cities, it is recommended to apply all types of environmental protection measures available in the development of urban solutions to increase their cost-effectiveness. Environmental protection measures, a territorially interconnected system, a system that ensures the sustainable development of the city's socio-economic complex, are integrated into the city's environmental protection complex.

**References:**

1. Болотова М.П., Лейкина Д.К., Рыгалов В.А. Благоустройство промышленных предприятий. - М.: Стройиздат, 1980. - 115 с.
2. Adilov Zarifjon Himmatovich, Reyimbaev Shuxrat Sagdullaevich// Socio-Ecological Factors of Formation of the Architectural Environment of Streets of Tashkent// Middle European Scientific Bulletin, 2021/12/7 pp. 15-19.
3. Константинова З.И. Защита воздушного бассейна от промышленных выбросов. - М.: Стройиздат, 1981. - 97 с.
4. [https://znaytovar.ru/gost/2/RekomendaciiRekomendacii\\_po\\_pl2.html](https://znaytovar.ru/gost/2/RekomendaciiRekomendacii_po_pl2.html)
5. ORNAMENTS AS A SYNTHESIS OF ARTS IN LANDSCAPE DESIGN OF UZBEKISTAN CITIES MMA Kizi - PalArch's Journal of Archaeology of Egypt/Egyptology, 2020
6. LANDSCAPING OF THE TERRITORY OF HISTORICAL MONUMENTS LOCATED ALONG THE HIGHWAY\* ON Maksetovna
7. Reyimbaev Shukhrat, Adilov Zarif, Matniyozov Zafar. (2021). Role of the design code in improving the quality of the urban environment. ACADEMICIA: AN INTERNATIONAL MULTIDISCIPLINARY RESEARCH JOURNAL, 11 (1), pp