PREPARATION FOR ENVIRONMENTAL PLANNERS

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Summary

Environmental Planners collect, organize and analyze the environmental, physical, social and economic data necessary to develop, review or administer local, regional or state environmental planning programs. Generally the environmental planners are involved in the development of long and short term plans and programs on different issues of environmental management of an area, and the use of land and facilities in urban, suburban, and rural areas. There is a growing need for environmental planning. Organizations and Authorities need the services of the environmental planners, who are employed by the governmental and local authorities. In the private sector, the Environmental Planners are employed in projects related to regional and urban planning, industrial sites management, remediation, education, environmental action plans and systems, and permitting procedures. Cases in which the environmental planner may participate are Environmental management projects and action plans initiatives for cities and local management plans or environmental impact assessment and public consultation, environmental permitting.

1. The Nature of Environmental Planner's Work

Environmental planning is the systematic assessment of environmental potential, data, alternatives of projects and other environmental, social and economic conditions, for the

purpose of selecting and adopting solutions and options which are most beneficial to inhabitants and users without degrading the resources or the environment, together with the selection of measures most likely to encourage sustainable development. Environmental planning may be at international, national, district, or local (industrial area, urban) levels. It includes participation by the public, planners and decision-makers and covers technological, educational, legal, fiscal and financial measures.

Environmental Planners collect, organize and analyze the environmental, physical, social and economic data necessary to develop, review or administer local, regional or state environmental planning programs. They prepare studies or background reports, analyze the impact of proposed plans and policies, and meet with public officials, planning commissions and the general public to provide technical advice, explain plans and policies, answer questions and seek cooperation. The nature of their work is complicated, while the number of the subjects involved is wide: from planning cities and areas up to programs of continuing monitoring of the results of the environmental measures imposed in a certain area.

2. Career Opportunities and Job Description

2.1. Nature of Work

The nature of the work of an environmental planner depends on the special characteristics of the project. Generally the environmental planners deal with the development of long and short term plans and programs on different issues for environmental management of an area, the use of land and facilities in urban, suburban, and rural areas. They are dealing with plans that provide for growth and revitalization and take into account environmental problems under the sustainable development aspect taking into consideration social, economic, and environmental issues. The nature of their work is similar to that of Environmental Engineers, Architects, Landscape Architects, City Managers, Civil Engineers, and Surveyors.

An Environmental planner will have the responsibility of assisting with the evaluation of the environmental impacts from existing or proposed District projects and activities. Specifically, this position will: (1) analyze and document existing environmental conditions; (2) analyze and document the existing or potential environmental impacts from capital projects and/or maintenance activities; (3) prepare environmental documents; (4) assist with negotiating permits ; (5) assist with development of District environmental policies and guidelines; (6) review and evaluate State and Local regulations, policies, and legislation; (7) plan and pre-design mitigation, restoration, and enhancement areas; (8) prepare reports to regulatory agencies, and liaison with agencies, special interest groups, and the general public.

2.2. Job requirements and Opportunities

There is a growing need for environmental planning. Organizations and Authorities need the services of the environmental planners. The minimum requirements for an environmental planner usually are: A bachelor's degree in planning and several years of professional experience in local, regional or state planning or a master's degree in

planning and two to five years of professional planning experience in local, regional or state planning.

The environmental Planning Supervisor or Manager should have experience as a Planner or a master's degree in planning and three years of responsible professional planning experience.

2.3. Career Description

Environmental Planners are employed by the governmental and local authorities' agencies for the following tasks: Implementation and enforcement of the environmental law, Health, Emergency Management Agencies and authorities, Environmental Protection, Conservation and Natural Resources, Transportation etc.

In the private sector the Environmental Planners are employed in projects related with regional and urban planning, industrial sites management, remediation, education, environmental action plans and systems, permitting procedure's, etc.

2.4. Education/Training

The necessary Education/Training in most cases is of the level of a B.A. degree from an accredited program and although it is desirable to proceed to a Master's degree from an accredited program. During their studies, the students will be trained in:

- Environmental strategies and policies
- Sustainable development and ways of promoting it.
- Environmental legislation
- Implementation and enforcement of environmental law
- Rules of environmental, urban, regional planning.
- Technological advances on environmental protection and Best Available Techniques BAT).
- Use and management of resources
- Tools for managing the projects (geographical information system, environmental software, etc).

Most courses include research, which is focused mainly on sustainable development, environmental and statutory land use planning, local economic development, urban regeneration and property and urban development.

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Biographical Sketches

Mr. Alexandros Karavanas has two Masters degrees, one in Chemical Engineering from the National Technical University of Athens, Greece, awarded in 1977, and the other in Pharmacy awarded by the University of Athens in 1991. He also undertook postgraduate studies in Sanitary Engineering at the Athens Sanitary School in 1990. Since 1981 he has been working for the Ministry of the Environment, Planning and Public Works, Government of Greece, and since 1989 he has been working in the Environmental Permitting section of the Ministry.

During 1997-2004 Mr. Karavanas had been a representative of the Greek Ministry for the Environment on the EC Committee concerned with Article 19 of the EC Directive 96/61 "Integrated pollution, Prevention and Control (IPPC)" concerning the reporting of IPPC industries, and on the Technical Working Group on Food and Milk of the European IPPC Bureau in Saville, Spain. He has participated in several projects of the Ministry concerned with IPPC and has publications on IPPC and related issues such as Best Available Technologies (BAT) and control of industrial emissions.

Professor Nicholas Markatos received the Diploma of Imperial College (DIC), University of London, in 1973, and Ph.D in Engineering from the same College in 1974. After working in industry for a number of years, during 1982 until 1986 he was Reader at University of Greenwich, UK, and Director of its Mathematical Modelling and Process Analysis Section. In 1986 he became Professor at the National Technical University of Athens (NTUA), Greece, Head of Chemical Engineering in 1990, and Rector of the same university during 1991 and 1997. In 2002 he was a Senior Visitor to the Department of Applied Mathematics and Theoretical Physics, University of Cambridge, UK, and Fellow of that university's Selwyn College. In 1996 he was awarded the *Doctor Honoris Causa* (Dr.H.C) degree by the University of Chemical Technology and Metallurgy, Sofia, Bulgaria. Currently he is Head of the Department of Chemical Engineering at NTUA.

Professor Markatos is consultant to a number of companies and organizations including NASA Langley Research Centre Combustion Engineering, Boeing Inc., and member of several professional organizations and associations including AIAA and New York Academy of Sciences. His main research interest is in Computational Fluid Dynamics, and Air Pollution Modeling and Control. He has published more than 150 scientific papers including 4 books.