

ASSISTERIX - a TNO Software Product for Soil Protection at Industrial Sites

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Introduction

In the posters presented around the Dutch "Directive for Soil Protection of Industrial Sites", the Decision Support System for Soil Protection Strategy of Industrial Sites (acronym: BBB) has already been introduced. The system is a risk based instrument, facilitating the process of selecting the optimal soil protection strategy in which private companies and the competent authorities are commonly involved.

In order to enhance the use of the Decision Support System, a computerised version has been developed under the name ASSISTERIX. This acronym stands for Assessment of Industrial Site Terrestrial Risks, and is a precise explanation of the main features of the system:

- a decision support aid (ASSist);
- meant for Industrial Sites;
- assessing TERrestrial RISks.

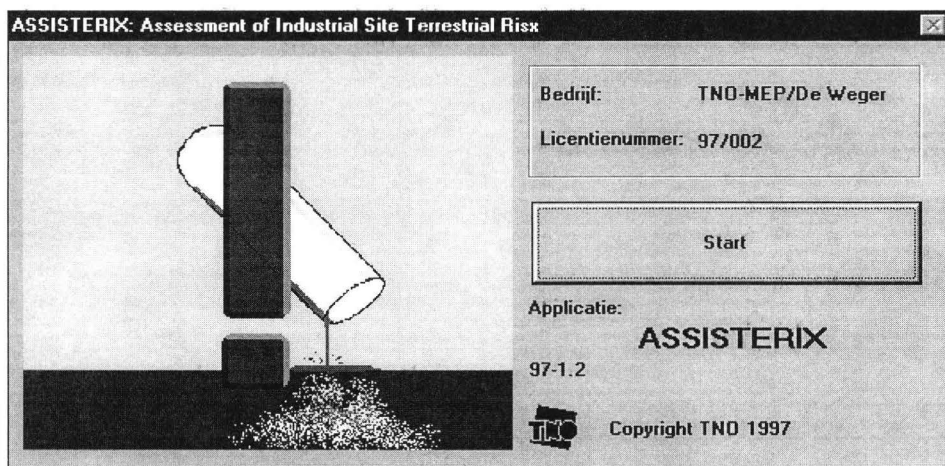


Figure. Introduction screen of the TNO software package ASSISTERIX

The software package

ASSISTERIX is a user friendly computer tool, running under Windows 3.x or Windows 95, which simplifies the decision support methodology in an intelligent way. Apart from providing a tool for filing soil risk data of specific companies and/or individual facilities, the system contains a database with the parameters needed for the risk calculations. However, the key feature of ASSISTERIX is the support the system provides when establishing the soil risk score for a specific industrial facility, taking into account soil protection measures (implemented and/or planned ones).

When using ASSISTERIX, one is led through the programme so as to avoid choices that are not supported by the Decision Support System (Dutch Guidelines). At each stage of application of the Decision Support methodology, only those options (precautionary measures) are shown that are relevant in that specific situation. The calculations that are necessary to determine the pollution size score are carried out by the system based on substance or location properties in the database. To this end, the programme includes a substance database containing all the parameters necessary to carry out the calculations;

The system has been equipped with several useful functions. For example, the industry's identified activities or sub-activities may be marked with a company-specific code and description; this is to facilitate recognition of the (sub)activities when using the programme or the software output. The company's administrative data (name, address, etc.) can be entered and stored in the system. Furthermore, a reporting facility is included into the programme which allows for printing overviews of the risk scores and categories of the individual installations and the company as a whole. And finally, the programme has been provided with an extensive help-function.

During the introduction of the Dutch Directive for Soil Protection Strategy, ASSISTERIX was adopted as the tool supporting the implementation of the Guidelines. ASSISTERIX is to be used by the local and regional authorities responsible for delivery of permits, and by problems owners such as controllers of landfills, polluted sites etc. (including industries and authorities).

In the Netherlands, several industrial sectors have already started the development of a branche-specific version of the Decision Support System. In the meantime, these specific checklists have been incorporated into ASSISTERIX, resulting in ASSISTERIX-PLUS. The wording used in ASSISTERIX-PLUS has been adapted to the terminology for the specific installations and facilities used in these branches. ASSISTERIX-PLUS includes checklists for the following sectors:

- metal and welding industry;
- dairy industry;
- textile and tapestry production;
- graphical industry;
- chemical industry.