

PACKAGE ID - 001349IBMPC00 ASSET1.0

KWIC TITLE - Air Sampling System Evaluatuion Template

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LIMITATION CODE -COPY **AUDIENCE CODE** - LIM

COMPLETION DATE - 04/17/2000 **PUBLICATION DATE** - 04/17/2000

DESCRIPTION - The ASSET1.0 software provides a template with which a user can evaluate an Air Sampling System against the latest version of ANSI N13.1 "Sampling and Monitoring Releases of Airborne Radioactive Substances from the Stacks and Ducts of Nuclear Facilities". The software uses the ANSI N13.1 PIC levels to establish basic design criteria for the existing or proposed sampling system. The software looks at such criteria as PIC level, type of radionuclide emissions, physical state of the radionuclide, nozzle entrance effects, particulate transmission effects, system and component accuracy and precision evaluations, and basic system operations to provide a detailed look at the subsystems of a monitoring and sampling system/program. A GAP evaluation can then be completed which leads to identification of design and operational flaws in the proposed systems. Corrective measures can then be limited to the GAPs.

PACKAGE CONTENTS - Media Directory; Software Abstract; Media Includes Source Code, Executable Modules;

SOURCE CODE INCLUDED? - Yes

MEDIA QUANTITY - 1 CD Rom

METHOD OF SOLUTION - Logic proccess using Database manipulation, dose calculations, ANSI PIC graded approach and programmed decision trees.

COMPUTER - IBM PC

OPERATING SYSTEMS - Windows 95/98/NT

PROGRAMMING LANGUAGES - NA

SOFTWARE LIMITATIONS - At this time there are no sensitivity levels to evaluate GAPs against. This will be added at a later date as approval from the regulators is obtained for the levels.

SOURCE CODE AVAILABLE (Y/N) - Y

UNIQUE FEATURES - The software provides a method to ensure that each requirement of ANSI N13.1 are correctly evaluated for a proposed

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UNIQUE FEATURES - (CONT) system. When the user identifies a unique component of the effluent stream or the proposed system the software reevaluates the Standards requirements and provides a new set of design/operational criteria for the system. The user does not have to continually research the Standards requirements every time a change in the operational or design criteria of the sampling system or the effluent characteristics occurs. Simply change that section in ASSET1.0 and the software performs the logic checks and provides new criteria as appropriate. The current version uses the ANSI Inventory method to determine PIC level. It also provides Potential Emissions calculations based on 40 CFR 61 Appendix D, and SRS method approved by EPA-IV and the Population dose. New modules can easily be added to accommodate methods used by other facilities.

HARDWARE REQS - IBM PC 90 Mhz Pentium class

TIME REQUIREMENTS - Minimal interactive software - runs on the fly

ABSTRACT STATUS - Released AS-IS 8/28/2000

SUBJECT CLASS CODE - Z

EDB SUBJECT CATEGORIES -
990200

SPONSOR - DOE

PACKAGE TYPE - AS - IS