WEST VALLEY NUCLEAR SERVICES COMPANY INCORPORATED	**NO.** EP-3-018	**Rev.** 0	**Date** 07/03/89	
	SUBJECT Software Application Control			
ENGINEERING PROCEDURE	**APPROVED** D. K. Ploetz Plant Engineering Manager			

1.0 PURPOSE

This procedure describes the process by which the use of a computer code is documented, in order to provide traceability between final results being reported and the Software Documentation Package of the code used in the analysis. It applies only when selected on the Software Requirements Form in accordance with EP-3-013, "Determination of Software Requirements", and only to the application of software used to generate or process data that directly supports the Waste Form Qualification Report (WQR) and/or Production Records Packages (PR); to document testing done in accordance with EP-3-017, "Conversion Testing, Verification, and/or Validation of Software;" and/or to document new-version testing performed in accordance with EP-3-016, "Software Configuration Management."

2.0 RESPONSIBILITIES

2.1 <u>User</u> - Assembles the Application Package

3.0 DEFINITIONS

3.1 <u>Application</u> - For use in this procedure, application refers to a specific task which is supported entirely or in part by use of a computer code and results in a reporting document. Application run refers to an individual run of that code.

3.2 <u>Application Package</u> - A package consisting of the Application Report, Form WV-1869 (attachment C) as a cover page, an Application Record Log (ARL), Form WV-1868 (attachment A), and an orderly series of application runs, including those of associated pre- and post-processor codes. The package also contains any input data or review documentation referenced in item 3 of the Application Report, and any supporting hand calculations. (For instructions on the completion of WV-1868, see attachment B.)

3.3 All other terms used in this procedure are defined in EP-3-013, "Determination of Software Requirements," section 3.0.

4.0 GENERAL

4.1 Preparation of an Application Package

The output of all or a logical subset of a series of computer runs along with supporting data and documentation shall make up an application package. Though an application package may occasionally include only a single computer run, the more usual case comprises an orderly series of many runs including applications of pre- and post-processor codes, i.e., support software. Only application runs developing information that directly supports the WQR and/or PR, or submitted as a testing record shall be included in an application package.

5.0 PROCESSING

RESPONSIBILITY	ACTION
5.1 User	A. Upon completion of an application, prepares an ARL, Form WV-1868 (attachment A).
	B. Prepares an Application Report, Form WV-1869 (attachment C).
	C. Assures that record copies of input and output contain the ARL number and date of the run.
	D. Assures that all magnetic media is labeled so that it is traceable to the ARL.
	E. Assembles the above documentation into an Application Package.
	F. Attaches completed application package to the document it supports prior to document review/approval.

Form No. WV-1001

6.0 <u>REFERENCES</u>

    6.1 EP-3-013, "Determination of Software Requirements"

    6.2 EP 3-017, "Conversion Testing, Verification, and/or Validation of Software"

    6.3 EP-3-016, "Configuration Control of Software"

7.0 <u>ATTACHMENTS</u>

    7.1 Attachment A - Application Record Log (ARL), WV-1868 (latest revision)

    7.2 Attachment B - Instructions on the Completion of WV-1868

    7.3 Attachment C - Application Report, WV-1869 (latest revision)

Form No. WV-1001

<u>ATTACHMENT A</u>

APPLICATION RECORD LOG

Preparer and organization _____

2) Application Record Log Number	3) Date and Time of Run	4) Software Name (title), Version and Operating System	5) Computer type/operating system/ compilers/libraries	6) Comments	7) Identifier

8) Prepared by:

_____

   Signature   Date

WV-   Rev. 0

ATTACHMENT B

INSTRUCTIONS FOR COMPLETING THE APPLICATION RECORD LOG - WV-1868

1) Enter the preparer and organization.

2) Assign a unique number to each application run in the package.

3) Indicate the date and time the application run was generated.

4) Indicate the correct name and version of the software used to generate the application run.

5) Enter the computer type and operating system used in the application package. Include specific system library(ies) and compiler(s) if unique to the application.

6) Indicate in this column, as needed, a more detailed description of the application run, any errors discovered in the application run, and other relevant information to aid in traceability or reproducibility of the application run. Note here if software has not received an FIDR per EP-3-014, "Final Internal Development Review of Software and Documentation," or if it has not been verified per EP 3-017, "Conversion Testing, Verification, and/or Validation of Software".

7) Identify the input file(s) and data base identifiers used in the application run.

8) The preparer shall sign and date upon completion.

Form No. WV-1001

ATTACHMENT C

APPLICATION REPORT

1) Preparer and organization _____

2) Purpose of application package and relationship to other work:

   _____

   _____

   _____

3) List original sources of input data, assumptions, and derivations used to obtain it, and justification for its use, as appropriate. (If input information has been previously reviewed, reference the documentation of this review.)

   _____

   _____

   _____

4) Describe interrelationships and dependencies of each application run in the application package: _____

   _____

5) Summarize the overall output of the application package in relation to the purpose stated in item 2 above (including tables and graphs, as appropriate:

   _____

   _____

   _____

6) _____

   Preparer   Date