

# LONG TERM PAVEMENT PERFORMANCE PROGRAM DIRECTIVE



*For the Technical Direction of the LTPP Program*



Program Area:	Monitoring	Directive Number:	SM-34
Date:	January 10, 2000	Supersedes:	SM-30
Subject:	Upgrade of SMPCheck Software to Version 3.0		

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Attached for immediate implementation please find Version 3.0 of the SMPCheck software. This new version of the program contains modifications implemented to make the software Y2K compliant and to handle data collected with the OnsPlus program, which has been customized for the SMP Phase II monitoring. More specifically, the following modifications were made in this program version:

- < All date fields have been checked or modified to make the program Y2K compliant.
- < Program has been modified to read data files collected with either OnsPlus, ONSITE or MOBILE.

Note: To process data collected with OnsPlus, user must copy raw data file to both the C:\Smpcheck\SiteName\Onsdata\ and C:\Smpcheck\SiteName\Mobdata\ directories and then rename data file using appropriate extension – i.e., in accordance with instructions provided in LTPP Directive SM-1. For example, if a file collected with OnsPlus is named 04SA99AK.ONS, a copy of the file must be made and copy must be renamed as 04SA99AK.MOB. The 04SA99AK.ONS file must reside in C:\Smpcheck\04a\Onsdata\ directory while the 04SA99AK.MOB file must reside in the C:\Smpcheck\04a\Mobdata\ directory. This step is necessary for SMPCheck to process temperature-rainfall and TDR-resistivity data using existing program functions.

- < When displaying TDR-resistivity data collected with OnsPlus, the program displays both TDR and resistivity data on the same computer screen if they were collected in the same hour of the day. Otherwise, the program displays either TDR or resistivity data. When displays resistivity data, the applied voltage and resistance voltage values are shown on

the computer screen along with the calculated resistance for the internal reference resistor. If the absolute error between the calculated resistance and actual resistance (nominally 100 k- $\Omega$ ) for the internal reference resistor is greater than 3 %, the value of the calculated resistance is displayed in red alerting user of possible errors in either equipment or data.

- < For data collected with OnsPlus, two new records will be created during generation of upload file. They are:
- Record 27, which contains applied voltage and resistance voltage value for the internal reference resistor.
  - Record 28, which contains measured voltage values and calculated resistance values for all 35 pairs of electrodes on the resistivity probe.

The above modifications require changes to the documentation; however, the Users Guide provided with the SMPCheck v2.5 software will not be changed at this time.

SMPCheck v3.0 should be installed on all computers being used to process SMP data. Installation consists of copying the file INSTALL.EXE off the distribution diskette and into the SMPCheck directory. Once done, run the INSTALL.EXE program and answer “yes” to question “overwrite existing program files?”. If this procedure is followed, the SMPCheck program should be able to read and process all data previously entered and processed with Version 2.7 of the SMPCheck program and data collected with OnsPlus.

It is strongly recommended that all SMP Phase I monitoring data, except for project data, be uploaded, backed up, and removed from existing data directories before starting processing of SMP Phase II monitoring data. This will eliminate confusion that could potentially arise as a result of data collected with various onsite programs (hence different format) residing in the same directory.

If there are any problems, please submit a SMP problem report (SMPPR) form in accordance with LTPP Monitoring Directive SM-6.

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