



**PENNDOT BITUMINOUS
LEVEL 1 PLANT TECHNICIAN
CERTIFICATION PROGRAM
2005-2006**

The PENNDOT Bituminous Level 1 Plant Technician Certification Program includes a two-day review course for technicians directly involved with bituminous pavement mixture design, hot mix asphalt (HMA) production, process control and/or quality assurance testing, with a written examination on the third day. The course was developed by NECEPT in cooperation with PENNDOT and private industry. For qualified applicants, attending this review course and passing the examination fulfill the requirements for Level 1 Plant Technician certification.

This is a review, not a training course. Therefore, a working knowledge of basic principles and procedures for asphalt pavement mixture design and production is necessary. **Recommendation by signatures of a Certified Bituminous Plant Technician and of a PENNDOT District Materials Engineer/District Materials Manager, and a minimum of one year of work experience related to HMA plants are required to qualify for this program.** The certification period is five years. Renewal may be obtained according to procedures described in PENNDOT Pub. 351.

Course materials include a notebook compiled by NECEPT that contains numerous PENNDOT documents: specifications for materials sampling, testing and acceptance; Bulletin 27 with guidelines for designing Superpave mixtures; PENNDOT test methods (PTMs) and related AASHTO methods. Participants will only be tested on the AASHTO test methods incorporated by PENNDOT in Bulletin 27 and Pub. 408. The “Hot Mix Asphalt Paving Handbook”, approved as a guide by AASHTO, FHWA, industry and other organizations, is also provided. Selected materials from the new National Highway Institute HMA plant course, “HMA Production Facilities” may be added. These are supplemented by lectures, slides, videos, overheads and various handouts including workshop problems and practice quizzes formatted in the same manner as the examination. The only PENNDOT forms used in the course will be those from Bulletin 27. The examination will be open book, consisting of multiple choice and true/false questions. There will be at least two versions of the test to discourage copying. Each participant scoring 70 percent or better will be sent a PENNDOT Bituminous Level 1 Plant Technician certificate, wallet card and hard hat sticker within approximately three to four weeks.

- **Picture identification is required.** Identification will be verified upon check in and on the day of the examination. Applicants will not be allowed to take the examination without picture ID.
- Participants should bring a calculator and pencils/pens to class. A No. 2 pencil is required to fill out the exam answer sheets for computer grading.
- Frequent informal breaks will be given at the instructors’ discretion. Morning beverage/snack breaks will be provided all three days; lunch and afternoon beverage/snack breaks the first two days.

LEVEL 1 PLANT TECHNICIAN REVIEW COURSE AGENDA*

Day	Time	Topic
Day 1	8:00 – 8:30 a.m.	Check In
	8:30 – 8:45 a.m.	Orientation
	8:45 – 11:00 a.m.	PENNDOT Specifications & Test Methods
	11:00 a.m. – 12:00 noon	PENNDOT Bulletin 27
	12:00 noon – 1:00 p.m.	Lunch
	1:00 – 2:30 p.m.	Superpave Mixture Design & Analysis
	2:30 – 3:30 p.m.	Aggregate Tests & Gradation
Day 2	3:30 – 5:00 p.m.	Aggregate Blending Workshop
	8:00 – 9:30 a.m.	Specific Gravity & Absorption
	9:30 – 11:00 a.m.	Density & Voids Analysis
	11:00 a.m. – 12:00 noon	Quality Control/Process Control
	12:00 noon – 1:00 p.m.	Lunch
	1:00 – 3:00 p.m.	Hot Mix Asphalt Plants
	3:00 – 4:00 p.m.	Introduction to Paving Operations
Day 3	4:00 – 5:00 p.m.	Segregation (Thermal and Particle Size)
	8:00 – 8:30 a.m.	Review/ Question and Answer
	8:30 – 11:30 a.m.	Examination
	11:30 a.m.	Dismissal

*Agenda is subject to change