

THE GENERAL ASSEMBLY OF PENNSYLVANIA

HOUSE BILL

No. 2062 Session of
1991

INTRODUCED BY KASUNIC, DeLUCA, McCALL, TIGUE, LESCOVITZ,
MIHALICH, LAUGHLIN, CARLSON, G. SNYDER, BROWN, BOYES,
PISTELLA, VAN HORNE, HERSHEY, KOSINSKI, CAWLEY, SCRIMENTI,
LEE, HERMAN, STAIRS, JOHNSON, GERLACH, HECKLER, WOGAN,
TANGRETTI, MAYERNIK, COY, HALUSKA, FARGO, PESCI, BELFANTI,
BUSH, FOX, LINTON, CLARK, GODSHALL, NYCE, STETLER, JOSEPHS,
GAMBLE, LUCYK, ITKIN, FAJT, M. N. WRIGHT, STISH, DERMODY,
TRICH, SURRA, ARGALL, KENNEY, BROUJOS, TRELLO, S. H. SMITH,
CARONE, STABACK, SCHEETZ, THOMAS, KRUSZEWSKI, BUNT, SERAFINI,
McHALE AND BELARDI, OCTOBER 21, 1991

REFERRED TO COMMITTEE ON TRANSPORTATION, OCTOBER 21, 1991

AN ACT

1 Providing for the Department of Transportation to conduct, as
2 part of its currently scheduled projects, a demonstration
3 project using crumb rubber from waste tires as an additive in
4 surfacing material, structural material, subbase material and
5 fill; and conducting a feasibility study of crumb rubber in
6 asphalt for road resurfacing or subbase material.

7 The General Assembly of the Commonwealth of Pennsylvania
8 hereby enacts as follows:

9 Section 1. Short title.

10 This act shall be known and may be cited as the Rubber-
11 Modified Asphalt Demonstration and Use Act.

12 Section 2. Declaration of policy.

13 The General Assembly finds and declares that:

14 (1) It is in the public interest to find alternative
15 ways to recycle waste tires that currently are part of the
16 solid waste stream.

1 (2) The reuse of waste tires, processed into crumb
2 rubber, in paving materials in the construction or
3 improvement of highway is a promising method of recycling
4 waste tires.

5 (3) Recent research shows that rubber-modified asphalt
6 paving material may add to the life and safety of public
7 highways.

8 (4) Pennsylvania should consider utilizing waste tires
9 in some beneficial way that will help to eliminate a
10 potential hazard to public health and to the environment.

11 (5) The Department of Transportation should be required
12 to investigate the use of rubber-modified asphalt as an
13 additive in asphalt pavement construction.

14 Section 3. Definitions.

15 The following words and phrases when used in this act shall
16 have the meanings given to them in this section unless the
17 context clearly indicates otherwise:

18 "Crumb rubber." The material created when waste tires are
19 reduced to pieces the size of sand grains or smaller.

20 "Department." The Department of Transportation of the
21 Commonwealth.

22 "Rubber-modified asphalt." A proprietary mix of asphalt and
23 crumb rubber blended at high temperatures. The crumb rubber acts
24 as a binder to hold aggregate. It can be applied as a joint
25 sealer, surface treatment, or in a hot mix.

26 "Surface treatment." Thin layers of pavement placed to
27 maintain roads. A chip seal is a type of surface treatment.

28 "Waste tire." A tire no longer suitable for its intended
29 purpose because of wear, damage or a defect.

30 Section 4. Rubber-modified asphalt demonstration project.

1 (a) Beginning of project.--To determine the feasibility of
2 using waste tires in rubber-modified asphalt, within six months
3 of the effective date of this act the department shall
4 undertake, as part of its currently scheduled projects, a
5 demonstration project using crumb rubber from waste tires in
6 road surface treatment or subbase materials for roads.

7 (b) Materials.--The rubber-modified asphalt demonstration
8 project shall utilize rubber derived from waste tires discarded
9 in this Commonwealth, including, but not limited to, use in
10 crumb rubber form as a percentage of asphalt mix and use as a
11 joint material and may be required in a contract or contracts
12 for capital construction or improvement of highways.

13 (c) Site selection.--The department shall select a site for
14 the demonstration project in an area of this Commonwealth that
15 experiences the extremes of weather common to Pennsylvania's
16 climate.

17 (d) Duration.--The demonstration project shall be maintained
18 for a minimum of 12 months, but no longer than 18 months.

19 Section 5. Feasibility study by the department.

20 (a) Study.--The department shall conduct an investigation
21 and evaluation of the use of crumb rubber as an additive to
22 asphalt concrete and other alternatives which would utilize
23 waste tires. The development of the scope of services and
24 technical guidance and review of the work shall be conducted by
25 the department's materials and testing division.

26 (b) Report.--Within six months after the completion of the
27 demonstration project required in section 4, the department
28 shall report to the Governor and the General Assembly on its
29 evaluation of rubber-modified asphalt. In making such a report,
30 the department may make use of and report on existing studies,

1 analyses and pilot projects conducted within or outside this
2 Commonwealth by other states or the Federal Government, along
3 with any other sources of information it deems appropriate. The
4 report shall include, but not be limited to:

5 (1) Determining the type and amount of crumb rubber that
6 would provide acceptable properties in rubber-modified
7 asphalt.

8 (2) Determining preprocessing requirements and the
9 method of incorporation of crumb rubber in rubber-modified
10 asphalt and identifying potential effects on pavement
11 construction and performance.

12 (3) Determining the effects and procedures for the
13 recycling of asphalt containing crumb rubber.

14 (4) Determining the amount of crumb rubber that may be
15 used in road construction and the expected costs of such use.

16 (5) Identifying changes needed in department and local
17 government specifications and procedures to allow for use of
18 crumb rubber from waste tires in rubber-modified asphalt.

19 (6) A comparison of costs of conventional asphalt mixes
20 to the costs of the use of rubber-modified asphalt.

21 Section 6. Effective date.

22 This act shall take effect immediately.