



pennsylvania

DEPARTMENT OF TRANSPORTATION

**STRATEGIC RECYCLING PROGRAM (SRP)
MEMORANDUM OF UNDERSTANDING (MOU)**

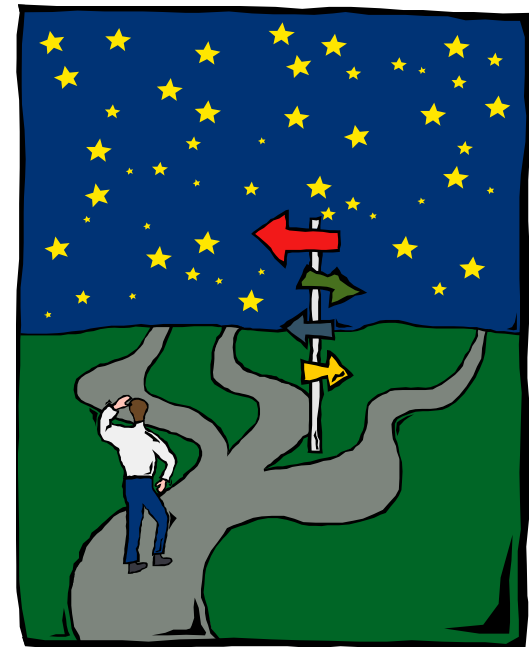
AN OVERVIEW

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OVERVIEW

- ◎ Macro-view
- ◎ Approved Specifications
- ◎ Recent Activities
- ◎ Future Opportunities
- ◎ Q/A





PENNDOT AND PADEP SRP MEMORANDUM OF UNDERSTANDING (MOU)

- ⊙ Establishing and implementing a waste reduction program for materials used in PENNDOT operations;
- ⊙ Continually reviewing and revising existing procedures and specifications;
- ⊙ Evaluating materials that may be recycled in transportation and civil engineering applications;
- ⊙ Employs procurement and contract bidding options encouraging recycled materials use.



PENNDOT'S STRATEGIC RECYCLING PROGRAM (SRP)

PennDOT SRP Development:

- ⊙ Created in 1998 as a tool to systematically identify, evaluate, and implement recycling opportunities throughout Pennsylvania.

PennDOT SRP Objectives:

- ⊙ Realize economic savings and environmental enhancement to PENNDOT and the Commonwealth;
- ⊙ Continued development and improvement to pollution prevention, recycling, energy efficiency efforts; and
- ⊙ Sound environmental management practices.

STRATEGIC RECYCLING PROGRAM

FIVE KEY FOCUS AREAS

Research – To collect information on recycled materials and to identify and resolve data gaps associated with the use of recycled materials.

Specifications – To develop, obtain, and/or disseminate user guidelines, provisional special provisions and Publication 408 specifications at the Municipal, District and Statewide levels.

Projects – The overall objective is to successfully incorporate recycled materials in transportation-related projects, including post-construction monitoring.

Outreach – To disseminate the results and experiences of recycled materials projects to PENNDOT, Commonwealth agencies and the public.

Contracting – To provide technical assistance to the Engineering Districts in developing construction contract mechanisms to specify or provide for recycled material use.



CURRENT RECYCLED MATERIAL SPECIFICATIONS



- ◎ Recycled Asphalt Pavement (RAP)
- ◎ Hot in-place Asphalt Recycling
- ◎ Crushed Glass
- ◎ Asphalt Shingles
- ◎ Reclaimed Portland Cement Concrete (RPCC)
- ◎ Blast Furnace Slag
- ◎ Steel Slag
- ◎ Fly Ash
- ◎ Bottom Ash
- ◎ Spent Foundry Sand
- ◎ Aluminum
- ◎ Scrap Tires
- ◎ Compost
- ◎ Geo-foam



RECENT ACTIVITIES

➤ **Created fact sheets for the following materials:**

- ⊙ Coal combustion by-products, including fly ash, bottom ash, and hydrated fly ash
- ⊙ Roofing shingles
- ⊙ Slags, including ground granulated blast furnace slag; currently piloted as anti-skid
- ⊙ Compost and shredded brush
- ⊙ Recycled Portland Cement Concrete
- ⊙ Glass cullet
- ⊙ Tires and tire rubber
- ⊙ Industrial sands, including Foundry Sands
- ⊙ Metals, primarily steel and aluminum



RECENT ACTIVITIES

SR 222 – Gouglersville Interchange Project – Berks County
Photographs Taken 4/30/2013



- ① District 5-0:SR 222, Berks County Spent **Mushroom Compost** Project
- ① District 3-0: SR 15 Snyder County Warm Mix Asphalt- Asphalt **Rubber** Gap graded (WMA-ARGG) wearing Course 12.5mm
- ① District 4-0: SR2005 (Blackman St), Luzerne County, Crumb **Rubber** Modified Asphalt (CRMA)



FUTURE OPPORTUNITIES

◎ Sustainability of demonstrated projects

◎ Ease of implementation

- ◎ Cradle –to-cradle analysis

◎ Data collection

- ◎ SRP & Non-SRP funded projects tracking
- ◎ Recycling beyond the SRP

◎ Stakeholder buy-in

◎ Outreach

◎ RMRC

◎ TRB

◎ SWAC

◎ STIC/Research Unit/Districts

◎ BIOCYCLE



PENNDOT'S WASTE AUDIT PROGRAM

- ◎ PennDOT waste audits are conducted biennially and serve to:
 - ◎ Collect solid and recyclable waste generation and cost data;
 - ◎ Provide a big-picture evaluation of office waste management practices at PennDOT;
 - ◎ Measure progress of PennDOT District and Central Office solid waste management activities;
 - ◎ Big picture evaluation of overall costs for waste disposal and recyclables management;
 - ◎ Allow each District to benchmark current recycling programs and support District Offices in opportunities for improvement;
 - ◎ Increase employees' awareness of recycling efforts;
 - ◎ Demonstrate PennDOT's support and compliance with the Commonwealth's overall recycling goals;



QUESTIONS?

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