BENEFICIAL USE OF SCRAP TIRES

Ohio EPA encourages the reduction, re-use, and recycling of all waste materials, including scrap tires. However, Ohio Law requires landowners, construction companies and others to receive specific Ohio EPA authorization in accordance with Ohio Administrative Code (OAC) Rule 3745-27-78 to beneficially use whole or processed scrap tires before beginning any type of project which is not specifically listed as a pre-approved project type in paragraphs (D) or (E).

If a proposed project is not listed as pre-approved, then a project plan must be submitted and approved by Ohio EPA before a project may be implemented. OAC Rule 3745-27-78 paragraphs (F) and (G) describe the requirements for all proposed scrap tire beneficial uses which are not pre-approved by rule. All required project plans are to be submitted through the appropriate Ohio EPA district office where each project is proposed. All project plan requirements can be found at:

www.epa.state.oh.us/dsiwm/document/currentrule/3745-27-78_current.pdf

Basic project plans are to include information such as: the number, weight, or volume of scrap tires to be used; the total length of time the project is expected to complete; a detailed description of how the tires will be used including project specifications of how the tires will be used; the kind of material normally used which is to be substituted as a construction material; and the mosquito controls to be utilized for temporary storage of the whole tires to be used during the project. Some types of project plans which have been approved by Ohio EPA include the following:

Whole tires which have been filled with soil used in:
- a buildings' walls as construction material
- a subgrade light weight retaining wall

Within 60 days of each project’s completion, a report is to be submitted to Ohio EPA’s Scrap Tire Unit describing the number, weight, or volume of tires originally delivered to the site for the project, as well as the number, weight, or volume of scrap tires actually used in the project.

Prior Ohio EPA Scrap Tire Beneficial Use project plan approval is not required for the following beneficial uses, unless storage of more than one hundred tires will take place for more than 30 days in the following instances:

While Ohio EPA is required under Ohio Revised Code Section 3734.84 to review project proposals for the beneficial use of whole and processed scrap tires based on certain restrictions/allowances, each project may also be subject to other local restrictions such as zoning, building or health codes. Any local approvals required may be more restrictive than Ohio EPA’s allowance criteria or may prohibit the use of alternative construction materials altogether. All relevant local and state approvals are required before each project can move ahead and are the responsibility of each company or landowner requesting beneficial use approval.
Whole tire projects which are pre-approved-by-rule are listed in OAC 3745-27-78(D) and include such uses as:

- dock bumpers;
- crash barriers at race tracks (limited to 1500 scrap tires without a project plan);
- rifle range backstops (limited to 1500 scrap tires without a project plan);
- agricultural use to hold down covers over piles of hay, silage (limited to 250 scrap tires without a project plan); and
- to hold down tarps and covers at landfills if permitted or licensed to use in association with tarps or covers as alternative daily cover (limited to 250 scrap tires without a beneficial use project plan).

Processed tire derived chip (TDC) projects which are pre-approved-by-rule are listed in OAC 3745-27-78(E) and include such uses as:

- As an aggregate substitute for:
  - leachate collection systems in landfills if use is permitted or licensed at each landfill;
  - re-circulation systems in landfills if use is permitted or licensed;
  - methane gas collection system in landfills if use is permitted or licensed at each landfill;
  - drainage/insulation of home and building foundations;
  - home septic system leach fields if use is pre-approved thru local county health department;
  - subgrade drainage layer and road base in public roadways;
  - subgrade light weight fill in public parking lots and roadways;
  - subgrade light weight fill around building foundations;

- As fall protection under children’s playground equipment if all metal has been removed;
- As a bulking agent at composting facilities if approval has been granted, as required by OAC Rule 3745-27-40.

All pre-approved-by-rule beneficial uses listed above and in OAC Rule 3745-27-78(D) or (E) require pre-notification by mail accompanied by receipt to the appropriate Ohio EPA district office and the approved local county health department.

As Ohio EPA becomes more familiar with appropriate design specifications for different projects and how scrap tires may be appropriately substituted as an useful alternative construction material, the list of pre-approved project types is continually being considered for revision with the addition of new construction projects.