OhioEPA
State of Ohio Environmental Protection Agency

Northwest District Office

347 North Dunbridge Rd.
Bowling Green, OH 43402-9398

TELE: (419) 352-8461 FAX: (419) 352-8468
www.epa.state.oh.us

Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

Re: Scrap Tire Beneficial Use
Project #33-STBU-7239
Notice of Violation

April 10, 2009

CERTIFIED MAIL

Mr. Logan Medley
Medley's Housing
19583 State Route 31
Mt. Victory, Ohio 43340

Dear Mr. Medley:

On March 27, 2009, I, along with Tyler Madeker and Brent Goetz, represented the Ohio Environmental Protection Agency (Ohio EPA) and performed an inspection of your property located at 19583 St. Rte. 31, Mt. Victory, in Hardin County, Ohio (Site). The Site is the location of a scrap tire beneficial use project, in which scrap tires are approved for use in the building of a house, a horse barn, and a fence. You were present during the inspection. Ohio EPA approved your request to beneficially use scrap tires, including your project plan, at the Site on September 20, 2007. In accordance with Ohio Administrative Code (OAC) Rule 3745-27-78(H)(1), you are required to "comply with the project plan as submitted to and approved by the director." As part of the approval you are also subject to the conditions identified in the authorizing letter issued to you on September 20, 2007. Furthermore, in a letter dated August 24, 2008, and received on September 4, 2008, you requested to amend your project plan by seeking approval to place scrap tires around the existing house at the Site. You were granted approval to use scrap tires in this manner in a letter dated November 26, 2008.

Your approved project plan consisted of multiple document submittals, dated June 8, 2007, (received June 18, 2007), July 3, 2007, (received July 6, 2007), July 28, 2007, (received August 2, 2007), and August 24, 2008, (received September 4, 2008). In your approved project plan, you stated the following:

- "I will fog and spray every night to keep down on the mosquito's. . . I will cover with tarp or plastic and spray for mosquitos, after each work day."
- "After the tires are laid down for the fence, (each tire) then will be filled with dirt, packed tight."
- Tires will be deck screwed together, as indicated in "fence 1" and "fence 2" drawings (drawings attached).
- "keep you informed of day's we receive tires."
- "I will keep track of every used tire, and how many we use a day. I will report and mail a letter to you every month."
- "No tires will hold water."

- "What ever you did not approve of, we would change it, or do an idea that you thought would be better."
- "14 to 16 inch tires" would only be used.
- Single row of tires to be used in the fence construction, as indicated in "fence 1" and "fence 2" drawing (drawings attached). Project plan does reference the possibility of doubling for stability.
- Three (3) inch thick concrete wall on each side with incased top, as depicted in "fence 2" drawing (drawing attached).

As part of the approval from the director for the Site, you are subject to the following additional conditions, in part:

- "All scrap tires not in use shall be stored in compliance with OAC Rule 3745-27-60(B), as effective March 29, 2002"
- "The fence shall be covered with cement as soon as an entire truckload of cement is able to be used."
- Structures built with scrap tires "shall be maintained such that tires are not exposed . . . due to partial collapse of the . . . structure. If scrap tires become exposed, repairs shall be made to eliminate the exposure . . ."

In addition, during a scrap tire transporter inspection of R&R Tire, shipping papers maintained by R&R Tire indicated that six (6) loads of scrap tires were brought to your Site, totaling approximately 2,500 scrap tires. Most of the scrap tires not currently being used in the tire fence are stored in a 1,900 square foot barn at the Site. Approximately 25-50 scrap tires are currently stored on the ground in close proximity to the tire fence.

Attached to this letter are pictures taken during the March 27, 2009, inspection along with pictures taken over the past year, since the first inspection of the Site on July 15, 2008. The results of the March 27, 2009 inspection, along with results of all other Site visits, are detailed below. Furthermore, attached to this letter is the document, sent to your attention in July 2008, which documented Ohio EPA's first visit to the Site. This document provided guidance and recommendations on how to manage the project appropriately, in accordance with your project plan and the director's approval letter.

OAC Rule 3745-27-78(H)(1) states, in pertinent part:

> *After project plan approval, the applicant shall . . . comply with the project plan as submitted to and approved by the director.*

The owner or operator of the beneficial use of scrap tires Site, approval # 33-STBU-7239, is in violation of OAC Rule 3745-27-78(H)(1) for deviating from the approved project plan and from the director's approval dated September 20, 2007, for the following reasons:

1. Failure to fog and spray for mosquitoes every night as indicated in the project plan.
2. Failure to adequately ensure the scrap tires not in use that are stored outside of the barn were properly covered each night with a tarp or plastic. (See attached pictures #1, #2, and #23)

3. Failure to adequately place scrap tires in the fence by filling each tire and properly packing the soil into the tires. (See attached pictures #3 through #12)
4. Failure to properly screw together all scrap tires. (See pictures #5 and #9)
5. Failure to properly maintain tire use records and receipts of tire acceptance, and for failing to submit such records to Ohio EPA on at least a monthly basis.
6. Failure to ensure scrap tires will not hold water. (See attached pictures #13 and #14)
7. Failure to adjust or change construction techniques as recommended by Ohio EPA. (See attached document from July 15, 2008 Site visit)
8. Failure to utilize only 14 to 16 inch scrap tires for the project. (See Attached pictures #10, #15 through # 19)
9. Failure to maintain a single or double wide row of tires in the fence construction. There are areas of the fence that are three (3) wide. (See attached pictures #15 and #20)
10. Failure to have cement placed on tires in the fence when there are enough tires placed to use an entire truck load of cement. (See attached picture #21)
11. Failure to maintain and repair the tire structure built around the base of the existing house. The structure built around the existing house has failed, exposing scrap tires. (See attached picture #22)

OAC Rule 3745-27-78(H)(2) states, in pertinent part:

After project plan approval, the applicant shall . . . comply with the mosquito control requirements . . .

The owner or operator of the beneficial use of scrap tires Site, approval # 33-STBU-7239, is in violation of OAC Rule 3745-27-78(H)(2), OAC Rule 3745-27-60(B), as effective March 29, 2002, and Condition No. 4, of the director's approval dated September 20, 2007, for failing to comply with the mosquito control requirements identified within the project plan, approval from the director, and the OAC Rule 3745-27-60(B), as effective March 29, 2002. Specifically for the following reasons:

1. Failure to fog and spray for mosquitoes every night as indicated in the project plan.
2. Failure to adequately ensure the scrap tires not in use that are stored outside of the barn were properly covered each night with a tarp or plastic. (See attached pictures #1, #2, and #23)
3. Failure to ensure scrap tires will not hold water. (See attached pictures #13 and #14)
4. Failure to ensure all tires placed down for the fence were properly filled with dirt. (See attached pictures #3 through #12)

The owner or operator of the beneficial use of scrap tires Site, approval # 33-STBU-7239, is in violation of Condition No. 5, of the director's approval dated September 20, 2007, for the following reason:

1. Failure to cover the fence with cement as soon as an entire truckload of cement is able to be used. (See attached picture #21)

The owner or operator of the beneficial use of scrap tires Site, approval # 33-STBU-7239, is in violation of Condition No. 11, of the director's approval dated September 20, 2007, for the following reason:

1. Failure to maintain and repair the partial collapse of the scrap tire structure built around the foundation of the existing house at the Site. (See attached picture #22)

Although Ohio EPA encourages waste reduction and recycling, please be aware that failure to complete the project as indicated by your submitted proposal and in accordance with the approval conditions issued to you by Ohio EPA on September 20, 2007, may result in enforcement actions. If the fence is not constructed properly, Ohio EPA may order you to remove the entire fence and revoke your approval.

Please submit any pertinent documentation about the ongoing status of the project to me at 347 N. Dunbridge Road, Bowling Green, Ohio 43402. Any pertinent information should be sent within 14 days of the date of this letter. If you have any additional questions, please contact me at (419) 373-3079.

Sincerely,

Jeremy Scoles, RS
Environmental Specialist
Division of Solid and Infectious Waste Management

/lb

Attachments

pc: Bob Large, DSIWM, CO
[redacted]
7007 2560 0000 4485 5164

ec: Mike Reiser

23 .jpg

#1 .jpg

#2 .jpg

#3 .jpg

#4 .jpg

#5 .jpg

#6 .jpg

#7 .jpg

#8 .jpg

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#17 .jpg

#18 .jpg

#19 .jpg

#20 .jpg

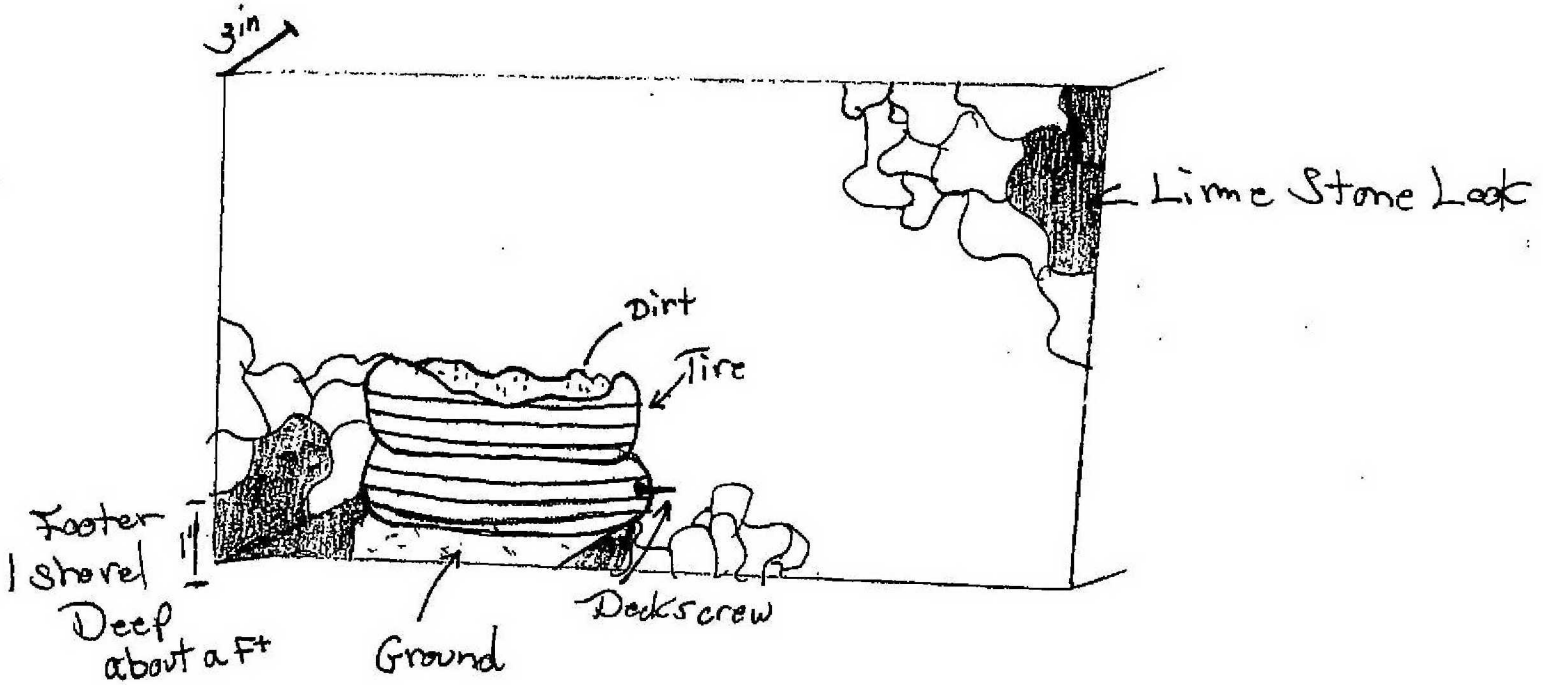
#21 .jpg

#22 .jpg

3in Concrete wall on each side.

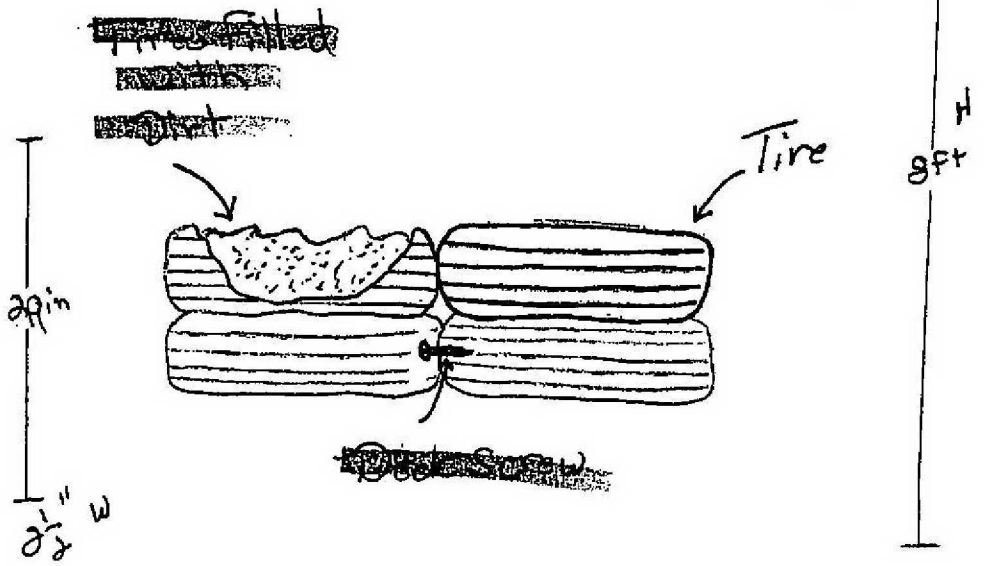
[redacted] Top-2-Sides of wall,

Fence 2.



Fence 1.

8ft Fence
Lenght of Fence 3,919ft
240 Tires every 50ft



3,919ft
L

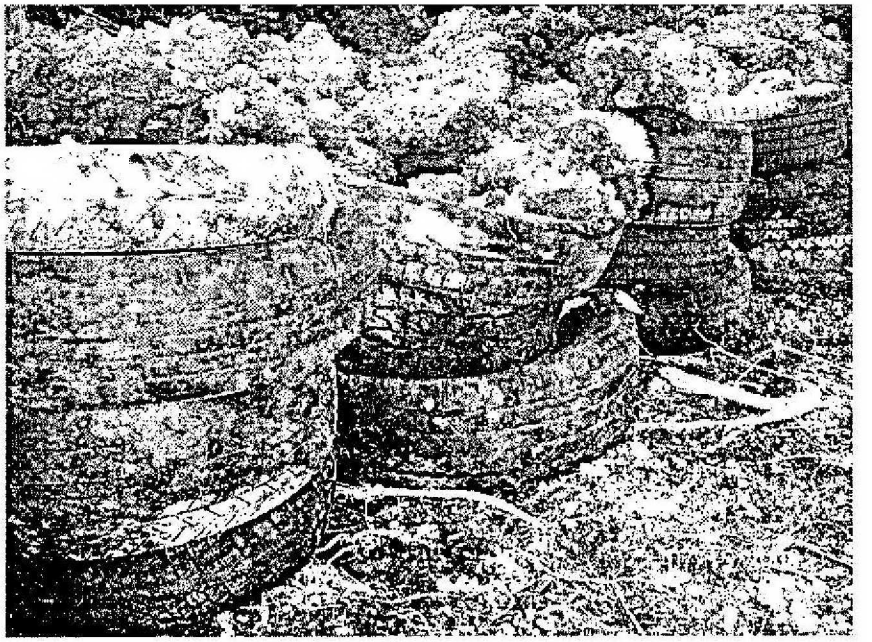
Tires should be kept covered with a tarp until used in the fence.

Each tire accepted is a potential debt. If the fence is not properly constructed In accordance with the Ohio EPA Director's Orders, the Director may order you to remove the entire fence. If the tire fence fails, sections fall down, or it is not maintained per the beneficial use approval letter, the Director may order its removal.

Based on the estimate of 40,424 tires for your projects, the potential cleanup costs if the state contract is used would be $68,515.00. The State would seek cost recovery and could place a lien on your property.

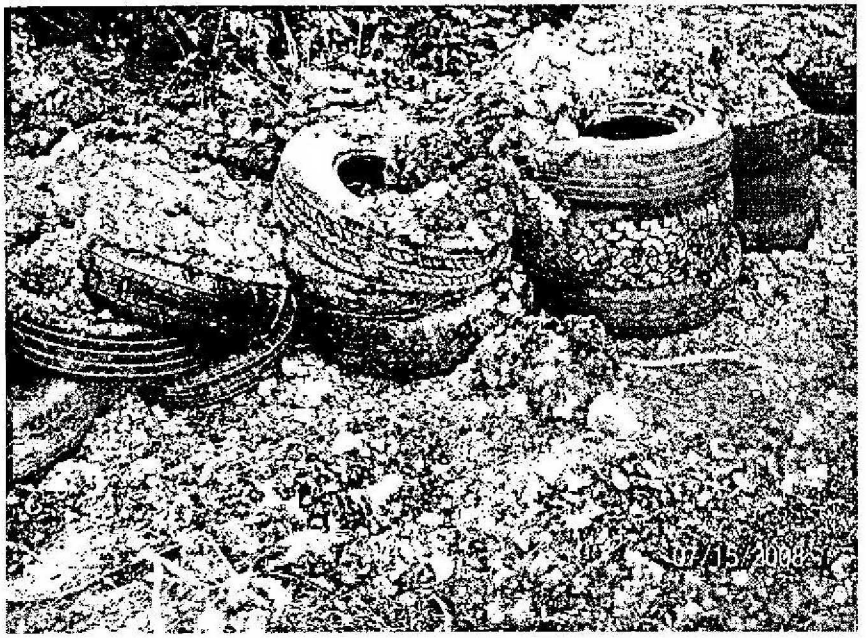
Driving over the tires is not a good idea. It will tend to weaken the sidewalls which will in turn weaken your fence.

3



4

Partially filled tires will not support the weight of the fence above it. This is especially critical in the bottom layers of the fence. The fill material needs to be packed into each tire. Sand or small gravel would work better than the clay soil you are using. Barrel stacking is probably not the best approach for this fence. Offsetting each layer of tires would give it more strength.



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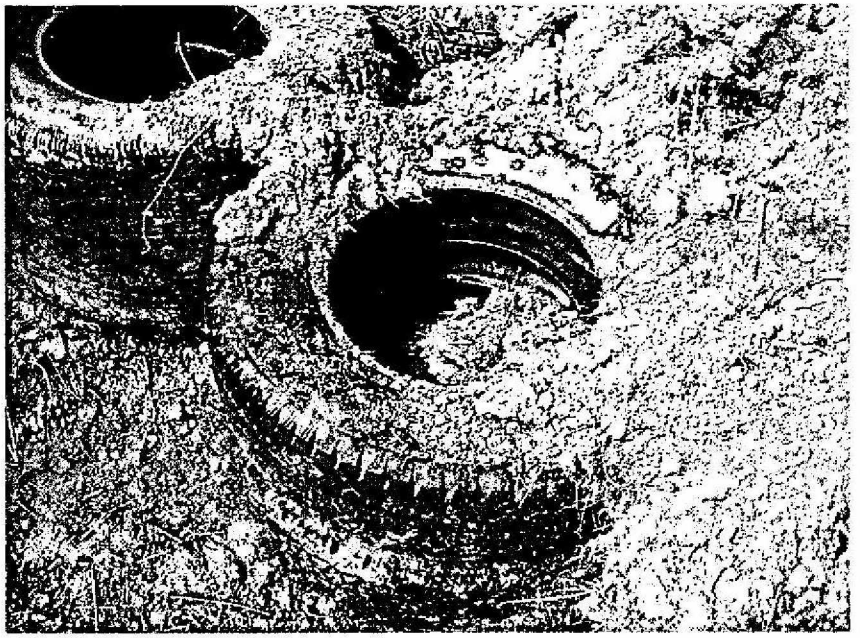
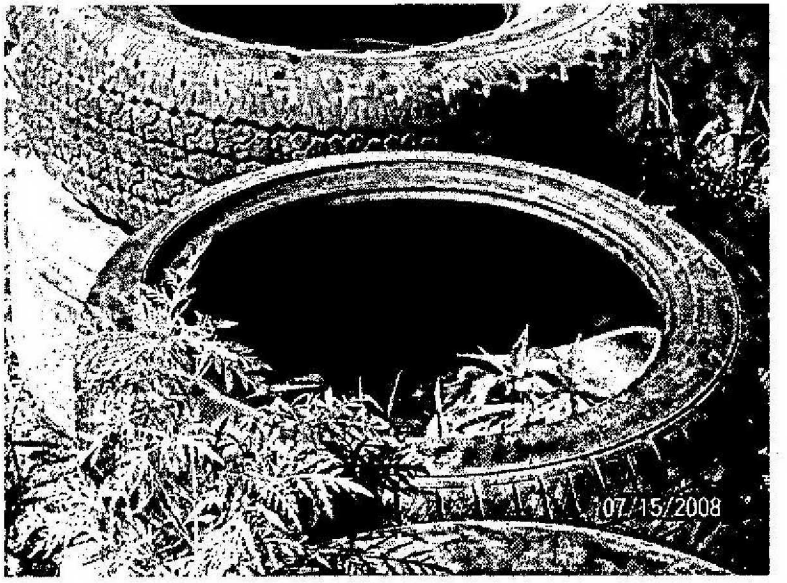


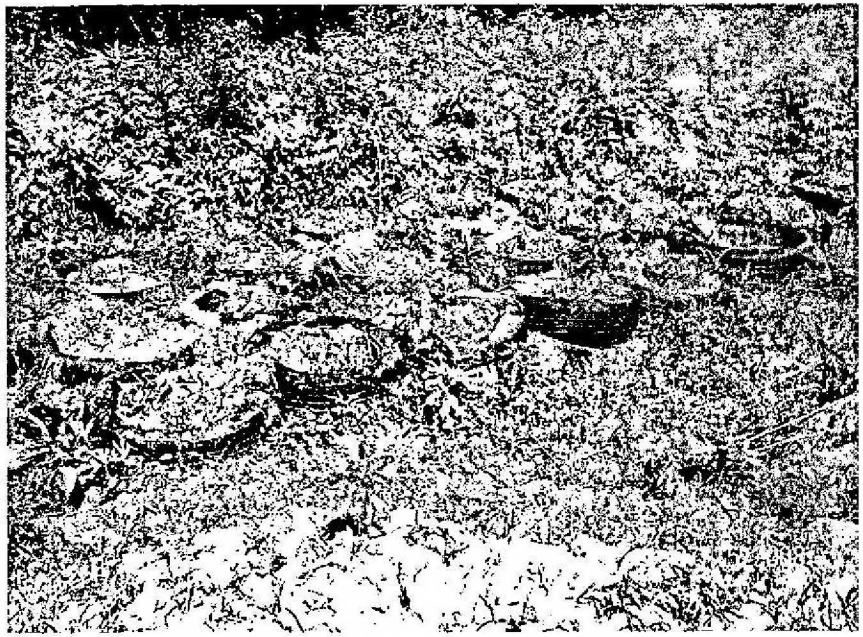
6

Poorly stacked and poorly filled tires will cause the fence to fail. Clay soil being used will hold moisture and cause extra freeze/thaw damage that will cause the fence to fail sooner. Using sand or small gravel in at least the bottom layers would avoid this problem.

Fill material needs to be packed such that it fills the whole tire without any empty space.



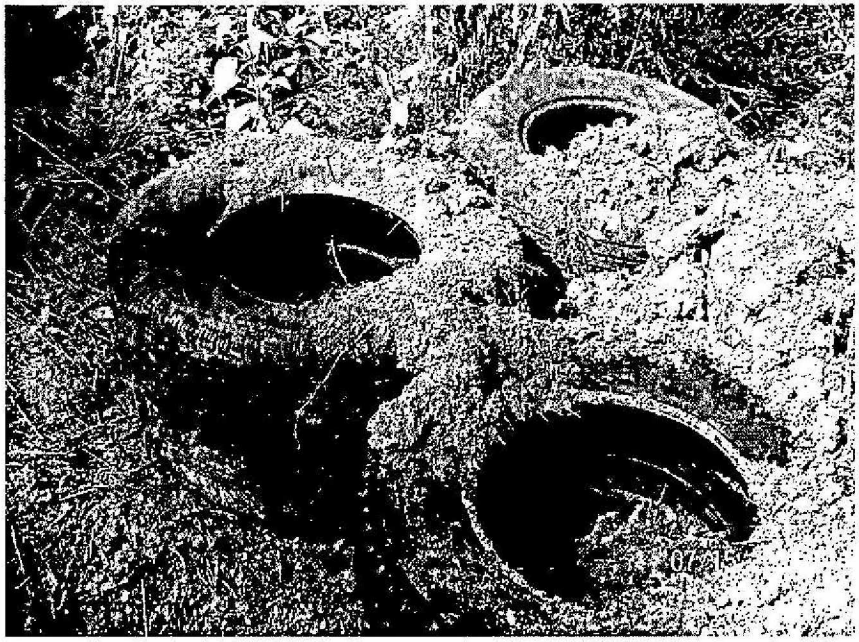
Use of screws to hold the tires together will add to the stability and long life of the fence.



Why is the fence three tires wide in places?

You should build the fence completely in one small section at a time rather than starting around the field with just a base layer. Condition 5 of your beneficial use approval letter requires the covering of the fence with cement as soon as an entire truckload of cement can be used.

Completion of a section of fence to its full height and covering it with concrete will give you a better idea of the cost of this fence in terms of both labor and dollars.



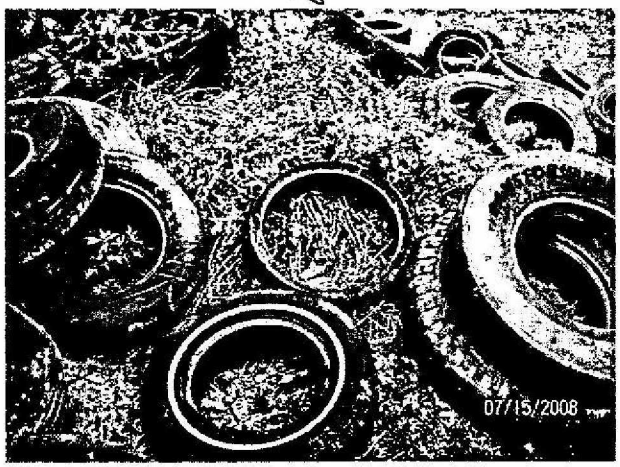
7

8

Fill material can not be properly packed in the tires after they have been Stacked two or three tires high. One area of the wall is already slipping or was poorly stacked. Use of screws to hold the tires together should prevent this. Offset layers of tires rather than barrel stacking may also help.

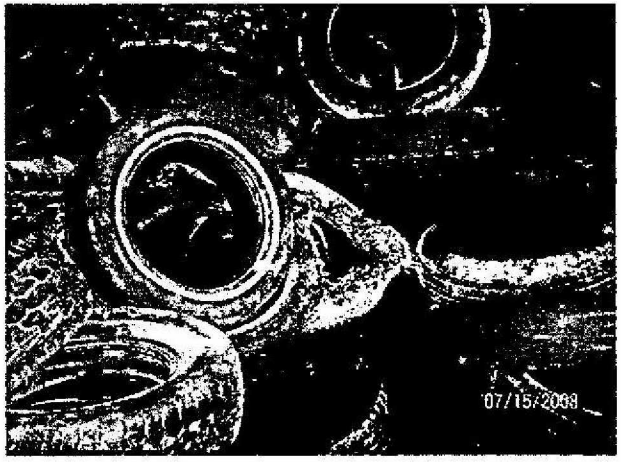
17

18



Tires should be uniform in size. Small and odd sized tires should be rejected

19



Damaged tires, parts of tires, and tires with sections cut out should be returned to the scrap tire transporter.

Tires along house foundation are stacked in the preferred manner which is offset rows rather than barrel stacking. Use of the same size tires for each layer would create a more stable stack. Biggest tires should be at the bottom.

Use around an existing foundation rather than for construction of a new house is a deviation from the beneficial use proposal submitted to Ohio EPA and approved on September 20, 2007. Such a deviation must be documented in writing to Ohio EPA prior to construction for a determination of acceptability.

Finished sections along the house foundation with bricks and gravel covering the tires along the house foundation.