



September 20, 2022

NELSON TIRE RECYCLING, LLC
RICHARD NESLON
116 INDUSTRIAL ST SE
CASCADE, IA 52033

SUBJECT: Waste Tire Management Inspection
Permit Number: 31-WTM-02-21-PRT

Enclosed is the report of the recent survey of the above system conducted by Chad Kehrli of this office.

We believe you will find the report self-explanatory. If you have any questions about the inspection or report, please contact Mr. Kehrli or this office at 563-927-2640.

Sincerely,

A handwritten signature in black ink that reads 'Amber Sauser'. The signature is written in a cursive, flowing style.

Amber Sauser
Environmental Specialist Senior, Field Office # FO1

Cc: IDNR Solid Waste Section – Mel Pins and Becky Jolly
Efile: 31 WMT Nelson Tire Recycling 092023 cvltr cek

**IOWA DEPARTMENT OF NATURAL RESOURCES
WASTE TIRE PROCESSOR (WTM) PERMIT INSPECTION FORM**

Permit No.:#31-WTM-02-21-PRT	County:Dubuque
Facility Name:Nelson Tire Recycling, LLC	Facility Address: 116 Industrial ST SE Cascade, IA 52033
Phone Number:941-356-0242	
Responsible Official:Richard Nelson	Mailing Address: Same as facility address
Phone Number:941-365-0242	
Person(s) Present: 1)Richard Nelson 2) 3)	
Date of This Inspection:09/18/2023	Date of Last Inspection:N/A

IAC 567 Chapter 117.6: Waste Tire Processing Facility Operation

Processing Description	<p>Describe the general processing equipment type/purpose: Two sidewall cutters (one inside for passenger tires 18 inches or less) and one located outside for 20 to 22 inch tires and semi-tires. One tire chunk cutter (located outside but under a roof) used to cut tractor tires into 24 inch pieces for landfill disposal. A tire mulcher (produces 2 inch pieces) is located inside the building, a dust collector (no outside venting) and two baggers, one for 1-ton bags and one for 1-yard plastic bags, are also located on site. In addition, a tumbler where paint can be added to color the mulch and a conveyor are present inside. In addition, a portable grinder is on site used to go off site and grind tires into 9-inch chips.</p>
	<p>Describe the hourly processing capacity of equipment: Mr. Nelson stated he could process approximately 800 PTE per day. The most recent Semiannual report submitted to this department indicates an average of 571 PTE per day. This facility was permitted for 250 PTE per day, but Mr. Nelson indicated he had spoken with Mr. Pins (DNR SW Des Moines) and was given permission to increase capacity as long as the final product was equally moving (tires in/tires out).</p>
	<p>Describe daily operating hours of the facility/equipment: Regular first shift hours 5 days per week.</p>
	<p>Describe the types of processed material being produced: Sidewalls with bead wire, sidewalls without bead wire (20 to 22 inch tires) tire chunks (cut to 24 inches and disposed of at the Dubuque County Sanitary Landfill), tire mulch (including colored mulch) for landscaping and ground tire chunks for landfill leachate collection systems and out of State leach fields (ground offsite on location).</p>

Facility Requirements	IAC 567 Chapter 117.6(2): Waste Tire Processing Facility Requirements		Yes	No	NA
	117.6(2)"a"	Is the site graded to prevent standing pools of water, and to limit run-on of precipitation in all areas where whole waste tire or processed tire materials are stored?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	117.6(2)"b"	Is the site secured by a fence or barrier of 6' or greater in height to impede unauthorized vehicle and personal access?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	117.6(2)"b"	Are all gates and entry points secured and locked when the site personnel are not present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	117.6(2)"c"	Is open burning of any type occurring on the property? <i>(Note: Open burning is prohibited.)</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Facility Requirements	IAC 567 Chapter 117.6(2): Waste Tire Processing Facility Requirements (Cont'd)		Yes	No	NA
	117.6(2)"c"	Is all fueling of vehicles or equipment, and activities that may release sparks or flame, conducted at least 50' from any tire storage area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	117.6(2)"d"	Are signs posted every 100' for on-site visibility that state "Open burning on-site prohibited"?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	117.6(2)"d"	Are signs posted every 100' on the perimeter of the location, for off-site visibility that state "Highly flammable materials on-site. Burning in area not recommended"?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments: The pile of preprocessed car tires (18 inches and below and about 3600 PTE) is within 50 feet of the on site fuel storage. A trailer breakdown caused the chunk tires that are being delivered to the Dubuque County Landfill to build up, causing a modification of where things are staged. The trailer is now fixed and Mr. Nelson stated that he will have the tires chunks (about 200,000 lbs. or 10,000 PTE) hauled to the landfill within 2 weeks and will then move the preprocessed passenger tires to the area where the tire chunks were stored, which will meet the 50 foot separation distance. Mr. Nelson stated that typically once the tires are cut into 24 inch chunks, there are placed into the trailer and the trailer is hauled to the landfill when it is full. He stated that they do not normally place or need a storage place for tire chunks. He was advised to rent a trailer if this issue happens again.

Preprocessed Waste Tire Storage	IAC 567 Chapter 117.6(3): Preprocessed Tire Storage Requirements		Yes	No	NA
	117.6(3)"a"	Is the quantity of whole waste tires present on site within the allowable three-day pre-processed quantity limitation? <i>(See "conditions of permit" for permitted quantity)</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	117.6(3)"d"	Are all waste tires processed within 30 days of their deposit at the site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	117.6(3)"f"	Does the facility store pre-processed waste tires Outdoors ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	117.6(3)"f"	If yes, are all pre-processed waste tire piles outdoors containing not more than 50,000 cubic feet of waste tires?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	117.6(3)"f"	If yes, is the vertical dimension of all waste tire piles within the 10' requirement?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	117.6(3)"f"	If yes, are all waste tire piles not more than 100' in length?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	117.6(3)"f"	If yes, is the surface area covered by a waste tire pile less than 5,000 square feet?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	117.6(3)"f"	If yes, are 50' fire lanes being maintained between any two tire piles?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
117.6(3)"f"	If yes, are 50' setbacks from any property line, street, public right-of-way, or building being maintained by waste tire piles onsite?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

117.6(3)"f"	If yes, are waste tire piles at least 200' from any well, lake, pond, river, stream, sinkhole, or tile line surface intake unless appropriate grading, or the construction of a barrier, dike, or berm, is completed to intercept surface water flows that may impact such interceptors. <i>(Note: This distance may then be reduced to 50'.)</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
117.6(3)"f"	If yes, are trees and brush cleared within 50' of any tire pile?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
117.6(3)"f"	If yes, are all combustible materials or volatile chemicals stored more than 50' from any tire pile? <i>(Note: If not, they must be in approved, fire-resistant containers)</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
117.6(3)"f"	If yes, is a 20 pound Class ABC dry chemical fire extinguisher available within 100' of any one portion of outdoor tire storage areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
117.6(3)"f"	If yes, are all waste tires stored in truck, trailers, or mobile containers at least 10' from any property line or building <i>(Note: These count toward total storage permitted for site; trucks unloading are exempted from setback requirement)</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
117.6(3)"f"	If yes, are tire bales stored no greater than 10' in height, 25' in width, and 50' in length with a separation distance of 50' between piles of tire bales?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments: This facility is processing more tires than originally permitted. Mr. Nelson had been in contact with Mr. Pins (DNR SW Des Moines) about increasing his processing amount, although no specific amount had been determined. Mr. Pins verified that Mr. Nelson had reached out about 6 months to one year ago. Mr. Nelson's business and markets have increased significantly since he began. From my onsite observations and records review it appears that Mr. Nelson is processing the whole waste tires received, has viable markets, and is moving the processed material off site to customers. Mr. Nelson estimates he is processing about 800 PTE per day, but could process about 1000 PTE per day with his existing equipment. Even with the updated processing ability, the current pile of whole waste tires is still greater than his three-day processing quantity. Currently there are approximately 3600 PTE of car passenger tires (18 inch and below) and about 250 tractor tires (about 1437 PTE) for a total of 5037 PTE whole waste tires. Mr. Nelson agreed to reduce the whole waste tires to within 3 days of processing within 30 days of receipt of this report and will work with Mr. Pins during the upcoming permit renewal process to update the processing and storage numbers.

Upon initial permit approval, this facility received notification from this Department's Storm Water Section that a storm water permit was not required. At the time of the initial permit application this facility's site plan showed all activities occurring indoors or within a semi-trailer with no tires or processed material being stored outside. Since that time the growth in business has changed the way whole tires and processed stored including some processed material. Mr. Nelson was provided with contact information for our Department's Storm Water Section and agreed to contact them to determine if a permit would now be required.

Preprocessed Waste Tire Storage	IAC 567 Chapter 117.6(3): Preprocessed Tire Storage Requirements (Cont'd)		Yes	No	NA
	117.6(3)"g"	Does the facility store pre-processed waste tires Indoors ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	117.6(3)"g"	If yes, are all tires stored indoors at least 20' from waste tire processing and handling equipment? <i>(Note: This does not apply to tires being actively unloaded from trucks or conveyors while process equipment is operating.)</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	117.6(3)"g"	If yes, are all tires cleared away at least 20' from the processing equipment after the end of the last working shift of the day?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	117.6(3)"g"	If yes, are less than 25,000 passenger tire equivalents in total stored indoors?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	117.6(3)"g"	If yes, are all combustible materials or volatile chemicals stored at least 25' from any waste tire storage area indoors? <i>(Note: If not, they must be in approved, fire-resistant containers.)</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

117.6(3)“g”	If yes, is a 20-pound Class ABC dry chemical fire extinguisher available within 50’ of any one portion of indoor tire storage areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
117.6(3)“g”	If yes, is the tire processing and storage structure secure from unauthorized access during times when site personnel are not present?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments: _____

IAC 567 Chapter 117.6(4): Processed Tire Storage Requirements		Yes	No	NA	
Processed Waste Tire Storage	117.6(4)“a”	Is the total volume of processed tire material stored on-site, at or less than the amount the facility produces within a consecutive 60-day period? <i>(Note: Sites are limited to no more than 5,000 tons (or 500,000 processed tires) of processed material to be stored on site at any one time.)</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	117.6(4)“c”	Are processed tires that are shredded into 9” or smaller pieces stored in piles not more than 15’ in height, 100’ in length, and 50’ width with no more than 75,000 cubic feet of product by volume?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	117.6(4)“c”	Are processed tires that are cut into strips, sidewalls, or other pieces larger than 9” stored in piles that are no more than 10’ in height, 100’ in length, and 50’ in width with no more than 50,000 cubic feet of product by volume?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	117.6(4)“c”	Is a 50’ fire lane maintained between piles of processed material, with the base of the lane kept free from waste tire-derived residuals or other debris?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	117.6(4)“c”	Are all processed tire materials stored at least 50’ from any property line, street, public right-of-way or building?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	117.6(4)“c”	Are trees and brush at least 50’ from the storage of processed tire material?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	117.6(4)“c”	Is a 20 pound Class ABC dry-chemical fire extinguisher available within 100’ of any one portion of the processed tire storage area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	117.6(4)“c”	For indoor storage of more than 5,000 cubic feet of processed tire material, is the material stored on concrete floors, with all retaining walls, bins, barriers, and roofing material constructed of nonflammable materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Comments: Limited tire grinding of 9 inch pieces is conducted on site. Mulch material (2 inch pieces) are bagged at the time of processing. Currently there is about 10,000 PTE (200,000 lbs.) of chunk tires need to be hauled to the Dubuque County Landfill. In addition, there are approximately 1000 PTE (20,000 lbs.) of mulch waiting to be delivered. This mulch is bagged in closable 1 ton bags and a small amount is inside on shelves bagged in 1 yard plastic bags. It was noted that the pile of tire chunks that are landfill bound are adjacent to the tractor tires awaiting processing. There is no 50 foot fire lane between the two. Mr. Nelson was instructed to maintain 50 foot fire lanes at all times and stated that this issue will be addressed within two weeks when the tire chunks are hauled to the landfill.

IAC 567 Chapter 117.6(5): Reporting Requirements		Yes	No	NA	
Reporting Requirements	117.6(5)	Is the waste tire processor submitting semi-annual reports to the Department that include:			
		a) Quantity of waste tires received by the facility during the reporting period?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		b) Quantity of waste tires received by the facility from in-state sources?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		c) Quantity of waste tires received by the facility from out-of-state sources?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		d) Quantity of unprocessed waste tires on hand at the facility at the time of reporting?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		e) Quantity of waste tires processed and delivered to end users during the reporting period, by product type, with determinations of quantities or product delivered to identified in-state and out-of-state markets or sites?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
		f) Quantity of processed tire material currently stored at the facility, by product type?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

Comments: _____

IAC 567 Chapter 117.6(6): Disposal of Solid Waste From Tire Processing		Yes	No	NA
Disposal	117.6(6)“b”	Are tire bead rings, separated metal wire, synthetic fibers, cording, and “fluff” wastes being disposed of at least every 60 days at a permitted sanitary disposal project, scrap recycler, or location approved by the Department?		
	117.6(6)“c”	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	117.6(6)“c”	Does the processor have records available on-site that note the most recent disposal date and location for these residuals/waste?		
	117.6(6)“c”	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	117.6(6)“c”	Are three years of records being maintained by the processing facility with regard to the disposal of these residual wastes?		

Comments: _____

Other Materials Accepted/Activities On-Site			
Recyclables Drop-Off	<input type="checkbox"/>	Appliance Demanufacturing	<input type="checkbox"/>
Lead Acid Batteries	<input type="checkbox"/>	Electronics Demanufacturing	<input type="checkbox"/>
Used Oil	<input type="checkbox"/>	Yard Waste Collection	<input type="checkbox"/>
Antifreeze	<input type="checkbox"/>	Yard Waste Composting	<input type="checkbox"/>
Tires	<input type="checkbox"/>	HHM/RCC	<input type="checkbox"/>
Brown Goods Collection	<input type="checkbox"/>	Other:None	
Cathode Ray Tube Collection	<input type="checkbox"/>		
White Goods Collection	<input type="checkbox"/>		
Scrap Metal Salvaging	<input type="checkbox"/>		

*Be advised your facility may require, due to either SIC code or onsite management practices, an NPDES General Permit #1 (Stormwater permit).

Summary of Requirements:	Compliance Date:
1) Move preprocessed tires (passenger tire pile) 50 feet from fueling of vehicles/equipment.	30 days
2) Haul/remove tire chunk pile to the landfill to make room for the preprocessed passenger tires to meet the 50 foot separation above and to meet the fire lane requirements noted below.	2 weeks
3) Maintain 50 feet separation between tire piles.	2 weeks
4) Reduce whole waste tires stored on site to 3 days of processing quantity.	30 days
5) Work with the DNR Solid Waste Permitting Section during the upcoming permit renewal process to update the processing and storage numbers.	Permit Renewal

Summary of Reminders:
1) Check with this Department's Storm Water Section for any necessary permits.
2)
3)
4)
5)

Summary of Recommendations:
1)
2)
3)
4)
5)

Inspector: <u>Chad Kehne</u>	Reviewer: <u>Amber Sauer</u>
Date: <u>09/20/2023</u>	Date: <u>9/21/2023</u>

Facility Photographs (if applicable)

	