

STATE OF MISSOURI



DEPARTMENT OF NATURAL RESOURCES

MISSOURI AIR CONSERVATION COMMISSION

PERMIT TO CONSTRUCT

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to construct the air contaminant source(s) described below, in accordance with the laws, rules and conditions as set forth herein.

Permit Number: 06 2016 - 005 Project Number: 2016-01-050
Installation Number: 033-0038

Parent Company: WireCo Worldgroup DBA US Reel Corporation

Parent Company Address: 8 Municipal Drive, Carrollton, MO 64633

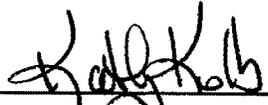
Installation Name: WireCo Worldgroup DBA US Reel Corporation

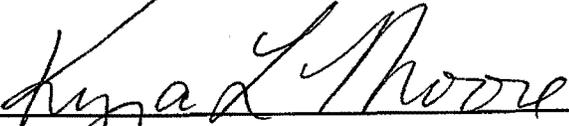
Installation Address: 8 Municipal Drive, Carrollton, MO 64633

Location Information: Carroll County, S23, T53N, R23W

Application for Authority to Construct was made for:
Installation of an Air Curtain Destructor. This review was conducted in accordance with
Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*.

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- Standard Conditions (on reverse) are applicable to this permit.
- Standard Conditions (on reverse) and Special Conditions are applicable to this permit.


Prepared by
Kathy Kolb
New Source Review Unit


Director or Designee
Department of Natural Resources
JUN 08 2016

Effective Date

STANDARD CONDITIONS:

Permission to construct may be revoked if you fail to begin construction or modification within two years from the effective date of this permit. Permittee should notify the Enforcement and Compliance Section of the Air Pollution Control Program if construction or modification is not started within two years after the effective date of this permit, or if construction or modification is suspended for one year or more.

You will be in violation of 10 CSR 10-6.060 if you fail to adhere to the specifications and conditions listed in your application, this permit and the project review. In the event that there is a discrepancy between the permit application and this permit, the conditions of this permit shall take precedence. Specifically, all air contaminant control devices shall be operated and maintained as specified in the application, associated plans and specifications.

You must notify the Enforcement and Compliance Section of the Department's Air Pollution Control Program of the anticipated date of start up of this (these) air contaminant source(s). The information must be made available within 30 days of actual startup. Also, you must notify the Department's regional office responsible for the area within which you are located within 15 days after the actual start up of this (these) air contaminant source(s).

A copy of the permit application and this permit and permit review shall be kept at the installation address and shall be made available to Department's personnel upon request.

You may appeal this permit or any of the listed special conditions to the Administrative Hearing Commission (AHC), P.O. Box 1557, Jefferson City, MO 65102, as provided in RSMo 643.075.6 and 621.250.3. If you choose to appeal, you must file a petition with the AHC within 30 days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed. If it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the AHC.

If you choose not to appeal, this certificate, the project review and your application and associated correspondence constitutes your permit to construct. The permit allows you to construct and operate your air contaminant source(s), but in no way relieves you of your obligation to comply with all applicable provisions of the Missouri Air Conservation Law, regulations of the Missouri Department of Natural Resources and other applicable federal, state and local laws and ordinances.

The Air Pollution Control Program invites your questions regarding this air pollution permit. Please contact the Construction Permit Unit using the contact information below.

Contact Information:
Missouri Department of Natural Resources
Air Pollution Control Program
P.O. Box 176
Jefferson City, MO 65102-0176
(573) 751-4817

The regional office information can be found at the following website:
<http://dnr.mo.gov/regions/>

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

The special conditions listed in this permit were included based on the authority granted the Missouri Air Pollution Control Program by the Missouri Air Conservation Law (specifically 643.075) and by the Missouri Rules listed in Title 10, Division 10 of the Code of State Regulations (specifically 10 CSR 10-6.060). For specific details regarding conditions, see 10 CSR 10-6.060 paragraph (12)(A)10. "Conditions required by permitting authority."

WireCo Worldgroup DBA US Reel Corporation
Carroll County, S23, T53N, R23W

1. Burning Surveillance
WireCo Worldgroup DBA US Reel Corporation shall have a representative/employee present at the facility during all burning to ensure compliance with this permit.
2. Air CurtainDestructor (ACD) Location
The distance from the burn site (ACD) to the non-US Reel nearest occupied structure (residence or business) must be greater than 200 yards unless the owner or operator of the non-US Reel occupied structure provides written waivers of this requirement. Any waiver shall accompany this permit.
3. Burn Time
Burning will be allowed continuously (24 hours per day) unless complaints are received. If complaints are received and the investigation by the Department of Natural Resource personnel authenticates the complaint is associated with the operation of the ACD then operation of this Air Curtain Destructor will only be allowed to operate between 7:00 a.m. and 5:00 pm.
4. WireCo Worldgroup DBA US Reel Corporation shall immediately correct any problems that would arise from the burning, such as a public health hazard, nuisance, or a hazard to vehicular or air traffic.
5. Visible Emissions Test
 - A. WireCo Worldgroup DBA US Reel Corporation shall meet opacity limitations as stated in §60.2250.
 - B. WireCo Worldgroup DBA US Reel Corporation shall submit a current visible emissions test which complies with 40 CFR Part 60, Appendix A-*Test Methods, Method-9-Visual Determination of the Opacity of emissions from Stationary Sources.*
6. Burn Restrictions
 - A. WireCo Worldgroup DBA US Reel Corporation shall burn only the following materials generated at this site:

SPECIAL CONDITIONS:

The permittee is authorized to construct and operate subject to the following special conditions:

- i. 100 percent wood waste
 - ii. 100 percent clean lumber
 - iii. 100 percent mixture of only wood waste, clean lumber, and/or yard waste
- B. Under no circumstances will the ACD operator use tires or other rubber products, plastics, heavy oils, asphalt base or impregnated materials to start or maintain the ACD operation.
- C. Burning shall not be conducted during unfavorable meteorological conditions or days when the U.S. Forest Service has issued a high risk of fire according to the local U.S. Forest Service or when an open burning ban has been officially declared by either appropriate state or local officials.
- D. WireCo Worldgroup DBA US Reel Corporation shall burn less than 50 tons per day wood waste as defined in Special Condition 6.A.
- E. WireCo Worldgroup DBA US Reel Corporation shall maintain a daily operating log approved by Air Pollution Control Program to demonstrate compliance with Special Conditions 6. D.
7. WireCo Worldgroup DBA US Reel Corporation shall have an operations manual for their air curtain destructor on site and operate the ACD according to guidance provided in the manual.
8. WireCo Worldgroup DBA US Reel Corporation shall use propane (LPG) to start the fire in the ACD.
9. Record Keeping and Reporting Requirements
 - A. WireCo Worldgroup DBA US Reel Corporation shall maintain all records required by this permit for not less than five years and shall make them available immediately to any Missouri Department of Natural Resources' personnel upon request. These records shall include SDS for all materials used.
 - B. WireCo Worldgroup DBA US Reel Corporation shall report to the Air Pollution Control Program's Compliance/Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 10 days after the end of the month during which any record required by this permit shows an exceedance of a limitation imposed by this permit.

REVIEW OF APPLICATION FOR AUTHORITY TO CONSTRUCT AND OPERATE
SECTION (5) REVIEW

Project Number: 2016-01-050
Installation ID Number: 033-0038
Permit Number:

Installation Address:

WireCo Worldgroup DBA US Reel
Corporation
8 Municipal Drive
Carrollton, MO 64633

Parent Company:

WireCo Worldgroup DBA US Reel
Corporation
8 Municipal Drive
Carrollton, MO 64633

Carroll County, S23, T53N, R23W

REVIEW SUMMARY

- WireCo Worldgroup DBA US Reel Corporation has applied for authority to install an Air Curtain Destructor.
- The application was deemed complete on February 16, 2016.
- HAP emissions are expected from the proposed equipment. HAPs of concern from this process are due to the combustion of clean wood in the air curtain destructor.
- The ACD is exempt from the requirements in 40 CFR part 60 Subpart CCCC, Standards of Performance for Commercial and Industrial Solid Waste Incineration Units except for the provisions in §60.2242, 60.2250, and 60.2260. 40 CFR Part 60 Subpart E does not apply because the charging rate of 42 tons per day (3,500 lbs. per hour/1.75 tons per hour) is less than 45 metric tons per day (50 tons/day) threshold as stated by this subpart.
- None of the NESHAPs apply to this installation. None of the currently promulgated MACT regulations apply to the proposed equipment.
- No air pollution control equipment is being used in association with the new equipment.
- This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of all pollutant are below de minimis levels.
- This installation is located in Carroll County, an attainment area for all criteria pollutants.

- This installation is not on the List of Named Installations found in 10 CSR 10-6.020(3)(B), Table 2. The installation's major source level is 250 tons per year and fugitive emissions are not counted toward major source applicability.
- Ambient air quality modeling was not performed since potential emissions of the application are below de minimis levels.
- Emissions testing is not required for the equipment.
- A Part 70 Operating Permit application is required for this installation within 1 year of equipment startup.
- Approval of this permit is recommended with special conditions.

INSTALLATION DESCRIPTION

US Reel manufactures a complete line of nailed wood, plywood and MDF reels to customer specifications. US Reel started business in Carrollton, Missouri in 1982. It currently operates from 6 am to 9 pm from Monday to Thursday. The burning operation hours have been restricted for years (due to city/county ordinance). The burning hours depend on the time of the year (11 hours per day October - February; 13 hours per day March – September). It was previously burning wood waste by obtaining an open burning permit from the Missouri DNR Northeast Regional Office.

No permits have been issued to WireCo Worldgroup DBA US Reel Corporation from the Air Pollution Control Program.

PROJECT DESCRIPTION

US Reel Corporation has purchased a McPherson System, Inc. M15E Serial No.0301690 Refractory line air curtain burner (bolt together) with a maximum burn rate of 3,500 lbs/hr (1.75 tons per hour). The burn rate is stated at the maximum and is dependent on variables such as moisture and type of wood to be burned. The maximum amount of waste that has ever been generated at the facility was 11,500 lb/day (5.75 tons per day). Although sales are down and they are currently burning less than 5.75 tons per day, the PTE will be calculated based on 1.75 tons per hour according to the manufacturer's data submitted with the permit application.

The ACD is a vertical unit 20 feet high. The burning chamber, which is ten feet high, has six inch refractory panels (3,000° F melt temperature) with ash cleanout doors. The loading chamber (top ten feet) is constructed of heavy material on three sides – four inches thick refractory. This chamber has a half inch mesh #13304 stainless expanded metal screen on top of it. The 40 HP fan motor will be electric.

High ember production could be a problem in cases when the surrounding environment is extremely dry due to lack of rain and/or high wind conditions. Therefore, burn restrictions are implemented during these events as stated in Special Condition 6.C.

EMISSIONS/CONTROLS EVALUATION

The emission factors for PM_{2.5}, CO and VOC used in this analysis were obtained from the USDA Forest Service, “Reducing PM_{2.5} Emissions Through Technology”, 2003. PM and PM₁₀ emission factors were calculated from the PM_{2.5} emission factor and scaled based on particle size distribution in EPA document AP-42, Table 1.5-5 (uncontrolled), *Cumulative Particle Size Distribution and Size Specific Emission Factors for Wood/Bark-Fired Boilers*, September, 2003.

Emissions from haul roads and vehicular activity areas were calculated using the predictive equation from AP-42 Section 13.2.2 “Unpaved Roads,” November 2006, and AP-42 Section 13.2.1 “Paved Roads,” January 2011.

The following table provides an emissions summary for this project. There are no existing potential emissions since this is the first construction permit for this facility. Existing actual emissions likewise are not available. Potential emissions of the application represent the potential of the air curtain destructor, assuming continuous operation (8760 hours per year).

Table 2: Emissions Summary (tpy)

Pollutant	Regulatory <i>De Minimis</i> Levels	Existing Potential Emissions	Existing Actual Emissions	Potential Emissions of the Project
PM	25.0	N/A	N/A	18.31
PM ₁₀	15.0	N/A	N/A	12.01
PM _{2.5}	10.0	N/A	N/A	8.64
SO _x	40.0	N/A	N/A	0.77
NO _x	40.0	N/A	N/A	30.66
VOC	40.0	N/A	N/A	8.43
CO	100.0	N/A	N/A	19.93
GHG (CO ₂ e)	N/A	N/A	N/A	28,486.39
GHG (mass)	N/A	N/A	N/A	27,728.85
HCl	10 (SMAL)	N/A	N/A	2.15
HAPs	25.0	N/A	N/A	4.37

N/A = Not Applicable

PERMIT RULE APPLICABILITY

This review was conducted in accordance with Section (5) of Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*. Potential emissions of all pollutants are below de minimis levels.

APPLICABLE REQUIREMENTS

WireCo Worldgroup DBA US Reel Corporation shall comply with the following applicable requirements. The Missouri Air Conservation Laws and Regulations should be consulted for specific record keeping, monitoring, and reporting requirements. Compliance with these emission standards, based on information submitted in the application, has been verified at the time this application was approved.

GENERAL REQUIREMENTS

- *Submission of Emission Data, Emission Fees and Process Information*, 10 CSR 10-6.110
 - Per 10 CSR 10-6.110(4)(B)2.B(II) and (4)(B)2.C(II) a full EIQ is required for the first full calendar year the equipment (or modifications) approved by this permit are in operation. Does not apply if DemPAL.
- *Operating Permits*, 10 CSR 10-6.065. Required to submit a PART 70 Operating Permit within 12 months of commencement of operation of the ACD.
- *Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin*, 10 CSR 10-6.170
- *Restriction of Emission of Visible Air Contaminants*, 10 CSR 10-6.220
- *Restriction of Emission of Odors*, 10 CSR 10-6.165

SPECIFIC REQUIREMENTS

- *New Source Performance Regulations*, 10 CSR 10-6.070
 - 40 CFR Part 60, Subpart DDDD, *Emission Guidelines for Commercial and Industrial Solid Waste Incineration Units*, subsequently 10 CSR 10-6.161 *Commercial and Industrial Solid Waste Incinerators*. WireCo Worldgroup DBA US Reel Corporation's ACD is exempt from the requirements of this subpart except for the provisions in §§60.2242, 60.2250, and 60.2260.

STAFF RECOMMENDATION

On the basis of this review conducted in accordance with Section (5), Missouri State Rule 10 CSR 10-6.060, *Construction Permits Required*, it is recommended that this permit be granted with special conditions.

PERMIT DOCUMENTS

The following documents are incorporated by reference into this permit:

- The Application for Authority to Construct form, dated January 25, 2016, received January 27, 2016, designating WireCo Worldgroup DBA US Reel Corporation as the owner and operator of the installation.

APPENDIX A

Abbreviations and Acronyms

%	percent	m/s	meters per second
°F	degrees Fahrenheit	Mgal	1,000 gallons
acfm	actual cubic feet per minute	MW	megawatt
BACT	Best Available Control Technology	MHDR	maximum hourly design rate
BMPs	Best Management Practices	MMBtu	Million British thermal units
Btu	British thermal unit	MMCF	million cubic feet
CAM	Compliance Assurance Monitoring	MSDS	Material Safety Data Sheet
CAS	Chemical Abstracts Service	NAAQS ...	National Ambient Air Quality Standards
CEMS	Continuous Emission Monitor System	NESHAPs	National Emissions Standards for Hazardous Air Pollutants
CFR	Code of Federal Regulations	NO_x	nitrogen oxides
CO	carbon monoxide	NSPS	New Source Performance Standards
CO₂	carbon dioxide	NSR	New Source Review
CO_{2e}	carbon dioxide equivalent	PM	particulate matter
COMS	Continuous Opacity Monitoring System	PM_{2.5}	particulate matter less than 2.5 microns in aerodynamic diameter
CSR	Code of State Regulations	PM₁₀	particulate matter less than 10 microns in aerodynamic diameter
dscf	dry standard cubic feet	ppm	parts per million
EQ	Emission Inventory Questionnaire	PSD	Prevention of Significant Deterioration
EP	Emission Point	PTE	potential to emit
EPA	Environmental Protection Agency	RACT	Reasonable Available Control Technology
EU	Emission Unit	RAL	Risk Assessment Level
fps	feet per second	SCC	Source Classification Code
ft	feet	scfm	standard cubic feet per minute
GACT	Generally Available Control Technology	SDS	Safety Data Sheet
GHG	Greenhouse Gas	SIC	Standard Industrial Classification
gpm	gallons per minute	SIP	State Implementation Plan
gr	grains	SMAL	Screening Model Action Levels
GWP	Global Warming Potential	SO_x	sulfur oxides
HAP	Hazardous Air Pollutant	SO₂	sulfur dioxide
hr	hour	tph	tons per hour
hp	horsepower	tpy	tons per year
lb	pound	VMT	vehicle miles traveled
lbs/hr	pounds per hour	VOC	Volatile Organic Compound
MACT	Maximum Achievable Control Technology		
µg/m³	micrograms per cubic meter		

Mr. Bill Crowell
Plant Manager
WireCo Worldgroup DBA US Reel Corporation
8 Municipal Drive
Carrollton, MO 64633

RE: New Source Review Permit - Project Number: 2016-01-050

Dear Mr. Crowell:

Enclosed with this letter is your permit to construct. Please study it carefully and refer to Appendix A for a list of common abbreviations and acronyms used in the permit. Also, note the special conditions on the accompanying pages. The document entitled, "Review of Application for Authority to Construct," is part of the permit and should be kept with this permit in your files. Operation in accordance with these conditions, your new source review permit application and with your Part 70 operating permit is necessary for continued compliance. The reverse side of your permit certificate has important information concerning standard permit conditions and your rights and obligations under the laws and regulations of the State of Missouri.

This permit may include requirements with which you may not be familiar. If you would like the department to meet with you to discuss how to understand and satisfy the requirements contained in this permit, an appointment referred to as a Compliance Assistance Visit (CAV) can be set up with you. To request a CAV, please contact your local regional office or fill out an online request. The regional office contact information can be found at the following website: <http://dnr.mo.gov/regions/>. The online CAV request can be found at <http://dnr.mo.gov/cav/compliance.htm>.

If you were adversely affected by this permit decision, you may be entitled to pursue an appeal before the administrative hearing commission pursuant to Sections 621.250 and 643.075.6 RSMo. To appeal, you must file a petition with the administrative hearing commission within thirty days after the date this decision was mailed or the date it was delivered, whichever date was earlier. If any such petition is sent by registered mail or certified mail, it will be deemed filed on the date it is mailed; if it is sent by any method other than registered mail or certified mail, it will be deemed filed on the date it is received by the administrative hearing commission, whose contact information is: Administrative Hearing Commission, United States Post Office Building, 131 West High Street, Third Floor, P.O. Box 1557, Jefferson City, Missouri 65102, phone: 573-751-2422, fax: 573-751-5018, website: www.oa.mo.gov/ahc.

Mr. Bill Crowell
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If you have any questions regarding this permit, please do not hesitate to contact Kathy Kolb, at the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102 or at (573) 751-4817. Thank you for your attention to this matter.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Susan Heckenkamp
New Source Review Unit Chief

SH:kkj

Enclosures

c: Northeast Regional Office
PAMS File: 2016-01-050

Permit Number: