State of Utah

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Department of
Environmental Quality

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DIVISION OF AIR QUALITY
Bryce C. Bird
Director

DAQE-IN141870003-22

July 1, 2022

Landon Bott
Western Metals Recycling, LLC
300 Pike St.
Cincinnati, OH 45202
landon.bott@djj.com

Dear Mr. Bott:

Re: Intent to Approve:
New Plymouth Scrap Metal Recycling Operation
Project Number: N141870003

The attached document is the Intent to Approve (ITA) for the above-referenced project. The ITA is subject to public review. Any comments received shall be considered before an Approval Order (AO) is issued. The Division of Air Quality is authorized to charge a fee for reimbursement of the actual costs incurred in the issuance of an AO. An invoice will follow upon issuance of the final AO.

Future correspondence on this ITA should include the engineer's name, **Mr. Tim DeJulis,** as well as the DAQE number as shown on the upper right-hand corner of this letter. Mr. Tim DeJulis, can be reached at (385) 306-6523 or tdejulis@utah.gov, if you have any questions.

Sincerely,

Alan D. Humpherys, Manager
New Source Review Section

ADH:TD:sa

cc: Bear River Health Department

STATE OF UTAH
Department of Environmental Quality
Division of Air Quality

INTENT TO APPROVE
DAQE-IN141870003-22
New Plymouth Scrap Metal Recycling Operation

Prepared By
Mr. Tim DeJulis, Engineer
(385) 306-6523
tdejulis@utah.gov

Issued to
The David J. Joseph Company dba Western Metals Recycling, LLC

Issued On
July 1, 2022

New Source Review Section Manager
Alan D. Humpherys

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GENERAL INFORMATION

CONTACT/LOCATION INFORMATION

Owner Name
Western Metals Recycling, LLC

Source Name
The David J. Joseph Company dba Western Metals Recycling, LLC

Mailing Address
300 Pike St.
Cincinnati, OH 45202

Physical Address
7400 West 21200 North
Plymouth, UT 84330

Source Contact
Name Landon Bott
Phone (801) 386-4233
Email landon.bott@djj.com

UTM Coordinates
400,344 m Easting
4,638,771 m Northing
Datum NAD83
UTM Zone 12

SIC code 5093 (Scrap & Waste Materials)

SOURCE INFORMATION

General Description
Western Metals Recycling, LLC (WMR) is a wholly-owned venture of Cincinnati-based, The David J. Joseph Company. WMR conducts metal shredding in addition to cutting, hand torching, and sorting of ferrous and non-ferrous materials. WMR has a diesel fueled emergency generator engine at the facility. The plant has storage tanks in place to provide diesel fuel and gasoline to on-site equipment. Paved and unpaved haul roads are in use at the facility. The Plymouth plant will shred 320,000 tons of automobiles per year.

NSR Classification
New Minor Source

Source Classification
Located in Salt Lake City UT $PM_{2.5}$ NAA
Box Elder County
Airs Source Size: B

Applicable Federal Standards
MACT (Part 63), A: General Provisions
MACT (Part 63), ZZZZ: National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
MACT (Part 63), CCCCCC: National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities

Project Description
WMR has requested an approval order for their scrap metal recycling operations at the Plymouth plant. The scrap metal recycling operation uses an electric shredding device, a metal recovery process, a shredded materials separation system, a wire chopper, a nonferrous finder separating system, torch cutting and welding, trommels, screens, conveyors, and magnetic separators.

SUMMARY OF EMISSIONS

The emissions listed below are an estimate of the total potential emissions from the source. Some rounding of emissions is possible.

Criteria Pollutant	Change (TPY)	Total (TPY)
CO_2 Equivalent		344.20
Carbon Monoxide		0.60
Nitrogen Oxides		0.65
Particulate Matter - PM_{10}		4.22
Particulate Matter - $PM_{2.5}$		1.83
Sulfur Dioxide		0.00
Volatile Organic Compounds		38.98

Hazardous Air Pollutant	Change (lbs/yr)	Total (lbs/yr)
Benzene (Including Benzene From Gasoline) (CAS #71432)		620
Cumene (CAS #98828)		60
Ethyl Benzene (CAS #100414)		620
Generic HAPs (CAS #GHAPS)		60
Hexane (CAS #110543)		1180
Methyl Chloroform (1,1,1-Trichloroethane) (CAS #71556)		20
Methyl Isobutyl Ketone (Hexone) (CAS #108101)		200
Methyl Methacrylate (CAS #80626)		20
Methylene Chloride (Dichloromethane) (CAS #75092)		20
Naphthalene (CAS #91203)		60
Styrene (CAS #100425)		280
Toluene (CAS #108883)		2660
Xylenes (Isomers And Mixture) (CAS #1330207)		2980
	Change (TPY)	**Total (TPY)**
Total HAPs		4.39

PUBLIC NOTICE STATEMENT

The NOI for the above-referenced project has been evaluated and has been found to be consistent with the requirements of UAC R307. Air pollution producing sources and/or their air control facilities may not be constructed, installed, established, or modified prior to the issuance of an AO by the Director.

A 30-day public comment period will be held in accordance with UAC R307-401-7. A notification of the intent to approve will be published in the Box Elder News & Journal on July 6, 2022. During the public comment period the proposal and the evaluation of its impact on air quality will be available for the public to review and provide comment. If anyone so requests a public hearing within 15 days of publication, it will be held in accordance with UAC R307-401-7. The hearing will be held as close as practicable to the location of the source. Any comments received during the public comment period and the hearing will be evaluated. The proposed conditions of the AO may be changed as a result of the comments received.

SECTION I: GENERAL PROVISIONS

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO.

I.1	All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]
I.2	The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]
I.3	Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]
I.4	All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Director or Director's representative upon request, and the records shall include the two-year period prior to the date of the request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of two (2) years. [R307-401-8]
I.5	At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]
I.6	The owner/operator shall comply with UAC R307-107. General Requirements: Breakdowns. [R307-107]
I.7	The owner/operator shall comply with UAC R307-150 Series. Emission Inventories. [R307-150]
I.8	The owner/operator shall submit documentation of the status of construction or modification to the Director within 18 months from the date of this AO. This AO may become invalid if construction is not commenced within 18 months from the date of this AO or if construction is discontinued for 18 months or more. To ensure proper credit when notifying the Director, send the documentation to the Director, attn.: NSR Section. [R307-401-18]

SECTION II: PERMITTED EQUIPMENT

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO.

II.A THE APPROVED EQUIPMENT

II.A.1	**Western Metals Recycling, LLC** Plymouth Scrap Metal Recycling Plant

II.A.2	**One (1) Electric Shredder** Control: water injection system
II.A.3	**Metals Recovery Process** Includes: trommels, screens, and conveyors
II.A.4	**Shredded Materials Separation System** Includes: magnetic drum separator, eddy current separators, and screens
II.A.5	**Wire Chopper** Includes: screens and conveyors
II.A.6	**Nonferrous Finder Separation System** Includes: screens and an internally vented baghouse
II.A.7	**Welding and Torch Cutting Activities**
II.A.8	**Various Conveyors** Control: water sprays
II.A.9	**One (1) Emergency Generator Engine** Fuel: diesel Rating: 396 kW (530 hp) Manufactured in 2000 MACT Subpart ZZZZ
II.A.10	**Various Fuel Storage Tanks** Two (2) storage tanks Fuel: diesel fuel Capacity: 2,000 gallons each One (1) storage tank Fuel: diesel fuel Capacity: 5,000 gallons One (1) storage tank Fuel: gasoline Capacity: 500 gallons Control: submerged filling MACT Subpart CCCCCC
II.A.11	**Various Support Equipment** Includes: shears, choppers, balers, non-ferrous metal receiving, cranes, and front-end loaders. Listed for informational purposes only.

SECTION II: SPECIAL PROVISIONS

The intent is to issue an air quality AO authorizing the project with the following recommended conditions and that failure to comply with any of the conditions may constitute a violation of the AO.

II.B REQUIREMENTS AND LIMITATIONS

II.B.1	**Plant-wide Requirements**
II.B.1.a	The owner/operator shall not process more than 320,000 tons of scrap metal through the shredding machine per rolling 12-month period. [R307-401-8]
II.B.1.a.1	The owner/operator shall: A. Determine scrap metal processed with process scales and inventory records B. Record scrap metal processed on a monthly basis C. Use the scrap metal processed data to calculate a new 12-month total by the 20th day of each month using data from the previous 12 months D. Keep the scrap metal processed records for all periods the plant is in operation. [R307-401-8]
II.B.1.b	The owner/operator shall control all emissions from the shredding system with a water spray system. [R307-401-8]
II.B.1.c	Unless otherwise noted, the owner/operator shall not allow visible emissions to exceed the following opacities from the following emission points: A. Screens - 10 % opacity B. Conveyor transfer points - 10% opacity C. Electric shredding machine - 15% opacity D. Conveyor drop points - 20% opacity E. Diesel engines - 20% opacity F. All other points - 20% opacity [R307-305-3]
II.B.1.c.1	Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-401-8]
II.B.1.d	The owner/operator shall comply with R307-328-5 for the gasoline storage tank. [R307-328-5, R307-401-8]
II.B.2	**Fugitive Dust and Haul Road Requirements**
II.B.2.a	Within 30 days of the date of this AO, the owner/operator shall submit a FDCP in electronic or written format. An electronic FDCP can be completed through the Utah DEQ Fugitive Dust Plan Permit Application Website. If a written FDCP is completed, it shall be submitted to the Director, attention: Compliance Branch, for approval. The owner/operator shall comply with the FDCP for control of all fugitive dust sources associated with metal shredding facility. [R307-309-6]

II.B.2.b	The owner/operator shall not allow visible fugitive dust emissions from haul-road traffic and mobile equipment in operational areas to exceed 20% opacity at any point in plant and 10% at the property boundary. [R307-309-4]
II.B.2.b.1	Visible emission determinations shall use procedures similar to Method 9. The normal requirement for observations to be made at 15-second intervals over a six-minute period, however, shall not apply. Visible emissions shall be measured at the densest point of the plume but at a point not less than 1/2 vehicle length behind the vehicle and not less than 1/2 the height of the vehicle. [R307-309-4]
II.B.2.c	The owner/operator shall use chemical suppressants on all the unpaved haul roads and use water with sweeping and vacuuming on all the paved haul roads on site to maintain opacity limits listed in this AO. If the temperature is below freezing or if the haul roads are covered with snow or ice, the owner/operator may stop using water on the paved haul roads. [R307-401-8]
II.B.2.c.1	Records of water application shall be kept for all periods when the plant is in operation. The records shall include the following items: A. Date and time treatments were made B. Number of treatments made and quantity of chemical suppressant/water applied C. Rainfall amount received, if any D. Records of temperature, if the temperature was below freezing [R307-401-8]
II.B.3	**Emergency Engine Requirements**
II.B.3.a	The owner/operator shall install one (1) 395 kW generator engine certified to meet a CO emission rate of 11.4 g/kW-hr or less. [R307-401-8]
II.B.3.a.1	To demonstrate compliance with the emission rate, the owner/operator shall keep a record of the manufacturer's certification of the emission rate. The record shall be kept for the life of the equipment. [R307-401-8]
II.B.3.b	The owner/operator shall not operate each emergency engine on site for more than 100 hours per rolling 12-month period during non-emergency situations. There is no time limit on the use of the engines during emergencies. [R307-401-8, 40 CFR 63 Subpart ZZZZ]
II.B.3.b.1	To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the 20th day of each month using data from the previous 12 months. Records documenting the operation of each emergency engine shall be kept in a log and shall include the following: A. The date the emergency engine was used B. The duration of operation in hours C. The reason for the emergency engine usage [40 CFR 60 Subpart ZZZZ, R307-401-8]
II.B.3.b.2	To determine the duration of operation, the owner/operator shall install a non-resettable hour meter for each emergency engine. [R307-401-8, 40 CFR 63 Subpart ZZZZ]

II.B.3.c	The owner/operator shall only use diesel fuel (e.g. fuel oil #1, #2, or diesel fuel oil additives) as fuel in each emergency engine. [R307-401-8]
II.B.3.c.1	The owner/operator shall only combust diesel fuel that meets the definition of ultra-low sulfur diesel (ULSD), which has a sulfur content of 15 ppm or less. [R307-401-8]
II.B.3.c.2	To demonstrate compliance with the ULSD fuel requirement, the owner/operator shall maintain records of diesel fuel purchase invoices or obtain certification of sulfur content from the diesel fuel supplier. The diesel fuel purchase invoices shall indicate that the diesel fuel meets the ULSD requirements. [R307-401-8]

PERMIT HISTORY

This Approval Order shall be based on the following documents:

Is Derived From	Notice of Intent dated September 26, 2019
Incorporates	Additional information dated April 30, 2020
Incorporates	Additional information dated May 8, 2020
Incorporates	Additional information dated August 25, 2020
Incorporates	Additional information dated September 16, 2021
Incorporates	Additional information dated December 8, 2021
Incorporates	Additional information dated April 18, 2022

ACRONYMS

The following lists commonly used acronyms and associated translations as they apply to this document:

40 CFR	Title 40 of the Code of Federal Regulations
AO	Approval Order
BACT	Best Available Control Technology
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CDS	Classification Data System (used by Environmental Protection Agency to classify sources by size/type)
CEM	Continuous emissions monitor
CEMS	Continuous emissions monitoring system
CFR	Code of Federal Regulations
CMS	Continuous monitoring system
CO	Carbon monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent - Title 40 of the Code of Federal Regulations Part 98, Subpart A, Table A-1
COM	Continuous opacity monitor
DAQ/UDAQ	Division of Air Quality
DAQE	This is a document tracking code for internal Division of Air Quality use
EPA	Environmental Protection Agency
FDCP	Fugitive dust control plan
GHG	Greenhouse Gas(es) - Title 40 of the Code of Federal Regulations 52.21 (b)(49)(i)
GWP	Global Warming Potential - Title 40 of the Code of Federal Regulations Part 86.1818-12(a)
HAP or HAPs	Hazardous air pollutant(s)
ITA	Intent to Approve
LB/YR	Pounds per year
MACT	Maximum Achievable Control Technology
MMBTU	Million British Thermal Units
NAA	Nonattainment Area
NAAQS	National Ambient Air Quality Standards
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOI	Notice of Intent
NO_x	Oxides of nitrogen
NSPS	New Source Performance Standard
NSR	New Source Review
PM_{10}	Particulate matter less than 10 microns in size
$PM_{2.5}$	Particulate matter less than 2.5 microns in size
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
R307	Rules Series 307
R307-401	Rules Series 307 - Section 401
SO_2	Sulfur dioxide
Title IV	Title IV of the Clean Air Act
Title V	Title V of the Clean Air Act
TPY	Tons per year
UAC	Utah Administrative Code
VOC	Volatile organic compounds