MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

September 2, 2016

PERMIT TO INSTALL 710-91E

ISSUED TO
The C. Reiss Coal Company

LOCATED AT 1010 3rd Avenue North Escanaba, Michigan

IN THE COUNTY OF Delta

FRIS PENINSTIL

STATE REGISTRATION NUMBER N2984

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203: August 12, 2016		
DATE PERMIT TO INSTALL APPROVED: September 2, 2016	SIGNATURE:	
DATE PERMIT VOIDED:	SIGNATURE:	
DATE PERMIT REVOKED:	SIGNATURE:	

PERMIT TO INSTALL

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Common Abbreviations / Acronyms

Common Acronyms Pollut			Pollutant / Measurement Abbreviations
AQD	Air Quality Division	acfm	Actual cubic feet per minute
BACT	Best Available Control Technology	BTU	British Thermal Unit
CAA	Clean Air Act	°C	Degrees Celsius
CAM	Compliance Assurance Monitoring	co	Carbon Monoxide
CEM	Continuous Emission Monitoring	CO ₂ e	Carbon Dioxide Equivalent
CFR	Code of Federal Regulations	dscf	Dry standard cubic foot
СОМ	Continuous Opacity Monitoring	dscm	Dry standard cubic meter
Department/	Michigan Department of Environmental	°F	Degrees Fahrenheit
department	Quality	gr	Grains
EU	Emission Unit	HAP	Hazardous Air Pollutant
FG	Flexible Group	Hg	Mercury
GACS	Gallons of Applied Coating Solids	hr	Hour
GC	General Condition	HP	Horsepower
GHGs	Greenhouse Gases	H ₂ S	Hydrogen Sulfide
HVLP	High Volume Low Pressure*	kW	Kilowatt
ID	Identification	lb	Pound
IRSL	Initial Risk Screening Level	m	Meter
ITSL	Initial Threshold Screening Level	mg	Milligram
LAER	Lowest Achievable Emission Rate	mm	Millimeter
MACT	Maximum Achievable Control Technology	MM	Million
MAERS	Michigan Air Emissions Reporting System	MW	Megawatts
MAP	Malfunction Abatement Plan	NMOC	Non-methane Organic Compounds
MDEQ	Michigan Department of Environmental	NO _x	Oxides of Nitrogen
	Quality	ng	Nanogram
MSDS NA	Material Safety Data Sheet Not Applicable	PM	Particulate Matter
NAAQS	National Ambient Air Quality Standards	PM10	Particulate Matter equal to or less than 10 microns in diameter
NESHAP	National Emission Standard for Hazardous		Particulate Matter equal to or less than 2.5
	Air Pollutants	PM2.5	microns in diameter
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	psia	Pounds per square inch absolute
PTI	Permit to Install	psig	Pounds per square inch gauge
RACT	Reasonable Available Control Technology	scf	Standard cubic feet
ROP	Renewable Operating Permit	sec	Seconds
SC	Special Condition	SO ₂	Sulfur Dioxide
SCR	Selective Catalytic Reduction	TAC	Toxic Air Contaminant
SNCR	Selective Non-Catalytic Reduction	Temp	Temperature
SRN	State Registration Number	THC	Total Hydrocarbons
TEQ	Toxicity Equivalence Quotient	tpy	Tons per year
USEPA/EPA	United States Environmental Protection Agency	μg	Microgram
VE	Visible Emissions	μm VOC	Micrometer or Micron Volatile Organic Compounds
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^{*}For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

GENERAL CONDITIONS

- 1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. (R 336.1201(1))
- 2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. (R 336.1201(4))
- 3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. (R 336.1201(6)(b))
- 4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. (R 336.1201(8), Section 5510 of Act 451, PA 1994)
- 5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to R 336.1219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of R 336.1219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. (R 336.1219)
- 6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. (R 336.1901)
- 7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). (R 336.1912)
- 8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
- 9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
- 10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

- 11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R 336.1301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R 336.1303. (R 336.1301)
 - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
 - b) A visible emission limit specified by an applicable federal new source performance standard.
 - c) A visible emission limit specified as a condition of this Permit to Install.
- 12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). (R 336.1370)
- 13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. (R 336.2001)

SPECIAL CONDITIONS

EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EU-MATERIALS	The transfer and storage of two groups of materials as defined below: No dust group: logs, cut lumber, plywood, railroad ties, steel and steel product, pig iron, and chipped tires Potential dust group: limestone, rock salt, wood chips, wood pulp, sawdust, pelletized or solidified biomass fuel, trap rock, armor rock, railroad ballast, aggregate, washed or unwashed sand & gravel, metallurgical coke, petroleum coke, slag and slag products, coal, lump and pelletized iron ore & copper ore	6-20-1991/ 8/18/1998, 9-11-2014, 9-2-2016	FG-DUSTGROUP
Self-loading barges and/or temporary box hopper and stacking conveyor (with diesel engine/generator <100 HP combined) loading material from stockpiles onto barges for transfer to off-site locations. The transfer of two groups of materials as defined below: No dust group: logs, cut lumber, plywood, railroad ties, steel and steel product, pig iron, and chipped tires Potential dust group: limestone, rock salt, wood chips, wood pulp, sawdust, pelletized or solidified biomass fuel, trap rock, armor rock, railroad ballast, aggregate, washed or unwashed sand & gravel, metallurgical coke, petroleum coke, slag and slag products, coal, lump and pelletized iron ore & copper ore		7-2-2012/ 9-2-2016	FG-DUSTGROUP
EU-WATERPUMP	Diesel water pump (77.5 HP) to supply water to dust control portable spray towers and also to a dust control water truck. The portable towers and/or truck are used on an "as needed" basis as dictated by weather conditions, amount of materials in storage, and vehicular activity.	7-30-2004/ 12-21-2012	N/A

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.

The following conditions apply to: EU-MATERIALS

<u>DESCRIPTION</u>: The transfer and storage of two groups of materials as defined below:

No dust group: logs, cut lumber, plywood, railroad ties, steel and steel product, pig iron, and chipped tires

Potential dust group: limestone, rock salt, wood chips, wood pulp, sawdust, pelletized or solidified biomass fuel, trap rock, armor rock, railroad ballast, aggregate, washed or unwashed sand & gravel, metallurgical coke, petroleum coke, slag and slag products, coal, lump and pelletized iron ore & copper ore

Flexible Group ID: FG-DUSTGROUP

POLLUTION CONTROL EQUIPMENT: Control of fugitive dust emissions through work practices

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Visible	10 percent opacity	Test protocol*	EU-MATERIALS	GC 13	R 336.1301(1)(c)
Emissions	at wind speeds <25		Potential Dust		
	mph		Group		
2. Visible	20 percent opacity	Test protocol*	EU-MATERIALS	GC 13	R 336.1301(1)(c)
Emissions	at wind speeds ≥25		Potential Dust		
	mph		Group		
3. Visible	10 percent opacity	Test protocol*	EU-MATERIALS	GC 13	R 336.1301(1)(c)
Emissions			No Dust Group		
*Test protocol shall specify averaging time					

II. MATERIAL LIMITS

N/A

III. PROCESS/OPERATIONAL RESTRICTIONS

- The permittee shall operate and maintain EU-MATERIALS Potential dust group according to a Fugitive Dust Control Plan for the Material Handling Operations at The C. Reiss Coal Company Dock 1 in Escanaba, Michigan, for all material handling operations and material storage areas, all plant roadways, and the plant yard. The permittee shall keep a copy of the Fugitive Dust Control Plan at the Reiss Coal Company offices in Escanaba and make it available to the AQD District Supervisor upon request. (R 336.1201, R 336.1901)
- 2. The permittee shall minimize the drop distance when unloading limestone, rock salt, wood chips, wood pulp, sawdust, pelletized or solidified biomass fuel, trap rock, armor rock, railroad ballast, aggregate, washed or unwashed sand & gravel, metallurgical coke, petroleum coke, slag and slag products, coal, or lump and pelletized iron ore & copper ore to EU-MATERIALS storage piles throughout the entire unloading process. The drop distance shall be specified in the *Fugitive Dust Control Plan.* (R 336.1201, R 336.1901)
- 3. The permittee shall not operate the storage piles of EU-MATERIALS Potential Dust group unless fugitive emissions from the storage piles are controlled as described in the *Fugitive Dust Control Plan.* (R 336.1201, R 336.1301, R 336.1901)

IV. DESIGN/EQUIPMENT PARAMETERS

N/A

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

N/A

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall keep, in a satisfactory manner, records and information associated with the *Fugitive Dust Control Plan* as required by SC III.1. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1201, R336.1901)
- 2. The permittee shall keep, in a satisfactory manner, records and information associated with the activity and control for each storage pile in EU-MATERIALS Potential Dust Group as required by SC III.3. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1201, R 336.1901)

VII. REPORTING

N/A

VIII. STACK/VENT RESTRICTIONS

N/A

IX. OTHER REQUIREMENTS

N/A

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

The following conditions apply to: EU-BARGELOADING

<u>DESCRIPTION</u>: Self-loading barges and/or temporary box hopper and stacking conveyor (with diesel engine/generator <100 HP combined) loading material from stockpiles onto barges for transfer to off-site locations. The transfer and storage of two groups of materials as defined below:

No dust group: logs, cut lumber, plywood, railroad ties, steel and steel product, pig iron, and chipped tires

Potential dust group: limestone, rock salt, wood chips, wood pulp, sawdust, pelletized or solidified biomass fuel, trap rock, armor rock, railroad ballast, aggregate, washed or unwashed sand & gravel, metallurgical coke, petroleum coke, slag and slag products, coal, lump and pelletized iron ore & copper ore

Flexible Group ID: FG-DUSTGROUP

POLLUTION CONTROL EQUIPMENT: Control of fugitive dust emissions through work practices.

I. <u>EMISSION LIMITS</u>

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Visible Emissions	10 percent opacity at wind speeds <25 mph	Test protocol*	EU- BARGELOADING Potential Dust Group	GC 13	R 336.1301(1)(c)
	20 percent opacity at wind speeds ≥25 mph	Test protocol*	EU- BARGELOADING Potential Dust Group	GC 13	R 336.1301(1)(c)
3. Visible Emissions	10 percent opacity	Test protocol*	EU- BARGELOADING No Dust Group	GC 13	R 336.1301(1)(c)
* Test protocol shall specify averaging time					

II. MATERIAL LIMITS

N/A

III. PROCESS/OPERATIONAL RESTRICTIONS

- 1. The permittee shall not retain the diesel powered portable box hopper and stacking conveyor in EU-BARGELOADING at the site for more than 12 consecutive months. (40 CFR Part 60 Subpart IIII, 40 CFR Part 63 Subpart ZZZZ)
- 2. The permittee shall operate and maintain the portable box hopper and stacking conveyor in EU-BARGELOADING Potential Dust Group according to a *Fugitive Dust Control Plan for the Material Handling Operations at The C. Reiss Coal Company Dock 1 in Escanaba, Michigan,* for all material handling operations and material storage areas, all plant roadways, and the plant yard. The permittee shall keep a copy of the *Fugitive Dust Control Plan* at the C. Reiss Coal Company offices in Escanaba and make it available to the AQD District Supervisor upon request. (R 336.1201, R 336.1901)
- 3. The permittee shall minimize the drop distance from the portable box hopper and stacking conveyor or self-loading barge equipment when loading limestone, rock salt, wood chips, wood pulp, sawdust, pelletized or solidified biomass fuel, trap rock, armor rock, railroad ballast, aggregate, washed or unwashed sand & gravel, metallurgical coke, petroleum coke, slag and slag products, coal, or lump and pelletized iron ore & copper ore throughout the entire barge loading process. The drop distance shall be specified in the Fugitive Dust Control Plan. (R 336.1201, R 336.1901)

IV. DESIGN/EQUIPMENT PARAMETERS

N/A

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

N/A

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall keep, in a satisfactory manner, records and information associated with the *Fugitive Dust Control Plan* as required by SC III.2. The permittee shall keep all records on file at the facility and make them available to the Department upon request. R 336.1205, R 336.1901)
- 2. The permittee shall keep, in a satisfactory manner, records and information associated with the presence on site of the portable box hopper and stacking conveyor in EU-BARGELOADING as required by SC III.1. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1205, 40 CFR Part 60 Subpart IIII, 40 CFR Part 63 Subpart ZZZZ)

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VII. REPORTING

N/A

VIII. STACK/VENT RESTRICTIONS

N/A

IX. OTHER REQUIREMENTS

N/A

<u>Footnotes:</u> ¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

The following conditions apply to: EU-WATERPUMP

<u>DESCRIPTION</u>: Diesel water pump (77.5 HP) to supply water to dust control portable spray towers and also to a dust control water truck. The portable towers and/or truck are used on an "as needed" basis as dictated by weather conditions, amount of materials in storage, and vehicular activity.

Flexible Group ID: N/A

POLLUTION CONTROL EQUIPMENT: N/A

I. <u>EMISSION LIMITS</u>

N/A

II. MATERIAL LIMITS

N/A

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not retain the diesel powered portable water pump in EU-WATERPUMP at the site for more than 12 consecutive months. (40 CFR Part 63 Subpart ZZZZ)

IV. DESIGN/EQUIPMENT PARAMETERS

N/A

V. TESTING/SAMPLING

N/A

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

 The permittee shall keep, in a satisfactory manner, records and information associated with the presence on site of the portable water pump in EU-WATERPUMP as required by SC III.1. The permittee shall keep all records on file at the facility and make them available to the Department upon request.¹ (R 336.1201, 40 CFR Part 63 Subpart ZZZZ)

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VII. REPORTING

N/A

VIII. STACK/VENT RESTRICTIONS

N/A

IX. OTHER REQUIREMENTS

N/A

<u>Footnotes:</u> ¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-DUSTGROUP	Flexible group of emission units necessitating a wind speed monitor. Opacity limits or operational restrictions of these emission units are contingent on wind speed.	EU-MATERIALS, EU-BARGELOADING

The following conditions apply to: FG-DUSTGROUP

<u>DESCRIPTION:</u> Flexible group of emission units necessitating a wind speed monitor. Opacity limits or operational restrictions of these emission units are contingent on wind speed.

Emission Units: EU-MATERIALS, EU-BARGELOADING

I. EMISSION LIMITS

N/A

II. MATERIAL LIMITS

N/A

III. PROCESS/OPERATIONAL RESTRICTIONS

N/A

IV. <u>DESIGN/EQUIPMENT PARAMETERS</u>

1. Within two weeks of any Potential Dust Group activity at this site (i.e. barge loading, barge unloading, or storage pile creation), the permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the wind speed on site at the facility on a continuous basis. (R 336.1201, R 336.1301, R 336.1901)

V. TESTING/SAMPLING

N/A

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. Within two weeks of any Potential Dust Group activity at this site (i.e. barge loading, barge unloading, or storage pile creation), the permittee shall continuously monitor and record, in a satisfactory manner, the wind speeds on site at the facility. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1201, R 336.1301, R 336.1901)
- 2. Within two weeks of any Potential Dust Group activity at this site (i.e. barge loading, barge unloading, or storage pile creation), the permittee shall keep, in a satisfactory manner, a log of the downtime of the wind speed monitoring device. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1201, R 336.1301, R 336.1901)
- 3. The permittee may cease to monitor and record the wind speeds on site at the facility during periods of extended Potential Dust Group non-activity at the facility. Extended Potential Dust Group non-activity constitutes at least two weeks of no barge loading or unloading and/or no storage piles or related material handling. (R 336.1201, R 336.1301, R 336.1901)

VII. REPORTING

- 1. The permittee shall notify the AQD District Supervisor, in writing, of the date on which the facility resumed Potential Dust group activity at the site, no later than 60 days after such date. (R 336.1201, R 336.1301, R 336.1901)
- 2. Within 30 days after completion of the installation of the wind speed monitor, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation is considered to occur not later than the commencement of wind speed recordkeeping. (R 336.1201(7)(a))
- The permittee shall notify the AQD District Supervisor, in writing, of the intent to cease monitoring and recording the wind speeds on site at the facility seven days prior to ceasing said activity. (R 336.1201, R 336.1301, R 336.1901)
- 4. The permittee shall notify the AQD District Supervisor, in writing, of the intent to resume monitoring and recording the wind speeds on site at the facility seven days prior to resuming said activity. (R 336.1201, R 336.1301, R 336.1901)

VIII. STACK/VENT RESTRICTIONS

N/A

IX. OTHER REQUIREMENTS

N/A

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).