

**AUTHORIZATION TO DISCHARGE UNDER
THE OKLAHOMA POLLUTANT DISCHARGE ELIMINATION SYSTEM**

**PERMIT NUMBER: OK0040291
ID NUMBER: I-62000060**

In compliance with the Oklahoma Pollutant Discharge Elimination System (OPDES) Act, 27A O.S. §2-6-201 *et seq.*, Oklahoma Uniform Environmental Permitting Act, 27A O.S. §2-14-101 *et seq.*, and the rules of the Oklahoma Department of Environmental Quality promulgated thereunder,

Unimin Corporation – Roff Plant, Inc.
P.O. Box 159
Roff, OK 74865

is authorized to discharge from their facility, located in the:

E½, Section 13, Township 2N, Range 4E IM, and
S½, Section 18, Township 2N, Range 5E IM
Pontotoc County, Oklahoma
or at 600 E Walling, Roff, OK 74865

to receiving waters identified as: unnamed tributaries of the Blue River, stream segment 410600, Water Body ID 410600020010_20

from:

Outfall 001:

Latitude 34° 38' 25.195" N, Longitude 96° 49' 41.110" W (GPS: NAD83)
NE¼, SE¼, SE¼, Section 13, Township 2N, Range 4E IM,
Pontotoc County, Oklahoma

Outfall 002:

Latitude 34° 38' 28.950" N, Longitude 96° 48' 50.066" W (GPS: NAD83)
SW¼, NE¼, SE¼, Section 18, Township 2N, Range 5E IM,
Pontotoc County, Oklahoma

Outfall 007:

Latitude 34° 38' 13.960" N, Longitude 96° 49' 46.614" W (GPS: NAD83)
SW¼, SE¼, SE¼, Section 13, Township 2N, Range 4E IM,
Pontotoc County, Oklahoma

Outfall 008:

Latitude 34° 38' 10.535" N, Longitude 96° 48' 23.224" W (GPS: NAD83)
NW¼, NW¼, NW¼, Section 20, Township 2N, Range 5E IM,
Pontotoc County, Oklahoma

Outfall 009:

Latitude 34° 38' 12.696" N, Longitude 96° 48' 51.409" W (GPS: NAD83)
NE¼, NW¼, NE¼, Section 19, Township 2N, Range 5E IM,
Pontotoc County, Oklahoma

in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, and III, hereof.

The above referenced facility is also authorized to retain wastewater in five flow-through impoundments (F01 – F05) and one total retention impoundment (T01), as described in the Appendix. Surface impoundments shall be maintained in accordance with Parts I, II, and IV, hereof.

Issuance of this permit in no way or in any respect affects the permittee's civil or criminal responsibility regarding disposal and/or discharges of wastewater, except with respect to the permittee's legal responsibility under the OPDES Act and Department Rules.

This permit replaces and/or supersedes OPDES Permit No. OK0040291 that became effective on September 1, 2011 and expires August 31, 2016.

This permit shall become effective on -----.

This permit and the authorization to operate the disposal system shall expire at midnight, on -----.

This is to certify that the wastewater discharges set forth in this permit comply with the requirements of Oklahoma's Water Quality Standards, as amended, provided the permittee does not exceed the effluent limitations set forth in this permit.

Issued this ----- day of -----, 2016.

For Oklahoma Department of Environmental Quality,

Carol Paden, P.E., Manager
Industrial Permits Section
Water Quality Division

Shellie R. Chard, Director
Water Quality Division

**PART I
 EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

SECTION A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. Effluent Limitations and Monitoring Requirements for Outfalls 001, 008, and 009

During the period beginning the effective date of the permit and lasting through the expiration date, the permittee is authorized to discharge from Outfalls 001, 008, and 009. The discharge from Outfalls 001, 008, and 009 consists of wastewater from a wet screen overflow, washing and separation, sand drying scrubber, stormwater runoff, and mine pit dewatering. Such discharge shall be limited and monitored by the permittee as specified below:

Mass and Concentration Limitations - Outfalls 001, 008, and 009

PARAMETERS	DISCHARGE LIMITATIONS			
	MASS LOADING LIMITS (lbs/day unless otherwise specified)		CONCENTRATION LIMITS (mg/L unless otherwise specified)	
	MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM
Flow STORET: 50050	Report (MGD)	Report (MGD)	---	---
Total Suspended Solids STORET: 00530	---	---	25	45
Oil and Grease STORET: 00552	---	---	---	15
pH STORET: 00400	---	---	between 6.5 s.u. - 9.0 s.u.	

Monitoring Requirements and Sample Types - Outfalls 001, 008, and 009

PARAMETERS	MEASUREMENT FREQUENCY ⁽¹⁾	SAMPLE TYPE
Flow	1/2 weeks	Estimate
Total Suspended Solids	1/month	Grab
Oil and Grease	1/month	Grab
pH	1/month	Grab

⁽¹⁾ When discharging.

NOTE: See Parts II and III for Additional Requirements.

There shall be no discharge of a visible sheen of oil or globules of oil or grease on or in the water. Oil and grease shall not be present in quantities that adhere to stream banks and coat bottoms of water courses. Surface waters of the State shall be maintained free from oil and grease and taste and odors.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

The discharge shall not contain chemical, physical, or biological substances in concentrations that are irritating to skin or sense organs or are toxic or cause illness upon ingestion by human beings.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations:

Outfall 001: At the valve on the slurry line at the west end of F01 in the NE¼, SE¼, SE¼, Section 13, Township 2N, Range 4E IM, Pontotoc County, Oklahoma, or at Latitude 34° 38' 25.195" N, Longitude 96° 49' 41.110" W (GPS: NAD83).

Outfall 008: At the valve on the slurry line east of F03, approximately one half mile to the east of the easement road and Highway 1 intersection in the NW¼, NW¼, NW¼, Section 20, Township 2N, Range 5E IM, Pontotoc County, Oklahoma, or at Latitude 34° 38' 10.535" N, Longitude 96° 48' 23.224" W (GPS: NAD83).

Outfall 009: At the valve on the slurry line east of F03 on the southeast corner of the easement road and Highway 1 intersection in the NE¼, NW¼, NE¼, Section 19, Township 2N, Range 5E IM, Pontotoc County, Oklahoma, or at Latitude 34° 38' 12.696" N, Longitude 96° 48' 51.409" W (GPS: NAD83).

2. Effluent Limitations and Monitoring Requirements for Outfalls 002 and 007

During the period beginning the commencement of discharge and lasting through the expiration date, the permittee is authorized to discharge from Outfalls 002 and 007. The discharge from Outfall 002 consists of wastewater from a wet screen overflow, washing and separation, sand drying scrubber, stormwater runoff, and mine pit dewatering. The discharge from Outfall 007 consists of stormwater runoff and stockpile draining. Such discharge shall be limited and monitored by the permittee as specified below.

Effluent Limitations – Outfall 002 and 007

PARAMETERS	DISCHARGE LIMITATIONS			
	MASS LOADING LIMITS (lbs/day unless otherwise specified)		CONCENTRATION LIMITS (mg/L unless otherwise specified)	
	MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM
Flow STORET: 50050	Report (MGD)	Report (MGD)	---	---
Total Suspended Solids STORET: 00530	---	---	25	45
Oil and Grease STORET: 00552	---	---	---	15
Total Dissolved Solids STORET: 70300	---	---	---	Report
pH STORET: 00400	---	---	between 6.5 s.u. - 9.0 s.u.	

Monitoring Requirements and Sample Types – Outfalls 002 and 007

PARAMETERS	MEASUREMENT FREQUENCY ⁽¹⁾	SAMPLE TYPE
Flow	1/2 weeks	Estimate
Total Suspended Solids	1/month	Grab
Oil and Grease	1/month	Grab
Total Dissolved Solids	1/month ⁽²⁾	Grab
pH	1/month	Grab

⁽¹⁾ When discharging.

⁽²⁾ Until at least 12 test results have been submitted to DEQ.

NOTE: See Parts II and III for Additional Requirements.

There shall be no discharge of a visible sheen of oil or globules of oil or grease on or in the water. Oil and grease shall not be present in quantities that adhere to stream banks and coat bottoms of water courses. Surface waters of the State shall be maintained free from oil and grease and taste and odors.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

The discharge shall not contain chemical, physical, or biological substances in concentrations that are irritating to skin or sense organs or are toxic or cause illness upon ingestion by human beings.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following locations:

Outfall 002: At the overflow point on the southeast side of impoundment F02, in the SW¼, NE¼, SE¼, Section 18, Township 2N, Range 5E IM, Pontotoc County, Oklahoma, at Latitude 34° 38' 28.950" N, Longitude 96° 48' 50.066" W (GPS: NAD83).

Outfall 007: Approximately 600 feet east of the plant building on the north side of the railroad tracks, at the end of the pipe where it emerges from beneath the dirt road in the SW¼, SE¼, SE¼, Section 13, Township 2N, Range 4E IM, Pontotoc County, Oklahoma, at Latitude 34° 38' 13.960" N, Longitude 96° 49' 46.614" W (GPS: NAD83).

SECTION B. SCHEDULE OF COMPLIANCE

The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule: None.

SECTION C. REPORTING OF MONITORING RESULTS

Monitoring results shall be reported in accordance with the provisions of Part III. E.4 of the permit. Monitoring results obtained during the previous month shall be summarized and reported on the Discharge Monitoring Report (DMR) forms due to the Oklahoma Department of Environmental Quality, Water Quality Division, Wastewater Compliance Tracking Section postmarked or received no later than the 15th day of the following month. If no discharge occurs during the reporting period, DMR forms stating "No Discharge" shall be submitted according to the above schedule.

The first report is due on _____.

PART II
OTHER PERMIT REQUIREMENTS

A. REGULATORY NOTICE

The permittee is hereby given notice that this permit is in all respects subject to compliance with and actions under any and all applicable and relevant terms, conditions, provisions and requirements, and any and all amendments of the laws of the state of Oklahoma, the rules of the Oklahoma Department of Environmental Quality, and Oklahoma's Water Quality Standards. The absence of any express reference within this permit of any particular statutory requirement, rule(s), regulation(s), or standard(s) shall in no respect be deemed or construed to exempt or preclude the application of such requirement, rule(s), regulation(s), or standard(s) to this permit or the permittee. By the Director's approval, grant and issuance of this permit, permittee acknowledges receipt of true, correct, and current copies of Oklahoma's Water Quality Standards, and the rules of the Oklahoma Department of Environmental Quality, provided, however, that permittee further acknowledges that any and all amendments thereto shall become part of this permit.

B. REOPENER CLAUSE

This permit may be reopened for modification or revocation and reissuance to require additional monitoring and/or effluent limitations where actual or potential exceedances of state water quality criteria are determined to be the result of the permittee's discharge to the receiving water(s), or a Total Maximum Daily Load is established for the receiving stream(s), or when required as technology. Modification or revocation and reissuance of the permit shall follow regulations listed at 40 CFR 124.5.

C. LABORATORY CERTIFICATION

All laboratory analyses for the parameters specified in this permit must be performed by a laboratory certified by the Oklahoma Department of Environmental Quality for those parameters.

D. ANALYTICAL REQUIREMENTS

Unless otherwise specified in this permit, effluent and/or upstream monitoring shall be conducted according to analytical, apparatus and materials, sample collection, preservation, handling, etc., procedures listed at 40 CFR Part 136 in effect on the effective date of this permit. Appendices A, B, and C to 40 CFR Part 136 are specifically referenced as part of this requirement. Amendments to 40 CFR Part 136 promulgated and incorporated by reference into OAC 252:606 after the effective date of this permit shall supersede these requirements as applicable.

E. MINIMUM QUANTIFICATION LEVEL (MQL)

If any individual analytical test result taken for compliance with this permit is less than the corresponding minimum quantification level listed in OAC 252:690 Appendix B, a value of zero (0) may be used for that individual result for the DMR calculations and reporting requirements.

F. SURFACE IMPOUNDMENT REQUIREMENTS

A minimum freeboard of two (2) feet shall be maintained for F01 – F05. A minimum freeboard of three (3) feet shall be maintained for T01.

The permit may be reopened to implement and/or require impoundment modifications, additions, extensions, and/or operational changes; additional monitoring and reporting (including but not necessarily limited to soil sampling); reclassification of wastes; sludge management plans; best management practices; closure plans; remediation and/or remediation plans; monitoring wells and/or subsurface monitoring plans; and/or other appropriate actions.

At such time as any of the surface impoundments are to be permanently taken out of service or at such time as the contents of any of the impoundments pose a risk to the environment or waters of the state, the owner or operator of the facility shall follow all closure requirements contained in OAC 252:616-13.

In all other respects, F01 – F05 and T01 shall be subject to standard conditions for surface impoundment contained in OAC 252:616, Subchapters 5, 7, and 13, including but not limited to requirements for construction, operation, maintenance, monitoring, and closure.

G. LAND APPLICATION

Not Applicable

H. OTHER DISPOSAL METHODS

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewater shall be disposed of in a state approved industrial waste disposal site or to a company for recycling.

If any such industrial wastes are removed from the facility, the permittee shall keep accurate records which include the following information:

- a. Name and address of company hauling waste.
- b. The type and amount of waste hauled.
- c. The final disposal site of waste hauled.

Upon request, the above records shall be made available to the staff of the Department for inspection, review, and copying.

APPENDIX

Description of Wastewater Treatment/Disposal Surface Impoundments (S.I.s)

Classification OAC 252:616-1-2		Liner Requirements OAC 252:616-7-2(b)	Holding Capacity and/or Dimensions OAC 252:616-7-1(6) ⁽²⁾	Wastewater Destination
S.I. ⁽¹⁾	Wastewater			
F01	Mine dewatering, stormwater, water from F03-F06 Class III	Excavated Soil	111 million gallons ~ 3 ft deep	F02
F02	Water from F01, stormwater Class III	Excavated Soil	204 million gallons ~ 90 ft deep	Outfall 002
F03	Stormwater, process water Class III	Excavated Soil	33.1 million gallons ~ 60 ft deep	F01
F04	Process water Class III	Excavated Soil	37.3 million gallons ~ 40 ft deep	F05
F05	Process Water Class III	Excavated Soil	32.9 million gallons ~ 40 ft deep	T01
T01	Stormwater, water from F04 and F05 Class III	Excavated Soil	208.4 million gallons ~ 40 ft deep	Reused in process

⁽¹⁾ Designation F refers to a flow-through surface impoundment.

⁽²⁾ Based on information provided in application. Freeboard requirements in Part ILE must be met.

Location of Surface Impoundments

S.I.	Legal Location	General Location and Description
F01	S½, SW¼, Section 18, Township 2N, Range 5E IM, Pontotoc County, Oklahoma	Approximately 2,200 feet east of the main office
F02	N½, SW¼, SE¼, and S½, NW¼, SE¼, Section 18, Township 2N, Range 5E IM, Pontotoc County, Oklahoma	East of F01
F03	S½, SE¼, SW¼, Section 18, Township 2N, Range 5E IM, Pontotoc County, Oklahoma	South of F01 and F02
F04	SW¼, NW¼, SE¼, Section 13, Township 2N, Range 4E IM, Pontotoc County, Oklahoma	Approximately 400 feet north-northwest of the main office
F05	NW¼, NW¼, SE¼, Section 13, Township 2N, Range 4E IM, Pontotoc County, Oklahoma	North of F04
T01	S¼, NE¼, Section 13, Township 2N, Range 4E IM, Pontotoc County, Oklahoma	Northeast of F05