FACT SHEET

GENERAL WASTEWATER PERMIT FOR ROCK, SAND, AND GRAVEL QUARRIES AND STONE CUTTING FACILITIES; TO CONSTRUCT OR OPERATE INDUSTRIAL WASTEWATER SURFACE IMPOUNDMENTS; AND/OR TO LAND APPLY INDUSTRIAL WASTEWATER FOR DUST SUPPRESSION; OR TO RECYCLE WASTEWATER AS WASH WATER OR COOLING WATER
GENERAL PERMIT No. OKG950000

DEQ Permit No.:	OKG950000
Applicant:	Operators of Rock, Sand, or Gravel Quarry Plants and Stone Cutting Facilities in Oklahoma
Prepared and Issued By:	Industrial Permits Section Water Quality Division Department of Environmental Quality P. O. Box 1677 707 N. Robinson Ave. Oklahoma City, OK 73101-1677
Permit Action:	Renewal of a general permit for rock, sand, and gravel quarries and stone cutting facilities; to discharge wastewater, and/or to construct or operate industrial wastewater surface impoundments; and/or to land apply industrial wastewater for dust suppression; and/or to recycle wastewater as wash water or cooling water

I. SCOPE OF PERMIT

The activities regulated by this General Permit Number OKG950000 (permit) are the following activities at Rock, Sand, or Gravel Quarries (SIC Codes No. 1422, 1423, and 1442 excluding dredging operations) and Stone Cutting Facilities (SIC Code 3281): (1) discharge of industrial wastewater to waters of the State/United States; (2) construction or operation of industrial surface impoundments; (3) land application of industrial wastewater for dust suppression; or (4) recycling of wastewater as wash water or cooling water. This Permit will regulate any combination of the above-listed wastewater disposal/treatment options, and will cover both discharging and non-discharging (total retention) facilities.

This permit does not authorize discharge of wastewater to the following waters: Outstanding Resource Waters; High Quality Waters; Sensitive Public and Private Water Supplies; Appendix 'B' Waters [OAC 785:45-5-25(c)(2)]; and receiving streams included in Oklahoma's '303(d) List' of impaired water bodies listed for "Turbidity" (Impairment ID 413) or "pH" (Impairment ID 441) for which a Total Maximum Daily Load (TMDL) has not been performed or the result of the TMDL indicates that discharge limits more stringent than 45 mg/l for Total Suspended Solids (TSS) or pH more stringent than 6.5-9.0 standard units are required.

For facilities that include wastewater from vehicle/equipment washing and maintenance areas in their discharge or facilities that use an oil-based product while cutting stone, the permit will contain a limit for Oil and Grease of 15 mg/l. This permit does not authorize discharge of wastewater from vehicle/equipment washing and maintenance areas or facilities that use an oil-based product to cut stone to waters included in Oklahoma's '303(d) List' of impaired water bodies listed for "Oil and Grease" (Impairment ID 317) for which a Total Maximum Daily Load (TMDL) has not been performed or the result of the TMDL indicates that discharge limits more stringent than 15 mg/l for Oil and Grease are required.

For all facilities applying for coverage under this permit, the DEQ will determine whether the point of discharge is located in surface waters designated sensitive by the U.S. Fish and Wildlife Service. If the facility is a new facility and the discharge is to a sensitive water, the facility will not be eligible for an Authorization under this permit. If the facility is an existing facility and the point of discharge is located in surface waters designated sensitive by the U.S. Fish and

Wildlife Service, the facility will not be eligible for coverage under this permit if there has been a change in the location of the discharge point or an increase in the volume of the discharge.

Quarries or stone cutting facilities that are currently permitted by the Oklahoma Department of Environmental Quality (DEQ) through individual wastewater disposal permits may apply for coverage under this Permit no later than 180 days prior to the expiration of their current individual permits, or they may elect to continue coverage under their individual permits. New quarries or stone cutting facilities shall apply for coverage under this Permit or an individual permit at least 90 days prior to commencing any of the activities regulated by this Permit.

Wastewater discharges regulated by this Permit are process wastewater and stormwater runoff that comes in direct contact with active process areas associated with the following common activities: mining of stone, sand, or gravel; crushing stone to size; washing and stockpiling of processed stone and sand; vehicle/equipment washing and maintenance areas; cutting stone. The wastewater generated at these quarries consists of runoff from the rock and sand crushing/washing process, vehicle/equipment washing and maintenance areas, and stormwater runoff from the active quarry (direct contact)[(a)]. The wastewater generated at stone cutting facilities consists of wastewater used to cool the cutting tools. At no time shall the effluent cause a violation of Oklahoma's Water Quality Standards (OWQS) in the receiving water. Stormwater discharges that are not associated (non-contact) with these activities and are not commingled with the stormwater associated with these activities are subject to DEQ stormwater rules promulgated in the OPDES Storm Water Multi-Sector General Permit for Industrial Activities (MSGP).

Surface impoundments regulated by this Permit include any surface impoundments at any facility that contain wastewater associated with the activities described above.

Land application of wastewater regulated by this Permit involves wastewater associated with the activities described above or stormwater subject to the MSGP. Land application shall be for dust suppression only on facility roadways and/or on stockpiles.

This permit does not specify the disposal/treatment method(s) that the permittee must use. If surface impoundments and/or land application are used for wastewater treatment and/or disposal, the surface impoundments and/or land application shall be regulated by this Permit in accordance with DEQ Rules OAC 252:616.

(a) For purposes of this permit, "stormwater runoff from the active quarry" as described in 40 CFR 122.26(b)(14) means the discharge from any conveyance which is used for collecting and conveying stormwater and which is directly related to manufacturing, processing, or raw material storage areas at an industrial plant. This paragraph of the rule also states, "…For the categories of industries identified in paragraph (b)(14)(xi) of this section, the term includes only stormwater discharges from all the areas that are listed previously where material handling equipment, or activities, raw materials, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to stormwater. For the purposes of this paragraph, material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, finished product, by-product or waste product."

II. APPLICANT ACTIVITY

The following common activities are the sources of wastewater at quarries: mining of stone, sand, or gravel, crushing stone to size, washing and stockpiling of processed stone or sand, and cleaning of mining equipment. The wastewater generated at these quarries consists of wastewater from the above activities and stormwater runoff from the active quarry.

The following common activities are the sources of wastewater at stone cutting facilities: stone cutting and rinsing.

Quarries and stone cutting facilities utilize one or more of the following methods to dispose of wastewater: discharge, total retention via surface impoundments, recycle, dust suppression, and/or stockpile watering. Treatment for wastewater is typically by surface impoundments or filter media to provide detention time for settling or filtration.

III. RECEIVING WATERBODY INFORMATION

Discharging quarries and stone cutting facilities covered by this Permit will be discharging to various Waters of the State/United States. These waters will have varying beneficial uses as designated by the "Oklahoma Water Quality Standards." This Permit will cover discharges to Waters of the State/United States with any or all of the following designated beneficial uses as listed in OAC 785, Chapter 45:

- Public and Private Water Supplies (OAC 785:45-5-10);
- Emergency Public and Private Water Supplies (OAC 785:45-5-11);
- Fish and Wildlife Propagation (OAC 785:45-5-12);
- Agriculture/Livestock and Irrigation (OAC 785:45-5-13);
- Primary Body Contact Recreation (OAC 785:45-5-16);
- Secondary Body Contact Recreation (OAC 785:45-5-17);
- Navigation (OAC 785:45-5-18);
- Aesthetics (OAC 785:45-5-19); and
- Fish Consumption (OAC 785:45-5-20)

This Permit will not regulate discharges to Waters of the State designated with any of the following additional limitations:

- Outstanding Resource Waters (OAC 785:45-5-25(c)(1));
- Appendix B Waters (OAC 785:45-5-25(c)(2));
- High Quality Waters (OAC 785:45-5-25(c)(3)); or
- Sensitive Public and Private Water Supplies (OAC 785:45-5-25(c)(4)).

Quarries or stone cutting facilities located along receiving waters with these additional limitations shall either apply for coverage as non-discharging (total retention) facilities under this Permit or shall apply for an individual discharge permit. Depending on the additional limitations applicable, quarries or stone cutting facilities located along these receiving waters may be prohibited from any new point source discharge, or increased loading from an existing discharge, in accordance with Oklahoma's anti-degradation policy statement (OAC 785:45-5-25). Such facilities will still be eligible for coverage under this Permit as non-discharging (total retention) facilities.

IV. DISCHARGE INFORMATION

A. DISCHARGE LOCATION

For each proposed outfall the discharge location shall be specified in the application and the Authorization to discharge under this Permit. The discharge locations shall be specified to within ten acres by use of legal description and specified by latitudes and longitudes.

B. DISCHARGE DESCRIPTION

Wastewater discharges regulated by this Permit are process wastewater and associated stormwater runoff from the following common activities: mining of stone, sand, or gravel; crushing stone to size; washing and stockpiling of processed stone and sand; cutting and shaping of stone.

C. WASTEWATER CHARACTERISTICS

Wastewater characteristics for quarries are based upon the potential pollutants generated from mining of stone, sand, or gravel, crushing stone to size, washing and stockpiling of processed stone, and cleaning of mining equipment.

Process wastewater from these activities, and the associated stormwater runoff, have the potential to contain suspended solids and fugitive dust resulting from the mining operation. Due to contact with these materials, the wastewater may display elevated pH levels. Oil and grease is also a potential pollutant of concern when the cleaning of mining equipment occurs at the facility site.

Wastewater characteristics for stone cutting facilities are based upon the potential pollutants generated from cutting/shaping of stone.

Process wastewater from these activities, and the associated stormwater runoff, have the potential to contain suspended solids and fugitive dust resulting from the cutting and shaping of stone. Due to contact with these materials, the wastewater may display elevated pH levels. Oil and grease is also a potential pollutant of concern if the facility uses an oil-based product during the cutting or shaping of the stone.

V. RATIONALE FOR DETERMINING DISCHARGE PERMIT LIMITS

The following sections set forth the principal facts and the significant factual, legal, methodological and policy questions considered in preparing the draft permit. Also set forth are any calculations or other necessary explanations of the derivation of specific effluent limitations and conditions, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under 40 CFR Part 122.44 and the Oklahoma Pollutant Discharge Elimination Act (OPDES), OAC 252:606-5-2, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under 40 CFR Part 122.44 and reasons why they are applicable or an explanation of how the alternative effluent limitations were developed.

In accordance with regulations promulgated at 40 CFR Part 122.44(d), the draft permit limits are based on the more stringent of technology-based limitations or applicable water quality-based limitations.

A. TECHNOLOGY-BASED EFFLUENT LIMITATIONS AND CONDITIONS

1. General Comments

Regulations promulgated in 40 CFR 122.44(a) and OAC 252:606-5-2(a)(1) require technology-based effluent limitations to be placed in OPDES permits based on effluent limitations guidelines, where applicable, on Best Professional Judgment (BPJ) in the absence of guidelines, or on a combination of the two.

2. Applicable Effluent Limitations Guidelines (ELG's)

Technology-Based Effluent Limitations Guidelines for Discharges from rock quarries and crushed stone subcategories are covered under:

- 40 CFR §436.22 - Mineral Mining and Processing Point Source Category
  Subpart B - Crushed Stone Subcategory

Effluent Limitations Guidelines for Discharges of Process Generated Waste Water Pollutants from Facilities that Recycle Waste Water for Use in Processing:

BPT [2] Effluent Limitations		
Effluent Characteristic	**Maximum for any 1 day**	**Average of daily values for 30 consecutive days shall not exceed-**
pH……	([1])	([1])

[1] Within the range 6.0 to 9.0 when discharging

[2] best practicable control technology currently available

Effluent Limitations Guidelines for Mine Dewatering Discharges:

BPT Effluent Limitations		
Effluent Characteristic	**Maximum for any 1 day**	**Average of daily values for 30 consecutive days shall not exceed-**
pH……	([1])	([1])

[1] Within the range 6.0 to 9.0 when discharging

- 40 CFR §436.32 - Mineral Mining and Processing Point Source Category
  Subpart C – Construction Sand and Gravel Subcategory

Effluent Limitations Guidelines for Discharges of Process Generated Waste Water Pollutants from Facilities that Recycle Waste Water for Use in Processing:

BPT Effluent Limitations		
Effluent Characteristic	**Maximum for any 1 day**	**Average of daily values for 30 consecutive days shall not exceed-**
pH……	([1])	([1])

[1] Within the range 6.0 to 9.0 when discharging

Effluent Limitations Guidelines for Mine Dewatering Discharges:

BPT Effluent Limitations		
Effluent Characteristic	**Maximum for any 1 day**	**Average of daily values for 30 consecutive days shall not exceed-**
pH……	([1])	([1])

[1] Within the range 6.0 to 9.0 when discharging

Technology-Based Effluent limitations guidelines (ELGs) have not been promulgated for stone cutting facilities.

3. Best Professional Judgment (BPJ)

The BPJ parameters included for all outfalls covered by this permit are TSS and Oil & Grease.

a. Total Suspended Solids - The permit limit of 45 mg/L daily maximum for Total Suspended Solids is BPJ based on previously issued general and individual discharge permits for these types of facilities.

b. Oil & Grease - The permit limit of 15 mg/L daily maximum for Oil and Grease is BPJ based on previously issued general and individual discharge permits for this type of facility. Oil and Grease limits apply only if wash water from the cleaning of mining equipment or wash water from a stone cutting facility that uses an oil-based product enters any impoundment that is discharged from the permitted facility.

Since discharges at these facilities can be intermittent and highly variable, mass loading limits are not included in the permit, based on BPJ.

B. WATER-QUALITY-BASED EFFLUENT LIMITATIONS AND/OR CONDITIONS

1. General Comments

Section 101 of the Clean Water Act (CWA) states that "...it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited..." A permit that contains technology-based permit limits alone may not adequately protect the quality of the receiving stream. Thus, additional water quality-based effluent limitations and/or conditions are considered in the permit using State narrative and numerical water quality standards (Oklahoma's Water Quality Standards, as amended, (OAC Title 785). This is to ensure that no point source discharge (1) results in in-stream aquatic toxicity; (2) causes a violation of an applicable narrative or numerical State water quality standard; or (3) results in aquatic bioaccumulation which threatens human health.

2. Water Quality Standards Requirements

The narrative and numerical stream standards are provided in "Oklahoma's Water Quality Standards," Oklahoma Water Resources Board.

a. Public and Private Water Supplies (OAC 785:45-5-10)

Based on the nature of the wastewater as described in Part IV.C above, and on information contained in past applications for individual discharge permits, the wastewater which will be discharged through the proposed outfalls should not contain substances listed in Raw Water Numerical Criteria (785:45-5-10(1)) and Water Column Criteria to protect for the Consumption of Fish Flesh and Water (785:45-5-10(6)) at levels which would have reasonable potential to violate numerical criteria. Thus, additional permit action is not necessary for this beneficial use.

Where actual or potential exceedances of State water quality criteria are determined to be the result of the facility's discharge to the receiving water(s), the DEQ may determine that the facility is no longer eligible for coverage under this Permit and require the facility to apply for an individual discharge permit with additional chemical-specific limits or toxicity testing requirements as necessary to maintain the beneficial uses of the receiving stream.

b. Fish and Wildlife Propagation (OAC 785:45-5-12)

(1) Dissolved Oxygen

Pursuant to OAC 785:45-5-12(f)(1)(A), dissolved oxygen (DO) criteria are designed to protect the diverse aquatic communities of Oklahoma. Based on the nature of the wastewater, the wastewater should not contain oxygen demanding substances at levels which would have reasonable potential to violate numerical criteria. Therefore, no permit limit or monitoring requirement is imposed for this criterion.

(2) Temperature

According to OAC 785:45-5-12(f)(2)(A), at no time shall heat be added to any surface water in excess of the amount that will raise the temperature of the receiving water more than 2.8°C at the edge of the mixing zone. For rock, sand, and gravel quarries, since heat is not added to the wastewater being discharged and the fact that the discharge should essentially be at ambient temperature, there is no reasonable potential to violate temperature criterion. Therefore, no permit limit or monitoring requirement is imposed for this criterion. For stone cutting facilities, heat could be added from cooling of the saw blades. The heat added should be minimal and the permit will require these facilities to have an impoundment or tank prior to discharging. Additionally, the permit will contain a monitoring requirement for this criterion for stone cutting facilities.

(3) pH

OAC 785:45-5-12(f)(3) states, "the pH values shall be between 6.5 and 9.0 in waters designated for fish and wildlife propagation; unless pH values outside that range are due to natural conditions." Therefore, the draft permit establishes a lower pH limit of 6.5 standard units and an upper limit of 9.0 standard units.

(4) Oil and Grease

According to OAC 785:45-5-12(f)(4), "all waters having the designated beneficial use of any subcategory of Fish and Wildlife Propagation shall be maintained free of oil and grease to prevent 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 or which cause deleterious effects to the biota." A narrative (water quality-based) condition requiring conformance to OAC 785:45-5-12(f)(4) is included in the draft permit. In addition, the technology-based limit of 15 mg/l for Oil and Grease should help insure that the narrative criteria is maintained. Numerical Oil and Grease limits apply only if wash water from the cleaning of equipment or if a facility uses an oil-based product that enters any impoundment that is discharged from the permitted facility.

(5) Biological Criteria

Pursuant to OAC 785:45-5-12(f)(5), aquatic life in all water bodies with the beneficial use designation of Fish and Wildlife Propagation (excluding waters designated "Trout, put-and-take") shall not exhibit degraded conditions. Based on the nature of the wastewater, the treated wastewater is not expected to degrade the diversity, similarity, community structure, species tolerance, trophic structure, dominant species, indices of biotic integrity, indices of well-being, or other measures. Therefore, no permit limit or monitoring requirement is imposed for this criterion.

(6) Toxic Substances

In accordance with OAC 785:45-5-12(f)(6)(A), surface waters of the state shall not exhibit acute toxicity and shall not exhibit chronic toxicity outside the chronic regulatory mixing zone. Based on previous permit applications, the discharge does not contain toxic substances at levels that could result in acute or chronic toxicity to fish or wildlife. Since the facility is a minor discharger, whole effluent toxicity (WET) testing is not required.

(7) Turbidity/Sediments

OAC 785:45-5-12(f)(7) states that turbidity from other than natural sources shall be restricted so as not to exceed the numeric limit of 50 NTUs for surface waters that have a beneficial use of Warm Water Aquatic Community. OAC 785:45-5-12(f)(8) states that concentrations or loads of suspended or bedded sediments that are caused by human activity shall not impair the Fish and Wildlife Propagation use or any subcategory thereof. The draft permit includes a technology-based limitation for TSS (a daily maximum limit of 45 mg/L) and a water quality-based narrative requirement for suspended solids. It is the BPJ of the permit writer that limitations on TSS and suspended solids should adequately control turbidity in the facility's discharge.

c. Agriculture/Livestock and Irrigation (OAC 785:45-5-13)

Based on the nature of the wastewater as described in Part IV.C above, and on information contained in past applications for individual discharge permits, the wastewater which will be discharged through the proposed outfalls should not contain substances (chloride, sulfate, and total dissolved solids) listed in Appendix F of OWQS, as amended, at levels which would have reasonable potential to violate numerical criteria. Thus, additional permit action is not necessary for this beneficial use.

Where actual or potential exceedances of State water quality criteria are determined to be the result of the facility's discharge to the receiving water(s), the DEQ may determine that the facility is no longer eligible for coverage under this Permit and require the facility to apply for an individual discharge permit with additional chemical-specific limits or toxicity testing requirements as necessary to maintain the beneficial uses of the receiving stream.

d. Primary Body Contact Recreation (OAC 785:45-5-16)

Based on the nature of the wastewater as described in Part IV.C above, and on information contained in past applications for individual discharge permits, wastewater discharged through the proposed outfalls should not contain coliform bacteria, Escherichia coli, and Enterococci at significant levels. Thus, permit action is not necessary for this beneficial use.

OAC 785:45-5-16(a) states "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." The draft permit will contain a narrative stating the prohibition of these conditions.

e. **Secondary Body Contact Recreation (OAC 785:45-5-17)**

OAC 785:45-5-17(d) states "Waters so designated shall be maintained to be free from human pathogens in numbers which may produce adverse health effects in humans." As stated above, wastewater discharged through the proposed outfalls should not contain coliform bacteria, Escherichia coli, and Enterococci at significant levels. Thus, permit action is not necessary for this beneficial use.

f. Navigation (OAC 785:45-5-18)

This beneficial use is generally more dependent upon quantity than quality of water. Thus, permit action is not necessary for this beneficial use.

g. Protection of Aesthetics Use (OAC 785:45-5-19)

Aesthetics use is determined in accordance with OAC 785:45-5-19, which states, "the surface waters of the State must be free from floating materials and suspended substances that produce objectionable color and turbidity." A narrative requirement is established in the draft permit to prohibit the discharge of floating solids or visible foam in other than trace amounts. In addition, the technology-based numerical effluent limitations of a 45 mg/L daily maximum for TSS should also help to maintain the narrative water quality criteria for TSS.

h. Fish Consumption (OAC 785:45-5-20)

Based on the nature of the wastewater as described in Part IV.C above, and on information contained in past applications for individual discharge permits, the wastewater which will be discharged through the proposed outfalls should not contain substances listed in (OAC 785:45-5-20(b)), Water Column Criteria to Protect for the Consumption of Fish Flesh, at levels which would have reasonable potential to violate numerical criteria. Thus, permit action is not necessary for this beneficial use.

Where actual or potential exceedances of State water quality criteria are determined to be the result of the facility's discharge to the receiving water(s), the DEQ may determine that the facility is no longer eligible for coverage under this Permit and require the facility to apply for an individual discharge permit with additional chemical-specific limits or toxicity testing requirements as necessary to maintain the beneficial uses of the receiving stream.

C. 303(d) LISTING STATUS

1. 303(d) List-Related Permitting Actions

Discharge of pollutants into a stream identified on the state 303(d) list as an impaired stream for "Turbidity" (Impairment ID 413) or "pH" (Impairment ID 441) for which a Total Maximum Daily Load (TMDL) has not been performed or the result of the TMDL indicates that discharge limits more stringent than 45 mg/l for Total Suspended Solids (TSS) or pH more stringent than 6.5-9.0 standard units are required is not authorized under this permit.

2. Reopener Clause

The draft permit also contains a reopener clause should any 303(d) list permitting actions be required in the future.

D. ENDANGERED SPECIES ACT

For existing facilities, the DEQ has concluded that issuance of this permit is unlikely to adversely affect any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving stream as aquatic habitat.

For new facilities, if the discharge in to an area designated as sensitive by the U.S. Fish and Wildlife Service the facility will not be eligible for an Authorization under this permit. Also, existing facilities that discharge into an area designated as sensitive by the U.S. Fish and Wildlife Service that propose a new outfall or an increase in flow to an existing outfall will not be eligible for an Authorization under this permit.

E. 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, or when required by changes to Technology-Based limits. Modification or revocation and reissuance of the permit shall follow regulations listed at 40 CFR 124.5.

VI. DRAFT PERMIT LIMITS AND OTHER REQUIREMENTS

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

The effluent limitations listed in Table 1 will apply to wastewater discharged from one or more of the following common activities at rock, sand, and gravel quarries or stone cutting facilities: mining of stone, sand, or gravel; crushing stone to size; washing and stockpiling of processed stone or sand; cutting stone.

TABLE 1
EFFLUENT LIMITATIONS

Parameters	Technology-based		Water-Quality-based		Draft Permit	
	Monthly Avg.	Daily Max.	Monthly Avg.	Daily Max.	Monthly Avg.	Daily Max.
Flow (MGD)	Report	Report	---	---	Report	Report
Oil and Grease [a]	Report	15 mg/l	---	---	Report	15 mg/l
TSS	Report	45 mg/l	---	---	Report	45 mg/l
Temperature [b]	Report	Report	---	---	Report	Report
pH	between 6.0 - 9.0 s.u.		between 6.5 - 9.0 s.u.		between 6.5 - 9.0 s.u.	

[a] Oil and Grease limits apply only if wash water from the cleaning of equipment or if a facility uses an oil-based product that enters any impoundment that is discharged from the permitted facility.

[b] Temperature requirements only apply to stone cutting facilities.

Monitoring requirements listed in Table 2 shall become effective along with the effluent limitations listed in Table 1.

TABLE 2
MONITORING REQUIREMENTS

Parameters	Measurement Frequency [a]	Sample Type
Flow	1/ Month	Estimate
Oil and Grease	1/ Month	Grab
TSS	1/Month	Grab
Temperature	1/Month	Grab
pH	1/Month	Grab

[a] When discharging

Reduction of Monitoring Frequency – Since Monthly Average Limits were not established in the previous permit, performance based monitoring frequency reduction is not applicable in accordance with OAC 252:690-3-91.

B. 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.

1. Inactivity Status

During months in which there is no activity at the facility, DMR forms stating "Inactive – No Process Wastewater Discharge" shall be submitted for that month. Stormwater runoff shall still be monitored and records maintained in accordance with the Storm Water Multi-Sector General Permit.

C. SURFACE IMPOUNDMENTS

The use of surface impoundments for treatment and/or disposal of wastewater are not required by this Permit. However, use of impoundments is a common industry practice in Oklahoma. Where impoundments are used, they are authorized in this Permit, subject to additional State requirements as specified below and in the Permit and Authorization, in accordance with OAC 252:616.

1. Construction Requirements

Impoundments shall be constructed and maintained in accordance with OAC 252:616-7-1.

2. Wastewater Classification

The wastewater generated from routine operations of rock, sand, and gravel quarries and stone cutting facilities is classified as Class III wastewater in accordance with OAC 252:616-1-2.

3. Liner Requirements

Liner materials and construction shall be in compliance with requirements of OAC 252:616-7-1(9) and OAC 252:616-7-2 through OAC 252:616-7-7.

4. Other Specific Requirements

a. Wastewater contained in surface impoundments may be recycled for use in dust suppression, stockpile watering wash water, or cooling water.

b. At such time as surface impoundments are to be permanently taken out of service or at such time as the contents of surface 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.

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

5. Freeboard Requirements (OAC 252:616-7-1(7))

A minimum freeboard of two (2) foot shall be maintained on all flow-through surface impoundments and all surface impoundments that are equipped to transfer process wastewater to a permitted outfall or other permitted surface impoundments. However, a minimum freeboard of one (1) foot shall be maintained on all flow-through surface impoundments constructed with a concrete liner in accordance with OAC 252:616-7.

A minimum freeboard of three (3) feet shall be maintained on all total retention surface impoundments that are not equipped to transfer process wastewater to a permitted outfall or other permitted surface impoundments. However, a minimum freeboard of two (2) feet shall be maintained on all total retention surface impoundments constructed with a concrete liner in accordance with OAC 252:616-7.

6. Depth to Groundwater (OAC 252:616-7-1(4))

Surface impoundments as required by OAC 252:616-7-1(4) are required to be located such that the base of the liner is at least (15) feet above historic maximum groundwater table. Since the wastewater from the activities covered by this permit is classified as Class III, this requirement may be waived in the authorization in accordance with OAC 252:616-7-1(4)(B).

D. TANK SYSTEMS

The use of underground tank systems to manage process wastewater for treatment and/or disposal of process wastewater is authorized by this permit, subject to additional State requirements as specified below and in the Authorization, in accordance with OAC 252:616-9.

1. Authorized Use of Tank Systems (OAC 252:616-9-1)

The use of tank systems for all wastewater classifications is authorized as follows:

a. Tank systems without lateral lines can be used for the treatment of Class I, II, III, and V wastewater.
b. Tank systems with lateral lines are subject to the Underground Injection Control permitting process.

2. Tank System Materials (OAC 252:616-9-2)

Tank systems may be constructed of concrete, metal, plastic, or fiberglass in accordance with OAC 252:616-9-2.

3. Tank System Requirements (OAC 252:616-9-3)

Tank systems must be constructed in accordance with OAC 252:616-9-3.

E. LAND APPLICATION AND BENEFICIAL REUSE OF WASTEWATER

Land application of process wastewater for dust suppression or stockpile watering and/or reuse of process wastewater for rock washing or cooling water is authorized by this permit, and is subject to the requirements as specified below and in the Authorization, in accordance with OAC 252:616-11.

1. Process wastewater that is reused or land applied for dust suppression must be classified as Class III wastewater in accordance with OAC 252:616-1-2.
2. Process wastewater to be land applied for dust suppression shall be free of visible sheen of oil or globules of oil or grease.
3. The process wastewater to be land applied for dust suppression shall be visually inspected prior to land application.
4. Process wastewater that is recycled is exempt from monitoring requirements.
5. There shall be no land application of process wastewater for dust suppression in areas where the depth to the maximum seasonal groundwater level is less than two (2) feet in accordance with OAC 252:616-5-1(b)(5).
6. There shall be no land application of process wastewater for dust suppression during periods of precipitation or when soil is saturated or frozen.
7. There shall be no runoff of process wastewater used for dust suppression.

F. DISPOSAL OF OTHER SOLIDS

Solids, sludges, or other pollutants other than recyclable material, 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 that include the following information:

1. Name and address of company hauling waste.
2. The type and amount of waste hauled.
3. The final disposal site of waste hauled.

Upon request, the above records shall be made available to the DEQ's staff for review. These records shall be kept for a minimum of three (3) years.

VII. CHANGES FROM PREVIOUS PERMIT

A. Facilities that cut and/or shape stone are added to the permit.
B. The use of underground tanks is added to the permit.

VIII. ADMINISTRATIVE RECORD

The following sources were used to prepare this Permit and constitute a part of the administrative record for this Permit:

A. DEQ RECORDS

- Industrial Permit files containing permits, applications and monitoring data for rock, sand, and gravel quarries.
- Fact Sheet and General Permit for Rock, Sand, and Gravel Quarries.

B. FEDERAL WATER POLLUTION CONTROL ACT (CLEAN WATER ACT), 33 U.S.C. 1251 et. seq.

- Section 301, 303, and 402(a).

C. FEDERAL RULES AND REGULATIONS

- 40 CFR, in particular, Parts 122, 124, 136, 436.

D. STATE LAW, STANDARDS, AND RULES AND REGULATIONS

- Oklahoma Pollutant Discharge Elimination System (OPDES) Act, 27A O.S. Supp.
- OAC 252:606, OAC 252:616, OAC 252:690, OAC 785:45.
- DEQ stormwater rules promulgated in the OPDES Storm Water Multi-Sector General Permit for Industrial Activities (MSGP).
- Oklahoma's Water Quality Standards, as amended.
- Oklahoma Continuing Planning Process Document (CPP).

IX. REVIEW BY OTHER AGENCIES AND FINAL DETERMINATION

If comments are received from State or Federal agencies with jurisdiction over fish, wildlife, or public health, additional conditions may be included in accordance with regulations promulgated under 40 CFR 124.59.