# STATE OF MISSOURI

# **DEPARTMENT OF NATURAL RESOURCES**

# MISSOURI CLEAN WATER COMMISSION



# **MISSOURI STATE OPERATING PERMIT**

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92<sup>nd</sup> Congress) as amended,

Permit No.	MO-0124567
Owner:	Oakwind Estates, Inc.
Address:	170 West Cherry Street, Troy, MO 63379
Continuing Authority:	Same as above
Address:	Same as above
Facility Name:	Oakwind Estates WWTP (formerly Waterbrooke Estates)
Facility Address:	Highway H, Troy, MO 63379
Legal Description:	SE ¼, NE ¼, Sec. 16, T49N, R1W; Lincoln County
Latitude/Longitude:	+3900532/-09100507
Receiving Stream:	Tributary to West Fork Cuivre River (U)
First Classified Stream and ID:	West Fork Cuivre River (P) (00177)
USGS Basin & Sub-watershed No.:	(07110008 - 030005)

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

# FACILITY DESCRIPTION

<u>Outfall #001</u> - Subdivision – SIC # 6552– **Certified "C" Operator is Required** Extended aeration/ aerated sludge holding tank/ ultraviolet disinfection/ sludge disposal is by contract hauler Design population equivalent is 295. Design flow is 25,000 gallons per day. Actual flow is 3,400 gallons per day. Design sludge production is 5.3 dry tons/year.

This permit authorizes only wastewater discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

January 29, 2010 Effective Date

Which light

Mark N. Templeton, Director, Department of Natural Resources

use

Mike Struckhoff, Director, St. Louis Regional Office

January 28, 2015 Expiration Date

### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

PAGE NUMBER 2 of 3

PERMIT NUMBER MO-0124567

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OUTFALL NUMBER AND	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
EFFLUENT PARAMETER(S)	entro	DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001</u>						
Flow	MGD	*		*	once/month	24 hr. estimate
Biochemical Oxygen Demand <sub>5</sub>	mg/L		45	30	once/quarter**	24 hr. composite
Total Suspended Solids	mg/L		45	30	once/quarter**	24 hr. composite
pH – Units	SU	***		***	once/quarter**	grab
Ammonia as N	mg/L	*		*	once/quarter**	grab
Temperature	°C	*		*	once/quarter**	grab
Fecal Coliform (Note 1)	#/100mls	1000		400	once/quarter**	grab

MONITORING REPORTS SHALL BE SUBMITTED **<u>QUARTERLY</u>**; THE FIRST REPORT IS DUE <u>April 28, 2010</u>. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

#### **B. STANDARD CONDITIONS**

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED Parts I & III STANDARD CONDITIONS DATED OCTOBER 1, 1980 and August 15, 1994, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

#### MO 780-0010 (8/91)

#### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

* Monitoring requirement only	•	
** Sample discharge at least one	ce for the months of:	Report is due:
January, February, March	(1 <sup>st</sup> Quarter)	April 28
April, May, June,	(2 <sup>nd</sup> Quarter)	July 28
July, August, September	(3 <sup>rd</sup> Quarter)	October 28
October, November, December	(4 <sup>th</sup> Quarter)	January 28

\*\*\* pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.0-9.0 pH units.

Note 1 - Final limitations and monitoring requirements for Fecal Coliform are applicable only during the recreational season from April 1 through October 31.

#### C. SPECIAL CONDITIONS

- 1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
  - a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
    - contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
       controls any pollutant not limited in the permit.
  - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
  - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

#### C. SPECIAL CONDITIONS (continued)

- 2. All outfalls must be clearly marked in the field.
- 3. Permittee will cease discharge by connection to area-wide wastewater treatment system within 90 days of notice of its availability.
- 4. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
  - (1) One hundred micrograms per liter (100  $\mu$ g/L);
  - (2) Two hundred micrograms per liter (200 μg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 μg/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
  - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
  - (4) The level established in Part A of the permit by the Director.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
- 5. Report as no-discharge when a discharge does not occur during the report period.
- 6. Water Quality Standards
  - (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
  - (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
    - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
    - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
    - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
    - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
    - (5) There shall be no significant human health hazard from incidental contact with the water;
    - (6) There shall be no acute toxicity to livestock or wildlife watering;
    - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
    - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.
- 7. The permittee shall comply with any applicable requirements listed in 10 CSR 20-8 and 10 CSR 20-9, unless the facility has received written notification that the Department has approved a modification to the requirements. The monitoring frequencies contained in this permit shall not be construed by the permittee as a modification of the monitoring frequencies listed in 10 CSR 20-9. If a modification of the monitoring frequencies listed in 10 CSR 20-9 is needed, the permittee shall submit a written request to the department for review and, if deemed necessary, approval.

# Missouri Department of Natural Resources Statement of Basis Oakwind Estates (formerly Waterbrooke Estates) NPDES #: MO-0124567 Lincoln County

A Statement of Basis (Statement) gives pertinent information regarding the applicable regulations and rational for the development of the NPDES Missouri State Operating Permit (operating permit). This Statement includes Wasteload Allocations, Water Quality Based Effluent Limitations, and Reasonable Potential Analysis calculations as well as any other calculations that effect the effluent limitations of this operating permit. This Statement does not pertain to operating permits that include sewage sludge land application plans and variance procedures, and does not include the public comment process for this operating permit.

A Statement is not an enforceable part of an operating permit.

# Part I – Facility Information

 Facility Type:
 Subdivision

 Facility SIC Code(s):
 6552

 Facility Description:
 Extended aeration/ aerated sludge holding tank/ ultraviolet disinfection/ sludge disposal by contract hauler.

#### **OUTFALL(S) TABLE:**

OUTFALL	DESIGN FLOW (CFS)	TREATMENT LEVEL	EFFLUENT TYPE	DISTANCE TO CLASSIFIED SEGMENT (MI)
001	0.0388	Secondary	Domestic	0.4

<u>Water Quality History</u>: Violations for exceeding permit limitations:  $BOD_5 - 3$ , TSS - 1 and fecal coliform - 3. Violations for non-reporting: all quarterly parameters - 6, fecal coliform - 1 and flow - 1.

<u>Comments</u>: This facility provides secondary treatment to domestic wastewater from a subdivision in Lincoln County prior to discharge to an unclassified tributary to West Fork Cuivre River.

# Part II – Operator Certification Requirements

As per [10 CSR 20-9.010(2)(A)], requirements for operation by certified personnel shall apply to all wastewater treatment systems, if applicable, as listed below:

Applicable  $\boxtimes$ ;

- Population Equivalent greater than two hundred (200):
- Fifty (50) or more service connections:
- Private sewer company regulated by the Public Service Commission:
- Department required:
- Owned and/or operated by:
  - Municipality:
  - Public Sewer District:
  - County:
  - Public Water Supply:

This facility is required to have a Certified Level (C) Operator, please **see Appendix # - Classification Worksheet** (staff may remove the worksheet reference; however, this provides a documentation of the facility's score). Modifications made to the wastewater treatment facility may cause the classification to be modified.

Operator's Name:Tim Allgire/ Rich JonesCertification Number:9430Certification Level:A

# Part III – Rationale and Derivation of Effluent Limitations & Permit Conditions

#### ANTI-BACKSLIDING:

A provision in the Federal Regulations [CWA §303(d)(4); CWA §402(c); 40 CFR Part 122.44(I)] that requires a reissued permit to be as stringent as the previous permit with some exceptions.

⊠ - All limits in this statement are at least as protective as those previously established; therefore, backsliding does not apply.

- Backsliding proposed in this statement for the reissuance of this permit conform to the anti-backsliding provisions of Section 402(o) of the Clean Water Act, and 40 CFR Part 122.44.

#### AREA-WIDE WASTE TREATMENT MANAGEMENT & CONTINUING AUTHORITY:

As per [10 CSR 20-6.010(3)(B)], ...An applicant may utilize a lower preference continuing authority by submitting, as part of the application, a statement waiving preferential status from each existing higher preference authority, providing the waiver does not conflict with any area-wide management plan approved under section 208 of the Federal Clean Water Act or any other regional sewage service and treatment plan approved for higher preference authority by the department.

#### **COMPLIANCE AND ENFORCEMENT:**

Enforcement is the action taken by the Water Protection Program (WPP) to bring an entity into compliance with the Missouri Clean Water Law, its implementing regulations, and/or any terms and conditions of an operating permit. The primary purpose of the enforcement activity in the WPP is to resolve violations and return the entity to compliance.

Not Applicable  $\boxtimes$ ;

The permittee/facility is not currently under Water Protection Program enforcement action.

**OUTFALL #001:** Effluent limitations have been reassessed and verified that they are still protective of the receiving stream's Water Quality. Therefore, effluent limitations have been retained from previous state operating permit – no changes proposed.

#### **REMOVAL EFFICIENCY:**

Removal efficiency is a method by which the Federal Regulations define Secondary Treatment and Equivalent to Secondary Treatment, which applies to Biochemical Oxygen Demand 5-day (BOD<sub>5</sub>) and Total Suspended Solids (TSS) for Publicly Owned Treatment Works (POTWs)/municipals. Please see the United States Environmental Protection Agency's (EPA) website for interpretation of percent removal requirements for National Pollutant Discharge Elimination System Permit Application Requirements for Publicly Owned Treatment Works and Other Treatment Works Treating Domestic Sewage @ www.epa.gov/fedrgstr/EPA-WATER/1999/August/Day-04/w18866.htm

#### Not Applicable $\boxtimes$ ;

This wastewater treatment facility is not a POTW. Influent monitoring is not being required to determine percent removal.

#### Sanitary Sewer Overflows (SSOs), Bypasses, Inflow & Infiltration (I&I) – Prevention/Reduction:

Sanitary Sewer Systems (SSSs) are municipal wastewater collection systems that convey domestic, commercial, and industrial wastewater, and limited amounts of infiltrated groundwater and storm water (i.e. I&I), to a POTW. SSSs are not designed to collect large amounts of storm water runoff from precipitation events.

Untreated or partially treated discharges from SSSs are commonly referred to as SSOs. SSOs have a variety of causes including blockages, line breaks, sewer defects that allow excess storm water and ground water to overload the system, lapses in sewer system operation and maintenance, inadequate sewer design and construction, power failures, and vandalism. A SSOs is defined as an untreated or partially treated sewage release from a SSS. SSOs can occur at any point in an SSS, during dry weather or wet weather. SSOs include overflows that reach waters of the state. SSOs also include overflows out of manholes and onto city streets, sidewalks, and other terrestrial locations. SSSs can back up into buildings, including private residences. When sewage backups are caused by problems in the publicly-owned portion of an SSS, they are considered SSOs.

#### Not Applicable $\boxtimes$ ;

This facility is not required to develop or implement a program for maintenance and repair of the collection system; however, it is a violation of Missouri State Environmental Laws and Regulations to allow untreated wastewater to discharge to waters of the state.

#### SCHEDULE OF COMPLIANCE (SOC):

A schedule of remedial measures included in a permit, including an enforceable sequence of interim requirements (actions, operations, or milestone events) leading to compliance with the Missouri Clean Water Law, its implementing regulations, and/or the terms and conditions of an operating permit.

Not Applicable  $\boxtimes$ ; This permit does not contain a SOC.

#### STORM WATER POLLUTION PREVENTION PLAN (SWPPP):

In accordance with 40 CFR 122.44(k) *Best Management Practices (BMPs)* to control or abate the discharge of pollutants when: (1) Authorized under section 304(e) of the Clean Water Act (CWA) for the control of toxic pollutants and hazardous substances from ancillary industrial activities: (2) Authorized under section 402(p) of the CWA for the control of storm water discharges; (3) Numeric effluent limitations are infeasible; or (4) the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA.

In accordance with the EPA's *Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans and Best Management Practices* [EPA 832-R-92-006] (Storm Water Management), BMPs are measures or practices used to reduce the amount of pollution entering (regarding this operating permit) waters of the state. BMPs may take the form of a process, activity, or physical structure.

Additionally in accordance with the Storm Water Management, a SWPPP is a series of steps and activities to (1) identify sources of pollution or contamination, and (2) select and carry out actions which prevent or control the pollution of storm water discharges.

Not Applicable  $\boxtimes$ ;

At this time, the permittee is not required to develop and implement a SWPPP.

#### WATER QUALITY STANDARDS:

Per [10 CSR 20-7.031(3)], General Criteria shall be applicable to all waters of the state at all times including mixing zones. Additionally, [40 CFR 122.44(d)(1)] directs the department to establish in each NPDES permit to include conditions to achieve water quality established under Section 303 of the Clean Water Act, including State narrative criteria for water quality.

#### WHOLE EFFLUENT TOXICITY (WET) TEST:

A WET test is a quantifiable method of determining if a discharge from a facility may be causing toxicity to aquatic life by itself, in combination with or through synergistic responses when mixed with receiving stream water.

#### Not Applicable $\boxtimes$ ;

At this time, the permittee is not required to conduct WET test for this facility.

#### 303(d) LIST & TOTAL MAXIMUM DAILY LOAD (TMDL):

Section 303(d) of the federal Clean Water Act requires that each state identify waters that are not meeting water quality standards and for which adequate water pollution controls have not been required. Water quality standards protect such beneficial uses of water as whole body contact (such as swimming), maintaining fish and other aquatic life, and providing drinking water for people, livestock and wildlife. The 303(d) list helps state and federal agencies keep track of waters that are impaired but not addressed by normal water pollution control programs.

A TMDL is a calculation of the maximum amount of a given pollutant that a body of water can absorb before its water quality is affected. If a water body is determined to be impaired as listed on the 303(d) list, then a watershed management plan will be developed that shall include the TMDL calculation

Not Applicable  $\boxtimes$ ; This facility does not discharge to a 303(d) listed stream.

# Part IV – Effluent Limits Determination

#### Outfall #001 - Main Facility Outfall

#### **EFFLUENT LIMITATIONS TABLE:**

PARAMETER	Unit	BASIS FOR LIMITS	Daily Maximum	WEEKLY Average	Monthly Average	Modified	PREVIOUS PERMIT LIMITATIONS
Flow	GPD	1	*		*	NO	S
BOD <sub>5</sub>	MG/L	1		45	30	NO	S
TSS	MG/L	1		45	30	NO	S
PH (S.U.)	SU	1	6.5-9.0		6.5 – 9.0	YES	6/9
TEMPERATURE (°C)	°C	1/8	*		*	YES	****
Ammonia as N	MG/L	2/3/5	*		*	YES	****
FECAL COLIFORM	***	1/2	1000		400	NO	S
MONITORING FREQUENCY	Please see Minimum Sampling and Reporting Frequency Requirements in the Derivation and Discussion Section below.						

\* - Monitoring requirement only

\*\*\* - # of colonies/100mL; the Monthly Average for Fecal Coliform is a geometric mean.

\*\*\*\* - Parameter not previously established in previous state operating permit.

N/A - Not applicable

S – Same as previous operating permit

Basis for Limitations Codes:

- 1. State or Federal Regulation/Law
- 2. Water Quality Standard (includes RPA)
- 3. Water Quality Based Effluent Limits
- 4. Lagoon Policy
- 5. Ammonia Policy
- 6. Dissolved Oxygen Policy

- 7. Antidegradation Policy
- 8. Water Quality Model
- 9. Best Professional Judgement
- 10. TMDL or Permit in lieu of TMDL
- 11. WET test Policy

#### OUTFALL #001 – DERIVATION AND DISCUSSION OF LIMITS:

- <u>Biochemical Oxygen Demand (BOD<sub>5</sub>)</u>. Effluent limitations have been retained from previous state operating permit, please see the APPLICABLE DESIGNATION OF WATERS OF THE STATE sub-section of the <u>Receiving Stream Information</u>.
- <u>Total Suspended Solids (TSS)</u>. Effluent limitations have been retained from previous state operating permit, please see the **APPLICABLE DESIGNATION OF WATERS OF THE STATE** sub-section of the <u>Receiving Stream Information</u>.
- <u>pH</u>. Effluent limitations have been changed to comply with 10 CSR 20-7.031 (4) (E).
- <u>Temperature</u>. Monitoring requirement due to the toxicity of Ammonia varies by temperature. 37
- <u>Total Ammonia Nitrogen</u>. Monitoring requirement only. Monitoring for temperature and ammonia are included to determine whether "reasonable potential" to exceed water quality standards exists.
- <u>Fecal Coliform</u>. Discharge shall not contain more than a monthly geometric mean of 400 colonies/100 mL and a daily maximum of 1000 colonies/100 mL during the recreational season (April 1 October 31), please see the APPLICABLE DESIGNATION OF
   WATERS OF THE STATE sub-section of the <u>Receiving Stream Information</u>. Future renewals of the facility operating permit will contain effluent limitations for E. coli, which will replace fecal coliform as the applicable bacteria criteria in Missouri's water quality standards.
- <u>Minimum Sampling and Reporting Frequency Requirements</u>.

PARAMETER	SAMPLING FREQUENCY	REPORTING FREQUENCY
Flow	ONCE/MONTH	ONCE/QUARTER
$BOD_5$	ONCE/QUARTER	ONCE/QUARTER
TSS	ONCE/QUARTER	ONCE/QUARTER
PH	ONCE/QUARTER	ONCE/QUARTER
Temperature (	ONCE/QUARTER	ONCE/QUARTER
Ammonia as N	ONCE/QUARTER	ONCE/QUARTER
FECAL COLIFORM	ONCE/QUARTER	ONCE/QUARTER

# Part V – Administrative Requirements

On the basis of preliminary staff review and the application of applicable standards and regulations, the Department, as administrative agent for the Missouri Clean Water Commission, proposes to issue a permit(s) subject to certain effluent limitations, schedules, and special conditions contained herein and within the operating permit. The proposed determinations are tentative pending public comment.

Date of Factsheet: November 17, 2008

Ed Pate WWPD/ WIMB Region VII U. S. Environmental Protection Agency 901 North 5<sup>th</sup> Street Kansas City, Kansas 66101 pate.ed@epa.gov

# Part VI – Appendices

#### **APPENDIX # - CLASSIFICATION WORKSHEET:**

Item	POINTS POSSIBLE	POINTS ASSIGNED		
Maximum Population Equivalent (P.E.) served (Max 10 pts.)	1 pt./10,000 PE or major fraction thereof.			
Maximum: 10 pt Design Flow (avg. day) or peak month; use greater (Max 10 pts.)	1 pt. / MGD or major fraction thereof.			
EFFLUENT DISCHARGE RECEIVING	WATER SENSITIVITY:			
Missouri or Mississippi River	0			
All other stream discharges except to losing streams and stream reaches supporting whole body contact	1	1		
Discharge to lake or reservoir outside of designated whole body contact recreational area	2			
Discharge to losing stream, or stream, lake or reservoir area supporting whole body contact recreation	3			
PRELIMINARY TREATMENT	Γ - Headworks			
Screening and/or comminution	3			
Grit removal	3			
Plant pumping of main flow (lift station at the headworks)	3			
PRIMARY TREATM	ENT			
Primary clarifiers	5			
Combined sedimentation/digestion	5	5		
Chemical addition (except chlorine, enzymes)	4			
REQUIRED LABORATORY CONTROL – performed	by plant personnel (highest level only	)		
Lab work conducted outside of plant	0	0		
Push – button or visual methods for simple test such as pH, settleable solids	3			
Additional procedures such as DO, COD, BOD, titrations, solids, volatile content	5			
More advanced determinations such as BOD seeding procedures, fecal coliform nutrients total oils phenols etc.	7			
Highly sophisticated instrumentation, such as atomic absorption and gas chromatograph	10			
ALTERNATIVE FATE OF EFFLUENT				
Direct reuse or recycle of effluent	6			
Land Disposal – low rate	3			
High rate	5			
Overland flow	4			
Total from page <b>ONE</b> (1)		6		

# **APPENDIX # - CLASSIFICATION WORKSHEET (CONTINUED):**

ITEM	POINTS POSSIBLE	POINTS ASSIGNED				
VARIATION IN RAW WASTE (highest level only) (DMR exceedances and Design Flow exceedances)						
Variation do not exceed those normally or typically expected	0					
Recurring deviations or excessive variations of 100 to 200 % in strength and/or flow	2	2				
Recurring deviations or excessive variations of more than 200 % in strength and/or flow	4					
Raw wastes subject to toxic waste discharge	6					
SECONDARY TREAT	MENT					
Trickling filter and other fixed film media with secondary clarifiers	10					
Activated sludge with secondary clarifiers (including extended aeration and oxidation ditches)	15	15				
Stabilization ponds without aeration	5					
Aerated lagoon	8					
Advanced Waste Treatment Polishing Pond	2					
Chemical/physical – without secondary	15					
Chemical/physical – following secondary	10					
Biological or chemical/biological	12					
Carbon regeneration	4					
DISINFECTION						
Chlorination or comparable	5					
Dechlorination	2					
On-site generation of disinfectant (except UV light)	5					
UV light	4	4				
SOLIDS HANDLING - S	SOLIDS HANDLING - SLUDGE					
Solids Handling Thickening	5					
Anaerobic digestion	10					
Aerobic digestion	6	6				
Evaporative sludge drying	2					
Mechanical dewatering	8					
Solids reduction (incineration, wet oxidation)	12					
Land application	6					
Total from page TWO (2)		27				
Total from page ONE (1)		6				
Grand Total		33				

A: 71 points and greater
B: 51 points – 70 points
C: 26 points – 50 points
D: 0 points – 25 points