AUTHORIZATION FOR A NO-DISCHARGE WATER PERMIT UNDER THE ARKANSAS WATER AND AIR POLLUTION CONTROL ACT

In accordance with the provisions of the Arkansas Water and Air Pollution Control Act (A.C.A. Sec. 8-4-101 et seq)

City of Fayetteville 113 West Mountain Fayetteville, AR 72701

is authorized to operate and maintain the waste disposal system from the facility located as follows: Section 14, Township 16 North, Range 31 West, in Washington County, Arkansas. The facility is located at the following coordinates:

Latitude: 36° 3′ 51" N Longitude: 94° 14′ 0" W

The facility is located 10,560 feet from Goose Creek in Stream Segment 3J of the Arkansas River basin, which is not listed in the latest ADEQ 303(d) list of impaired waters.

Operation shall be in accordance with all conditions set forth in Parts I and II hereof.

The Response to Comments is attached.

Issue Date:

May 31, 2009

Effective Date:

July 1, 2009

Expiration Date:

June 30, 2014

Steven L. Drown

Chief, Water Division

Arkansas Department of Environmental Quality

Permit No. <u>5028-W</u> AFIN No. <u>72-01033</u>

Part I Specific Conditions

- 1. This permit is for the land application of wastewater treatment plant effluent.
- 2. Wastewater shall not be discharged to the landscape area and thence to the waters of the State or onto the land in any manner that may result in runoff to the waters of the State.
- 3. The waste disposal system shall be operated and maintained in accordance with the Waste Management Plan (WMP) as approved by the Department of Environmental Quality.
- 4. There shall be no increase in the volume or strength of the waste being treated by the disposal system except within the limits covered in the WMP approved by the Department.
- 5. Nothing herein contained shall be construed as releasing the permittee from any liability for damage to persons or property by reason of the installation, maintenance or operation of the disposal system.
- 6. This permit is issued in reliance upon the statements and representations made in the application and the WMP. The Department has no responsibility for the adequacy or proper functioning of the disposal system.
- 7. The land applied wastewater shall not exceed any of the following limits:

Parameter	Maximum Limits
	

All effluent limits required by permit AR0050288

8. Land application sites are as follows:

Owner	Section(s)	Township	Range	Available Acres
City of Fayetteville	14	16 North	31 West	26
City of Fayetteville	14	16 North	31 West	4

- 9. Total Available Acres: 30
- 10. Plant available nutrients (Nitrogen, Phosphorus, and Potassium) shall not be applied in excess of the amounts contained in the WMP approved by the Department.
- 11. Wastes shall be evenly land-applied over the land application area at the rates indicated in the approved WMP.
- 12. No land-application of wastewater treatment plant effluent will be allowed except on the sites described in the waste management plan. The addition of land-application sites to the permit requires a permit modification.
- 13. Waste shall not be applied to soils that are saturated, frozen or covered with snow, and during rain or when precipitation is imminent, or at any time that the application may result in runoff to a water course. Waste shall not be land applied to slopes with a gradient greater than 15%, except where necessary to maintain the vegetation on the visual barriers.

- 14. The permittee shall take all the necessary measures to reduce obnoxious or offensive odors.
- 15. Except as necessary for landscape watering with low coverage sprinkler heads for the approved areas in the waste management plan, waste shall not be spread within fifty (50) feet of rock outcrops, property lines, or land-tracts not associated with the permit; one hundred (100) feet from ponds, springs, streams, lakes, or sinkholes, or any other waters of the state; two hundred (200) feet from drinking water wells; and three hundred (300) feet of occupied buildings, or extraordinary resource water bodies.
- 16. The permittee shall give one hundred and twenty (120) days advance notice to the Department of any change in the waste disposal practice.
- 17. The permittee may use treated wastewater effluent for landscape irrigation under the following conditions:
 - a. Treated effluent shall only be applied to areas of the treatment plant that are fenced and inaccessible to the public:
 - b. Signs shall be posted at the facility indicating that the area is irrigated with treated wastewater effluent.
 - c. Condition 17 may be removed at any time if the director believes the treated effluent for landscape irrigation is not being used as intended or for any other reason to protect the waters of the state.

MONITORING AND REPORTING REQUIREMENTS:

- 18. The permittee shall be responsible for the monitoring, supervision, operation, quality control, recording, and reporting of the facility's activities. All analytical results must be expressed in mg/l unless otherwise indicated. These activities shall include the following:
 - a. Irrigation Water
 - (1) Daily Monitoring during land-application:
 - Flow (mgd)
 - Depth Irrigated (inches)
 - Area Irrigated (acres)
 - (2) Annual Monitoring:
 - Nitrate + Nitrite Nitrogen
 - Total Phosphorous
 - pH
 - Total Kjeldahl Nitrogen
 - Ammonia Nitrogen
 - Potassium

Permit No. <u>5028-W</u> AFIN No. <u>72-01033</u>

(c) Soils Analysis

(1) Each land application site will be soil tested in the spring for the following parameters and reported in mg/kg unless otherwise indicated:

Nitrate-Nitrogen Potassium
Phosphorus Magnesium
Arsenic Cadmium
Copper Lead
Mercury Nickel
Selenium Zinc

pH (s.u.)

Cation Exchange Capacity (me/100g)

Salt Content (micro-mhos/cm)

(d) Reporting

Annual reports shall be sent to the Department to May 1, which must include the following:

The wastewater and soils analyses conducted under this condition. (The report should include a statement that the analyses were performed in accordance with methods or procedures approved by the Director). The report shall also include application dates and locations, volumes of wastewater applied (in gallons/acre-year), type of crop grown, and amounts of nutrients applied.

Part II Standard Conditions

SECTION A - GENERAL CONDITIONS

1. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Arkansas Water and Air Pollution Control Act (Act 472 of 1949 as amended) and is grounds for enforcement civil and administrative enforcement action, for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

2. Penalties for Violations of Permit Conditions

The Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended) provides that any person who violates any provisions of a permit issued under the Act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to imprisonment for not more than one (1) year, or a fine of not more than twenty-five thousand dollars (\$25,000) or by both such fine and imprisonment for each day of such violation. Any person who violates any provision of a permit issued under the Act may also be subject to civil penalty in such amount as the court shall find appropriate, not to exceed ten thousand dollars (\$10,000) for each day of such violation. The fact that any such violation may constitute a misdemeanor shall not be a bar to the maintenance of such civil action.

3. Permit Actions

- a. This permit may be modified, revoked and reissued, or terminated for cause including, but not limited to the following:
 - i. Violation of any terms or conditions of this permit;
 - ii. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
 - iii. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination;
 - iv. Failure of the permittee to comply with the provisions of APCEC Regulation No. 9 (Permit fees)
- b. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

4. <u>Civil and Criminal Liability</u>

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Any false or materially misleading representation or concealment of information required to be reported by the provisions of this permit or applicable state statues or regulations which defeats the regulatory purposes of the permit may be subject the permittee to criminal enforcement pursuant to the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended).

5. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

6. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

7. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provisions of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

8. Permit Fees

The permittee shall comply with all applicable permit fee requirements for no discharge permits as described in APCEC Regulation No. 9 (Regulation for the Fee System for Environmental Permits). Failure to promptly remit all required fees shall be grounds for the Director to initiate action to revoke this permit.

9. Proper Operation and Maintenance

- a. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
- b. The permittee shall provide an adequate operating staff which is duly qualified to carryout operation, maintenance and testing functions required to insure compliance with the conditions of this permit.

10. Duty to Mitigate

The permittee shall take all reasonable steps to prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment, or the water receiving the discharge.

11. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of waste waters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering the waters of the State.

12. Reporting of Violations and Unauthorized Discharges

Any violations to this permit must be reported to the Enforcement Branch of the Department immediately. Any leaks or seeps shall be reported to the Department and appropriately corrected. Any discharge from the waste storage system such as an overflow, a broken pipe, etc., shall be immediately reported to the Department.

The operator shall visually monitor and report immediately (within 24 hours) to the Enforcement Branch any unauthorized discharge from any facility caused by dike or structural failure, equipment breakdown, human error, etc., and shall follow up with a written report within five (5) days of such occurrence. The written report shall contain the following:

- i. A description of the permit violation and its cause;
- ii. The period of the violation, including exact times and dates;
- iii. If the violation has not been corrected, the anticipated time it is expected to correct the violation; and
- iv. Steps taken or planned to reduce, eliminate, and prevent the recurrence of the violation.

Reports shall be submitted to the Enforcement Branch at the following address:

Arkansas Department of Environmental Quality Water Division, Enforcement Branch 5301 Northshore Dr.
North Little Rock, Arkansas 72118
Fax (501) 682-0910

13. Penalties for Tampering

The Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended) provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under the Act shall be guilty of a misdemeanor and upon conviction thereof shall be subject to imprisonment for not more than one (1) year or a fine of not more than ten thousand dollars (\$10,000) or by both such fine and imprisonment.

13. Reporting of Monitoring Results

Monitoring results must be reported on a No Discharge Monitoring Report (NMR) form. Permittees are required to use preprinted NMR forms provided by ADEQ, unless specific written authorization to use other reporting forms is obtained from ADEQ. Monitoring results obtained during the previous calendar year shall be summarized and reported on a NMR form postmarked no later than May1st. NMR's signed and certified are required. Reporting Requirements shall be submitted to the Department at the following address:

Permits Branch/No Discharge Permits Section Water Division Arkansas Department of Environmental Quality 5301 Northshore Dr. North Little Rock, AR 72118

14. Retention of Records

The permittee shall retain records of all monitoring information, copies of all reports required by this permit, and records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

15. Record Contents

Records and monitoring information shall include:

- a. The date, exact place, time and methods of sampling or measurements, and preservatives used, if any;
- b. The individuals(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The measurements and results of such analyses.

16. Inspection and Entry

The permittee shall allow the Director, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit,
- d. Sample, inspect or monitor at reasonable times, for the purposes of assuring permit compliance any substances or parameters at any location.

17. Planned Changes

The permittee shall give notice and provide the necessary information to the Director for review and approval prior to any planned physical alterations or additions to the permitted facility.

18. Anticipated Noncompliance

The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

19. Transfers

The permit is nontransferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Act.

20. Duty to Provide Information

The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Director, upon request, copies of records required to be kept by this permit. Information shall be submitted in the form, manner and time frame requested by the Director.

21. Duty to reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The complete application shall be submitted at least 180 days before the expiration date of this permit. The Director may grant permission to submit an application less than 180 days in advance but no later than the permit expiration date. Continuation of expiring permits shall be governed by regulations promulgated in APCEC Regulation No. 6.

22. Signatory Requirements

All applications, reports or information submitted to the Director shall be signed and certified. All permit applications shall be signed as follows:

- a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - i. A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation: or
 - ii. The manager of one or more manufacturing, production, or operation facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
- b. For a partnership or sole proprietorship: by a general partner or proprietor, respectively; or
- c. For a municipality, State, Federal, or other public agency; by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
 - i. The chief executive officer of the agency, or
 - ii. A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

All reports required by the permit and other information requested by the Director shall be signed by a person described above or by a duly authorized representative of that person.

- A person is a duly authorized representative only if:
 - a. The authorization is made in writing by a person described above.
 - b. The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
 - c. The written authorization is submitted to the Director.

Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

23. Availability of Reports

Except for data determined to be confidential under APCEC Regulation 6, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department of Environmental Quality. As required by the Regulations, the name and address of any permit applicant or permittee, permit applications, permits and effluent data shall not be considered confidential.

24. Penalties for Falsification of Reports

The Arkansas Air and Water Pollution Control Act provides that any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan or other document filed or required to be maintained under this permit shall be subject to civil penalties and/or criminal penalties under the authority of the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended).

Part III Definitions

- "Act" means the Arkansas Water and Air Pollution Control Act (A.C.A. Sec. 8-4-101 et seq.) as amended.
- "Applicable water quality standards" means all water quality standards to which a discharge is subject under the federal Clean Water Act and which has been (a) approved or permitted to remain in effect by the Administrator following submission to the Administrator pursuant to Section 303 (a) of the Act, or (b) promulgated by the Director pursuant to Section 303(b) or 303(c) of the Act, and standards promulgated under regulation No. 2, as amended, (regulation establishing water quality standards for surface waters of the State of Arkansas.)
- "Department" means the Arkansas Department of Environmental Quality (ADEQ).
- "Director" means the Director of the Arkansas Department of Environmental Quality.
- "APCEC" means the Arkansas Pollution Control and Ecology Commission.
- "Available Acreage" means total acreage minus buffer zones
- "s.u." shall mean standard units.

OUARTERLY:

- (1) is defined as a fixed calendar quarter or any part of the fixed calendar quarter for a non-seasonal effluent characteristic with a measurement frequency of once/quarter. Fixed calendar quarters are: January through March, April through June, July through September, and October through December; or
- (2) is defined as a fixed three month period (or any part of the fixed three month period) of or dependent upon the seasons specified in the permit for a seasonal effluent characteristic with a monitoring requirement frequency of once/quarter that does not does not coincide with the fixed calendar quarter. Seasonal calendar quarters May through July, August through October, November through January, and February through April.

SEMI-ANNUAL:

is defined as the fixed time periods January through June, and July through December (or any portion thereof) for an effluent characteristic with a measurement frequency of once/6 months or twice/year.

ANNUAL or YEARLY

is defined as a fixed calendar year or any portion of the fixed calendar year for an effluent characteristic or parameter with a measurement frequency of once/year. A calendar year is January through December, or any portion thereof.

STATEMENT OF BASIS

For issuance of a no-discharge operation under draft permit number 5028-W and AFIN (file) number 72-01033.

1. PERMITTING AUTHORITY

Arkansas Department of Environmental Quality Water Division, Permits Branch 5301 Northshore Dr. North Little Rock, Arkansas 72118-5317

2. APPLICANT

City of Fayetteville West Side Wastewater Treatment Plant 113 West Mountain Fayetteville, AR 72701 479-575-8318

3. FACILITY LOCATION

The facility located as follows: 15 Broyles Ave. to nearest community of Farmington in Section 14, Township 16 North, Range 31 West, in Washington County, Arkansas. The facility is located at the following coordinates:

Latitude: 36° 3′ 51" N Longitude: 94° 14′ 0" W

4. RECEIVING STREAM LOCATION

The facility is located 10,560 from Goose Creek in Stream Segment 3J of the Arkansas River basin, which is not listed in the latest ADEQ 303(d) list of impaired waters.

5. CONSULTANT FOR THIS FACILITY

Robert Blanz, P.E. CH2M Hill 2112 Live Oaks Drive Little Rock, AR 72223 501-372-6060

6. PREPARED BY

The permit was prepared by:

Marcus Tilley Engineer Permits Branch, Water Division 501-682-0650 E-mail: tilley@adeq.state.ar.us

7. DATE PREPARED

The permit was prepared on August 28, 2008.

8. PERMIT ACTIVITY

The permittee submitted a permit issuance application which was received on June 20, 2008. It is proposed that the current water no discharge permit be issued for a 5-year term.

9. APPLICANT ACTIVITY

Under the standard industrial classification (SIC) code 4952 or North American Industry Classification System (NAICS) code 22132, the applicant activities are the operation of land application of wastewater treatment plant effluent.

10. WASTE APPLICATION METHOD

Spray Irrigation

11. TOTAL AVAILABLE ACREAGE

30 acres

12. ADDITIONAL SITE INFORMATION

There are two land application sites. The sites are a wetlands mitigation area and the plant grounds landscape site. Wastewater will be applied to the wetlands mitigation area, during the dry periods, as necessary to maintain the wetland vegetation. Land application rates are based on a water balance for the crop needs.

13. PERMIT HISTORY

New Permit

14. LIST OF ALL LAND APPLICATION SITES

Owner	Section(s)	Township	Range	Available Acres
City of Fayetteville	14	16 North	31 West	26
City of Fayetteville	14	16 North	31 West	4

15. BASIS FOR PERMIT CONDITIONS

The Arkansas Department of Environmental Quality has made a tentative determination to issue a permit for the no-discharge facility as described in the application and waste management plan. Permit requirements and conditions are based on regulations pursuant to the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended, Ark. Code Ann. 8-4-101 et. seq. and A.C.A. Sec. 8-4-201 et seq).

16. PERMIT COMPLIANCE

Compliance is required on the effective date of the permit.

17. SOURCES

The following Sources were used to draft the permit:

- a. Regulation No. 2, Water Quality Standards for Surface Waters of the State of Arkansas, as amended.
- b. Regulation No. 8, Administrative Procedures, as amended.
- c. Regulation No. 9, Fee System for Environmental Permits, as amended.
- d. 40 CFR 503 for land application of biosolids.
- e. Integrated Water Quality and Assessment Report (305(b) Report)
- f. ACT 472 of 1949, as amended, Arkansas Water and Air Pollution Control Act.
- g. Application No. 5028-W received June 20, 2008.

18. POINT OF CONTACT

For additional information, contact

Marcus Tilley
Engineer
Permits Branch, Water Division
5301 Northshore Drive
North Little Rock, AR 72118-5317
501-682-0650

E-mail: tilley@adeq.state.ar.us



RESPONSE TO COMMENTS

This is the Water Division's response to comments received on the subject draft permit in accordance with regulations promulgated by the Arkansas Pollution Control and Ecology Commission (APC&EC) pursuant to Arkansas Code Annotated § 8-4-202 et seq.

Subject: Permit 5028-W

City of Fayetteville – West Side Wastewater Treatment Plant (WWTP)

Prepared by: Marcus Tilley, Engineer, Permits Branch, Water Division

Permit Action: Final decision and response to comments received on the draft permit publicly

noticed on October 27, 2008.

Date Prepared: May 12, 2009

The following comments, which are quoted directly, were received on the draft permit:

Letter from David Jurgens, P.E., City of Fayetteville, to Marcus Tilley dated November 11, 2008.

COMMENT 1

Condition 1: Suggest that the word "operation" be deleted, it seems to be redundant.

RRSPONSE 1

The Department concurs with this request. The word "operation" has been deleted from Part 1 Condition No. 1.

COMMENT 2

Condition 2: Our application included land application in two areas, the WWTP landscape, and the wetlands mitigation area. This condition prohibits the "discharge...in any manner that may result in ponding"......We anticipate having to irrigate the wetland mitigation area during periods of extreme drought and then only to the point of re-saturating the soil. However, by its nature, the wetlands mitigation area soils percolate slowly and may, at times retain some "ponding" until the soil saturation point is reached.

If it becomes necessary to irrigate the wetlands area we anticipate that it will be a spray and wait...spray and wait, iterative process that entails periods of application followed by periods of percolation. As stated in the application, the City will not irrigate the wetland area to the point that treated effluent will mix with natural runoff. It is our intent, as stated in the application, that no standing irrigation water will be present at the end of the application cycle.

Therefore we suggest the following changes to Condition # 2:

"Waste shall not be discharged to the landscape area and thence to the waters of the State or onto the land in any manner that may result in runoff to the waters of the State."

RESPONSE 2

The Department concurs with this request. Part 1 Condition No. 2 has been modified to read as follows:

"Wastewater shall not be discharged to the landscape area and thence to the waters of the State or onto the land in any manner that may result in runoff to the waters of the State."

COMMENT 3

Condition 7: We note here for future comments, that the permit requires only wastewater meeting the NPDES permit conditions, including disinfection, shall be land applied on either site. That means that the water that is land applied is the same water that is discharged to the receiving stream. The receiving steam is classified as "fishable, swimmable" meaning that it is okay for human primary contact. Certain restrictions on the land application sites, intended to limit public contact, appear to conflict with the potential uses of the receiving stream and the degree of wastewater treatment prior to land application.

RESPONSE 3

The Department acknowledges this comment. Please be advised that the "fishable, swimmable" designation is only evaluated at the facility's discharge location following mixing with the receiving stream. Land application of wastewater treatment plant effluent is regulated in accordance with 40 CFR Part 503. Section 503.32 restricts access to land application areas with a potential for public exposure.

COMMENT 4

Condition 10: This Condition is redundant since Condition No. 7 clearly states that applied wastewater must meet the terms of the NPDES permit. The City respectfully requests that it be deleted.

RESPONSE 4

The Department concurs with this request.

COMMENT 5

Condition 11 of the draft permit: The SMP clearly provides documentation and tabular presentation of the anticipated application rate of plant available nutrients and demonstrates that it is a fraction of the University of Arkansas Cooperative Extension Service's annual nutrient agronomic uptake of the crop. Therefore, to avoid the repetitive sampling for these constituents, discussed in response to Condition # 19 of the draft permit, the City suggest the following changes to this condition:

"Plant available nutrients (Nitrogen, Phosphorus, and Potassium) shall not be applied in excess of the amounts contained in the WMP approved by the Department."

RESPONSE 5

The Department concurs with this request. Part 1 Condition No. 10 of the draft permit has been modified to read as follows:

"Plant available nutrients (Nitrogen, Phosphorus, and Potassium) shall not be applied in excess of the amounts contained in the WMP approved by the Department."

COMMENT 6

Condition 13 of the draft permit: The City of Fayetteville is evaluating the possibility of expanding the wetland mitigation area in order to establish a mitigation bank for future development, either by the City, or others. The expansion would be to the west and contiguous with the existing wetland mitigation area. In order to encourage the development of additional natural areas and to avoid the requirement for a permit modification, the City suggests the following changes:

No land-application of wastewater treatment plant effluent will be allowed except on sites described in the WMP, as may be amended to include contiguous City owned land, and approved by the Department after proper public notice. The addition of land-application on any other site(s) requires a permit modification.

RESPONSE 6

The Department does not concur with this request. A permit modification is required for the addition of land application sites and shall follow the requirements in APC&EC Regulation No. 8.

COMMENT 7

Condition 14 of the draft permit: As noted in comment 3, above, only wastewater meeting the NPDES permit conditions can be land applied. The irrigation water is pumped from the treated effluent, after disinfection, to the hydro-pneumatic tank where it is pressurized for distribution into the W3 water system. The plant site includes several hundred feet of visual barriers in the form of earthen berms which are outside of the WWTP security fence and exceed a vertical gradient of 15%.

In order to address Specific Conditions 14 of the draft permit, the City proposes the following language be added:

"Except where necessary to maintain the vegetation on the visual barriers, waste shall not be applied to slopes with a gradient greater than 15%."

RESPONSE 7

See Response No. 3. The allowable gradient for land application will remain as permitted.

COMMENT 8

Condition 16 of the draft permit: Also as noted in comment 3, above, there is a landscape area associated with the plant sign and entrance at the intersection with Broyles Avenue. This area is closer than 50 feet to the property line. Additionally, there is also a landscape area surrounding the Operations Building which is outside of the security fence

The City of Fayetteville believes that since the irrigation water is of sufficient quality for primary contact recreation that it is of sufficient quality for land application on areas restricted by Specific Conditions 14 and 16 of the draft permit. Such application is necessary for maintenance of the vegetation of the slopes of the berms as well as aesthetically at the plant entrance and landscape area. Application of the final treated effluent for the described purposes poses no threat to human health or the environment.

Also Condition 16 of the draft permit restricts the application of effluent to within 100 feet from ponds. Although, the WMP does not envision land application in the mitigation area to occur whenever there is standing water, the area is a pond most of the time.

The City proposes the following language be added in Specific Condition 16 of the draft permit:

"Except as necessary for landscape watering with low coverage sprinkler heads, waste shall not be spread within fifty (50) feet of rock outcrops, property lines, or land tracts not associated with the permit."

RESPONSE 8

See Response No. 3. The required buffer distances for land application areas will remain as permitted.

COMMENT 9

Condition 18a: As mentioned in comments above, a portion of the areas that may need landscape watering are outside of the WWTP security fence. Again the City feels like the permit protects human health and the environment in these areas by limiting the quality of the disinfected effluent to the NPDES permit conditions. Additionally, the plant property abutting Broyles Road is a main thoroughfare and, since it does not have significant pedestrian traffic or, even, sidewalks, access by the public is very limited. Therefore the City requests the following changes in Specific Condition 18a. of the draft permit:

Except as provided below, treated effluent shall only be applied to areas of the treatment plant that are fenced and inaccessible to the public:

- 1. Landscaping and slope protection on the visual berm, and
- 2. Landscaping at the plant entrance.

RESPONSE 9

At this time, the Department can not allow land application to the landscaped areas that are beyond the fenced area. See Response Nos. 3, 7, and 8.

COMMENT 10

Condition 19: Since the irrigation of WWTP effluent is limited to seasonal landscape watering and the rare application to the wetlands mitigation area it appears that soil and groundwater monitoring requirements are unnecessarily excessive. The City requests that Specific Condition 19 of the draft permit be deleted from the permit. The City believes that by limiting the application rates as described in the SMP and keeping records of the amount of effluent applied, that sufficient information will be available to demonstrate that the application methods are protective of human health and the environment.

RESPONSE 10

The Department has revised Part 1 Condition 18 of the draft permit as follows:

- 18 a (2): The quarterly monitoring for the irrigation water has been reduced to annual monitoring.
- 18 (b): The ground water monitoring requirement has been removed from the permit. The application rates are based on a monthly water balance and limit the application rates to the cover crop needs. The site management plan also states that "effluent will only be added during periods of extreme dryness in order to preserve the hydric vegetation." Therefore, the Department agrees that ground water monitoring can be removed from the permit.
- 18 (c) and 18 (d) were not revised.