

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-0056545

Owner: City of Homestead Village  
Address: 317 Ahner Drive, Excelsior Springs, MO 64024

Continuing Authority: Same as Above  
Address: Same as Above

Facility Name: Homestead Village Wastewater Treatment Plant  
Facility Address: South end of Cherokee Drive, Excelsior Springs, MO 64024

Legal Description: SW¼, NE¼, Sec. 31, T53N, R29W, Ray County  
UTM Coordinates: X= 396568.461, Y= 4357541.125

Receiving Stream: Unnamed tributary to East Fork Fishing River (U)  
First Classified Stream and ID: East Fork Fishing River (C) (0386)  
USGS Basin & Sub-watershed No.: (10300101-0406)

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

**FACILITY DESCRIPTION**

Outfall #001 – POTW – SIC #4952

The use or operation of this facility shall be by or under the supervision of a **Certified “C” Operator**.

Screening / Extended aeration / clarifier / sludge holding tank / sludge disposal by contract hauler.

Design population equivalent is 200.

Design flow is 0.02 MGD.

Actual flow is 0.025 MGD.

Design sludge production is 4.2 dry tons/year.

Actual sludge production is 4.2 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.

May 1, 2013  
Effective Date

Sara Parker Pauley, Director, Department of Natural Resources

June 30, 2014  
Expiration Date

John Madras, Director, Water Protection Program

| OUTFALL #001   | TABLE A-1.<br>INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS |                              |                | PAGE NUMBER 2 of 6       |                         |                 |
|--|--|------------------------------|----------------|--------------------------|-------------------------|-----------------|
|  |  |                              |                | PERMIT NUMBER MO-0056545 |                         |                 |
| The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The interim effluent limitations shall become effective upon issuance and remain in effect through <b>April 30, 2015</b> . Such discharges shall be controlled, limited and monitored by the permittee as specified below: |  |                              |                |                          |                         |                 |
| EFFLUENT PARAMETER(S)  | UNITS  | INTERIM EFFLUENT LIMITATIONS |                |                          | MONITORING REQUIREMENTS |                 |
|  |  | DAILY MAXIMUM                | WEEKLY AVERAGE | MONTHLY AVERAGE          | MEASUREMENT FREQUENCY   | SAMPLE TYPE     |
| Flow   | MGD  | *                            |                | *                        | once/month              | 24 hr. estimate |
| Biochemical Oxygen Demand <sub>5</sub>   | mg/L   |                              | 45             | 30                       | once/month              | composite**     |
| Total Suspended Solids   | mg/L   |                              | 45             | 30                       | once/month              | composite**     |
| <i>E. coli</i> (Note 1, Page 3)  | #/100 ml   | *                            |                | *                        | once/month              | grab            |
| pH – Units   | SU   | ***                          |                | ***                      | once/month              | grab            |
| Ammonia as N<br>(April 1 – Sept 30)<br>(Oct 1 – March 31)  | mg/L   | *                            |                | *                        | once/month              | grab            |
| MONITORING REPORTS SHALL BE SUBMITTED <u>MONTHLY</u> ; THE FIRST REPORT IS DUE <u>JUNE 28, 2013</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.  |  |                              |                |                          |                         |                 |

- \* Monitoring requirement only.
- \*\* A 24-hour composite sample is composed of 48 aliquots (subsamples) collected at 30 minute intervals by an automatic sampling device.
- \*\*\* pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.5-9.0 pH units.

| OUTFALL #001   | TABLE A-2.<br>FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS |                            |                | PAGE NUMBER 3 of 6       |                         |                 |
|--|--|----------------------------|----------------|--------------------------|-------------------------|-----------------|
|  |  |                            |                | PERMIT NUMBER MO-0056545 |                         |                 |
| 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 on <b>May 1, 2015</b> and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below: |  |                            |                |                          |                         |                 |
| EFFLUENT PARAMETER(S)  | UNITS  | FINAL EFFLUENT LIMITATIONS |                |                          | MONITORING REQUIREMENTS |                 |
|  |  | DAILY MAXIMUM              | WEEKLY AVERAGE | MONTHLY AVERAGE          | MEASUREMENT FREQUENCY   | SAMPLE TYPE     |
| Flow   | MGD  | *                          |                | *                        | once/month              | 24 hr. estimate |
| Biochemical Oxygen Demand <sub>5</sub>   | mg/L   |                            | 45             | 30                       | once/month              | composite**     |
| Total Suspended Solids   | mg/L   |                            | 45             | 30                       | once/month              | composite**     |
| <i>E. coli</i> (Note 1, Page 3)  | #/100 ml   | 1030                       |                | 206                      | once/month              | grab            |
| pH – Units   | SU   | ***                        |                | ***                      | once/month              | grab            |
| Ammonia as N<br>(April 1 – Sept 30)<br>(Oct 1 – March 31)  | mg/L   | 4.9<br>8.6                 |                | 1.3<br>2.8               | once/month              | grab            |
| MONITORING REPORTS SHALL BE SUBMITTED MONTHLY; THE FIRST REPORT IS DUE <u>JUNE 28, 2015</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.  |  |                            |                |                          |                         |                 |

\* Monitoring requirement only.

\*\* A 24-hour composite sample is composed of 48 aliquots (subsamples) collected at 30 minute intervals by an automatic sampling device.

\*\*\* pH is measured in pH units and is not to be averaged. The pH is limited to the range of 6.5-9.0 pH units.

**Note 1** - Effluent limitations and monitoring requirements for *E. coli* are applicable only during the recreational season from April 1 through October 31. The Monthly Average Limit for *E. coli* is expressed as a geometric mean.

### C. STANDARD CONDITIONS

In addition to specified conditions stated herein, this permit is subject to the attached Parts I, II, & III standard conditions dated October 1, 1980 and August 15, 1994, and hereby incorporated as though fully set forth herein.

### D. 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:
    - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
    - (2) 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.

2. All outfalls must be clearly marked in the field.

D. SPECIAL CONDITIONS

3. Permittee will cease discharge by connection to a facility with an area-wide management plan per 10 CSR 20-6.010(3)(B) within 90 days of notice of its availability.

4. 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.

5. 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 µg/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.

6. Report as no-discharge when a discharge does not occur during the report period.

7. It is a violation of the Missouri Clean Water Law to fail to pay fees associated with this permit (644.055 RSMo).

8. The permittee shall comply with any applicable requirements listed in 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.

9. The permittee shall develop and implement a program for maintenance and repair of the collection system. The permittee shall submit a report annually in January to the Kansas City Regional Office with the Discharge and Monitoring reports which address measures taken to locate and eliminate sources of infiltration and inflow into the collection system serving the facility for the previous year.

10. Bypasses are not authorized at this facility and are subject to 40 CFR 122.41(m). If a bypass occurs, the permittee shall report in accordance to 40 CFR 122.41(m)(3)(i), and with Standard Condition Part I, Section B, subsection 2.b. Bypasses are to be reported to the Kansas City Regional Office.

D. SPECIAL CONDITIONS (continued)

11. The facility must be sufficiently secured to restrict entry by children, livestock and unauthorized persons as well as to protect the facility from vandalism.
12. A least one gate must be provided to access the wastewater treatment facility and provide for maintenance and mowing. The gate shall remain locked except when opened by the permittee to perform operational monitoring, sampling, maintenance, mowing, or for inspections by the Department.
13. At least one (1) warning sign shall be placed on each side of the facility enclosure in such positions as to be clearly visible from all directions of approach. There shall also be one (1) sign placed for every five hundred feet (500') (150 m) of the perimeter fence. A sign shall also be placed on each gate. Minimum wording shall be SEWAGE TREATMENT FACILITY—KEEP OUT. Signs shall be made of durable materials with characters at least two inches (2") high and shall be securely fastened to the fence, equipment or other suitable locations.
14. An Operation and Maintenance (O & M) manual shall be maintained by the permittee and made available to the operator. The O & M manual shall include key operating procedures and a brief summary of the operation of the facility.
15. An all-weather access road shall be provided to the treatment facility.
16. The discharge from the wastewater treatment facility shall be conveyed to the receiving stream via a closed pipe or a paved or rip-rapped open channel. Sheet or meandering drainage is not acceptable. The outfall sewer shall be protected against the effects of floodwater, ice or other hazards as to reasonably insure its structural stability and freedom from stoppage. The outfall shall be maintained so that a sample of the effluent can be obtained at a point after the final treatment process and before the discharge mixes with the receiving waters.

E. SCHEDULE OF COMPLIANCE

The permittee may either chose to replace/upgrade this facility, or close the facility and connect wastewater flow to the Excelsior Springs Wastewater Treatment Facility.

**1. Repair and/or Replace Existing Facility**

- a. Within 6 months of the effective date of this permit, the permittee shall submit a construction permit to repair and/or replace the facility including plans and specifications.
- b. Within one year of the effective date of this permit, the permittee shall submit a report detailing progress made in attaining compliance with the final effluent limits.
- c. Within 2 years of the effective date of this permit, the permittee shall attain full compliance with the final effluent limits for Ammonia.

Please submit progress reports to the Missouri Department of Natural Resources, St. Louis Regional Office, 7545 Lindbergh, Ste. 210, St. Louis, MO 63125.

**2. Facility Closure**

- a. The permittee shall submit a progress report within six (6) months, reporting progress made in plans for closure of the facility.
- b. Within 1 year of issuance of this permit, submit a plan to the Water Protection Program to cease discharges from this facility and properly close the facility. This plan must a proposal for removal of sludge from the facility, including test results for Nitrogen and other parameters in accordance with Standard Conditions Part III.
- c. Within 18 months of issuance of this permit, the permittee shall have initiated any construction necessary to connect wastewater influent flows to another permitted wastewater treatment facility. The permittee must submit a progress report, detailing the status of facility with respect to the closure plan.

E. SCHEDULE OF COMPLIANCE (continued)

- d. Within 2 years of issuance of this permit, discharges shall have ceased and the facility shall have been properly closed. The permittee shall notify the Water Protection Program when the facility has been properly closed so that the Department can evaluate whether the area has been properly stabilized. The permittee shall apply for a land disturbance permit if necessary. The permittee must apply for a termination of the facility using the proper Form J – Request for Termination of a State Operating Permit.
- e. Should the permittee fail to close the facility, the permittee shall comply with final effluent limitations for Ammonia as N and E. coli within two years of issuance of the permit as specified in section E.1. above.

**MISSOURI DEPARTMENT OF NATURAL RESOURCES  
FACT SHEET  
FOR THE PURPOSE OF RENEWAL  
OF  
MO-0056545  
HOMESTEAD VILLAGE WASTEWATER TREATMENT PLANT**

The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollution Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States, and the release of storm water from certain point sources. All such discharges are unlawful without a permit (Section 301 of the "Clean Water Act"). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Missouri State Operating Permits (MSOPs) are issued by the Director of the Missouri Department of Natural Resources (Department) under an approved program, operating in accordance with federal and state laws (Federal "Clean Water Act" and "Missouri Clean Water Law" Section 644 as amended). MSOPs are issued for a period of five (5) years unless otherwise specified.

As per [40 CFR Part 124.8(a)] and [10 CSR 20-6.020(1)2.] a Factsheet shall be prepared to give pertinent information regarding the applicable regulations, rationale for the development of effluent limitations and conditions, and the public participation process for the Missouri State Operating Permit (operating permit) listed below.

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

This Factsheet is for a Minor

**Part I – Facility Information**

Facility Type: POTW - SIC #4952

Facility Description:

Screening / Extended aeration / clarifier / sludge holding tank / sludge disposal by contract hauler.

Have any changes occurred at this facility or in the receiving water body that effects effluent limit derivation?

- No.

Application Date: 08/11/2011

Expiration Date: 11/08/2011

**OUTFALL(S) TABLE:**

| OUTFALL | DESIGN FLOW (CFS) | TREATMENT LEVEL | EFFLUENT TYPE | DISTANCE TO CLASSIFIED SEGMENT (MI) |
|---------|-------------------|-----------------|---------------|-------------------------------------|
| #001    | 0.031             | Secondary       | Domestic      | ~ 0.44                              |

Receiving Water Body's Water Quality & Facility Performance History:

This facility was referred to the Attorney General's Office on January 25, 1999 for the following violations:

1. Causing pollution to waters of the state.
2. Failure to comply with permit conditions.
3. Failure for the facility to meet its permit limits.
4. Failure to operate and maintain the wastewater treatment facility.
5. Illegal discharges of wastewater and sediment to waters of the state.
6. Violating water quality standards.

Comments:

The permittee has indicated that the facility will either be upgraded or be closed and connected to the Excelsior Springs Wastewater Treatment Facility. Therefore, in addition to the SOC to implement final effluent limitations, a SOC for closure has been placed in the permit to ensure that the facility is properly closed. See the remainder of the factsheet for additional information about the facility with regards to the SOC, final effluent limitations and the anticipated closure of the facility.

**Part II – Operator Certification Requirements**

Applicable ; This facility is required to have a certified operator.

As per [10 CSR 20-6.010(8) Terms and Conditions of a Permit], permittees shall operate and maintain facilities to comply with the Missouri Clean Water Law and applicable permit conditions and regulations. Operators or supervisors of operations at regulated wastewater treatment facilities shall be certified in accordance with [10 CSR 20-9.020(2)] and any other applicable state law or regulation. As per [10 CSR 20-9.020(2)(A)], requirements for operation by certified personnel shall apply to all wastewater treatment systems, if applicable, as listed below:

Owned or operated by or for:

- Private sewer company regulated by the Public Service Commission:

Each of the above entities are only applicable if they have a Population Equivalent greater than two hundred (200) and/or fifty (50) or more service connections.

- Department required:   
The Department requires this facility to retain the services of a certified operator.

This facility currently requires an operator with a “C” Certification Level. Please see **Appendix - Classification Worksheet**. Modifications made to the wastewater treatment facility may cause the classification to be modified.

Operator’s Name: Dennis D. Aldrich  
Certification Number: 2364  
Certification Level: WW – C

The listing of the operator above only signifies that staff drafting this operating permit have reviewed appropriate Department records and determined that the name listed on the operating permit application has the correct and applicable Certification Level.

**Part III– Operational Monitoring**

As per [10 CSR 20-9.010(4)], the facility is required to conduct operational monitoring.

**Part IV – Receiving Stream Information**

10 CSR 20-7.031 Missouri Water Quality Standards, the Department defines the Clean Water Commission water quality objectives in terms of "water uses to be maintained and the criteria to protect those uses." The receiving stream and/or 1<sup>st</sup> classified receiving stream’s beneficial water uses to be maintained are located in the Receiving Stream Table located below in accordance with [10 CSR 20-7.031(3)].

**RECEIVING STREAM(S) TABLE:**

| WATER-BODY NAME                              | CLASS | WBID | DESIGNATED USES*  | 12-DIGIT HUC  | EDU**                            |
|--|-------|------|-------------------|---------------|----------------------------------|
| Unnamed tributary to East Fork Fishing River | U     | ---- | General Criteria  | 10300101-0406 | Central Plains/Blackwater/Lamine |
| East Fork Fishing River                      | C     | 0386 | AQL, LWW, WBC “B” |               |                                  |

\* - Irrigation (IRR), Livestock & Wildlife Watering (LWW), Protection of Warm Water Aquatic Life and Human Health-Fish Consumption (AQL), Cool Water Fishery(CLF), Cold Water Fishery (CDF), Whole Body Contact Recreation (WBC), Secondary Contact Recreation (SCR), Drinking Water Supply (DWS), Industrial (IND), Groundwater (GRW).

\*\* - Ecological Drainage Unit

**RECEIVING STREAM(S) LOW-FLOW VALUES:**

| RECEIVING STREAM (U, C, P) | LOW-FLOW VALUES (CFS) |      |       |
|----------------------------|-----------------------|------|-------|
|                            | 1Q10                  | 7Q10 | 30Q10 |
| East Fork Fishing River    | 0.0                   | 0.0  | 0.0   |

**MIXING CONSIDERATIONS**

Mixing Zone: Not Allowed [10 CSR 20-7.031(4)(A)4.B.(I)(a)].

Zone of Initial Dilution: Not Allowed [10 CSR 20-7.031(4)(A)4.B.(I)(b)].

**Part V – Rationale and Derivation of Effluent Limitations & Permit Conditions**

**ALTERNATIVE EVALUATIONS FOR NEW FACILITIES:**

As per [10 CSR 20-7.015(4)(A)], discharges to losing streams shall be permitted only after other alternatives including land application, discharges to a gaining stream and connection to a regional wastewater treatment facility have been evaluated and determined to be unacceptable for environmental and/or economic reasons.

Not Applicable ; The facility does not discharge to a Losing Stream as defined by [10 CSR 20-2.010(36)] & [10 CSR 20-7.031(1)(N)], or is an existing facility.

**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 operating permit are at least as protective as those previously established; therefore, backsliding does not apply.

**ANTIDEGRADATION:**

In accordance with Missouri’s Water Quality Standard [10 CSR 20-7.031(2)], the Department is to document by means of Antidegradation Review that the use of a water body’s available assimilative capacity is justified. Degradation is justified by documenting the socio-economic importance of a discharging activity after determining the necessity of the discharge.

- No degradation proposed and no further review necessary. Facility did not apply for authorization to increase pollutant loading or to add additional pollutants to their discharge.

**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.

**BIOSOLIDS & SEWAGE SLUDGE:**

Biosolids are solid materials resulting from domestic wastewater treatment that meet federal and state criteria for beneficial uses (i.e. fertilizer). Sewage sludge is solids, semi-solids, or liquid residue generated during the treatment of domestic sewage in a treatment works; including but not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment process; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screening generated during preliminary treatment of domestic sewage in a treatment works. Additional information regarding biosolids and sludge is located at the following web address:

<http://dnr.mo.gov/env/wpp/pub/index.html>, items WQ422 through WQ449.

- Permittee is not authorized to land apply biosolids. Sludge/biosolids are removed by contract hauler.

**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

Applicable ; The permittee/facility is currently under enforcement action for the following reasons:

1. Causing pollution to waters of the state.
2. Failure to comply with permit conditions.
3. Failure for the facility to meet its permit limits.
4. Failure to operate and maintain the wastewater treatment facility.
5. Illegal discharges of wastewater and sediment to waters of the state.
6. Violating water quality standards.

**PRETREATMENT PROGRAM:**

The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a Publicly Owned Treatment Works [40 CFR Part 403.3(q)].

Not Applicable ; The permittee, at this time, is not required to have a Pretreatment Program or does not have an approved pretreatment program.

**REASONABLE POTENTIAL ANALYSIS (RPA):**

Federal regulation [40 CFR Part 122.44(d)(1)(i)] requires effluent limitations for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause or contribute to an in-stream excursion above narrative or numeric water quality standard.

In accordance with [40 CFR Part 122.44(d)(iii)] if the permit writer determines that any give pollutant has the reasonable potential to cause, or contribute to an in-stream excursion above the WQS, the permit must contain effluent limits for that pollutant.

Applicable ; A RPA was conducted on appropriate parameters. Please see **APPENDIX – RPA RESULTS**.

**SANITARY SEWER OVERFLOWS (SSO) AND INFLOW AND INFILTRATION (I&I):**

Sanitary Sewer Overflows (SSOs) are defined as an untreated or partially treated sewage release are considered bypassing under state regulation [10 CSR 20-2.010(11)] and should not be confused with the federal definition of bypass. SSO's have a variety of causes including blockages, line breaks, and sewer defects that allow excess storm water and ground water to (1) enter and overload the collection system, and (2) overload the treatment facility. Additionally, SSO's can be also be caused by lapses in sewer system operation and maintenance, inadequate sewer design and construction, power failures, and vandalism. SSOs also include overflows out of manholes and onto city streets, sidewalks, and other terrestrial locations.

- Not applicable. 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.

Applicable ; The time given for effluent limitations of this permit listed under Interim Effluent Limitation and Final Effluent Limitations were established in accordance with [10 CSR 20-7.031(10)]. The facility has been given a schedule of compliance to meet final effluent limits for Ammonia. The permit also contains a schedule of compliance for the facility to connect to the Excelsior Springs Wastewater Treatment Facility and to properly close the existing facility.

**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.

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

**VARIANCE:**

As per the Missouri Clean Water Law § 644.061.4, variances shall be granted for such period of time and under such terms and conditions as shall be specified by the commission in its order. The variance may be extended by affirmative action of the commission. In no event shall the variance be granted for a period of time greater than is reasonably necessary for complying with the Missouri Clean Water Law §§644.006 to 644.141 or any standard, rule or regulation promulgated pursuant to Missouri Clean Water Law §§644.006 to 644.141.

Not Applicable ; This operating permit is not drafted under premises of a petition for variance.

**WASTELOAD ALLOCATIONS (WLA) FOR LIMITS:**

As per [10 CSR 20-2.010(78)], the amount of pollutant each discharger is allowed by the Department to release into a given stream after the Department has determined total amount of pollutant that may be discharged into that stream without endangering its water quality.

Applicable ; Wasteload allocations were calculated where applicable using water quality criteria or water quality model results and the dilution equation below:

$$C_e = \frac{(Q_e + Q_s)C - (C_s \times Q_s)}{(Q_e)} \quad (\text{EPA/505/2-90-001, Section 4.5.5})$$

Where C = downstream concentration  
Cs = upstream concentration  
Qs = upstream flow  
Ce = effluent concentration  
Qe = effluent flow

Chronic wasteload allocations were determined using applicable chronic water quality criteria (CCC: criteria continuous concentration) and stream volume of flow at the edge of the mixing zone (MZ). Acute wasteload allocations were determined using applicable water quality criteria (CMC: criteria maximum concentration) and stream volume of flow at the edge of the zone of initial dilution (ZID).

Water quality based maximum daily and average monthly effluent limitations were calculated using methods and procedures outlined in USEPA's "Technical Support Document For Water Quality-based Toxics Control" (EPA/505/2-90-001).

**Number of Samples "n":**

Additionally, in accordance with the TSD for water quality-based permitting, effluent quality is determined by the underlying distribution of daily values, which is determined by the Long Term Average (LTA) associated with a particular Wasteload Allocation (WLA) and by the Coefficient of Variation (CV) of the effluent concentrations. Increasing or decreasing the monitoring frequency does not affect this underlying distribution or treatment performance, which should be, at a minimum, be targeted to comply with the values dictated by the WLA. Therefore, it is recommended that the actual planned frequency of monitoring normally be used to determine the value of "n" for calculating the AML. However, in situations where monitoring frequency is once per month or less, a higher value for "n" must be assumed for AML derivation purposes. Thus, the statistical procedure being employed using an assumed number of samples is "n = 4" at a minimum. For Total Ammonia as Nitrogen, "n = 30" is used.

**WLA MODELING:**

There are two general types of effluent limitations, technology-based effluent limits (TBELs) and water quality based effluent limits (WQBELs). If TBELs do not provide adequate protection for the receiving waters, then WQBEL must be used.

Not Applicable ; A WLA study was either not submitted or determined not applicable by Department staff.

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

**40 CFR 122.41(M) - BYPASSES:**

The federal Clean Water Act (CWA), Section 402 prohibits wastewater dischargers from “bypassing” untreated or partially treated sewage (wastewater) beyond the headworks. A bypass, which includes blending, is defined as an intentional diversion of waste streams from any portion of a treatment facility, [40 CFR 122.41(m)(1)(i)]. Additionally, Missouri regulation 10 CSR 20-2.010(11) defines a bypass as the diversion of wastewater from any portion of wastewater treatment facility or sewer system to waters of the state. Only under exceptional and specified limitations do the federal regulations allow for a facility to bypass some or all of the flow from its treatment process. Bypasses are prohibited by the CWA unless a permittee can meet all of the criteria listed in 40 CFR 122.41(m)(4)(i)(A), (B), & (C). Any bypasses from this facility are subject to the reporting required in 40 CFR 122.41(l)(6) and per Missouri’s Standard Conditions I, Section B, part 2.b. Additionally, Anticipated Bypasses include bypasses from peak flow basins or similar devices designed for peak wet weather flows.

Not Applicable ; This facility does not anticipate bypassing.

**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.

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

## Part VI – Effluent Limits Determination

### APPLICABLE DESIGNATIONS OF WATERS OF THE STATE:

As per Missouri’s Effluent Regulations [10 CSR 20-7.015], the waters of the state are divided into the below listed seven (7) categories. Each category lists effluent limitations for specific parameters, which are presented in each outfall’s Effluent Limitation Table and further discussed in the Derivation & Discussion of Limits section.

All Other Waters [10 CSR 20-7.015(8)]:

### OUTFALL #001 – MAIN FACILITY OUTFALL

Effluent limitations derived and established in the below Effluent Limitations Table are based on current operations of the facility. Future permit action due to facility modification may contain new operating permit terms and conditions that supersede the terms and conditions, including effluent limitations, of this operating permit.

### EFFLUENT LIMITATIONS TABLE:

| PARAMETER                           | Unit | Basis for Limits | Daily Maximum | Weekly Average | Monthly Average | Modified | Previous Permit Limitations |
|-------------------------------------|------|------------------|---------------|----------------|-----------------|----------|-----------------------------|
| Flow                                | MGD  | 1                | *             |                | *               | No       | */*                         |
| BOD <sub>5</sub>                    | mg/L | 1, 4             |               | 45             | 30              | No       | 45/30                       |
| TSS                                 | mg/L | 1, 4             |               | 45             | 30              | No       | 45/30                       |
| pH                                  | SU   | 1, 4             | 6.5-9.0       |                | 6.5-9.0         | Yes      | 6.0-9.0                     |
| Ammonia as N<br>(April 1 – Sept 30) | mg/L | 2, 3, 5          | 4.9           |                | 1.3             | Yes      | */*                         |
| Ammonia as N<br>(Oct 1 – March 31)  | mg/L | 2, 3, 5          | 8.6           |                | 2.8             | Yes      | */*                         |
| Escherichia coli                    | ***  | 1, 3             | 1030          |                | 206             | Yes      | Fecal coliform<br>1000/400  |

\* - Monitoring requirement only.

\*\* - For DO the Daily Maximum is a Daily Minimum and the Monthly Average is a Monthly Average Minimum.

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

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

#### Basis for Limitations Codes:

- |  |                                    |
|--|------------------------------------|
| 1. State or Federal Regulation/Law       | 7. Antidegradation Policy          |
| 2. Water Quality Standard (includes RPA) | 8. Water Quality Model             |
| 3. Water Quality Based Effluent Limits   | 9. Best Professional Judgment      |
| 4. Lagoon Policy                         | 10. TMDL or Permit in lieu of TMDL |
| 5. Ammonia Policy                        | 11. WET Test Policy                |
| 6. Antidegradation Review                |                                    |

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

- **Flow.** In accordance with [40 CFR Part 122.44(i)(1)(ii)] the volume of effluent discharged from each outfall is needed to assure compliance with permitted effluent limitations. If the permittee is unable to obtain effluent flow, then it is the responsibility of the permittee to inform the Department, which may require the submittal of an operating permit modification.
- **Biochemical Oxygen Demand (BOD<sub>5</sub>).**
  - Effluent limitations have been retained from previous state operating permit, please see the **APPLICABLE DESIGNATION OF WATERS OF THE STATE** sub-section of the **Receiving Stream Information.**
- **Total Suspended Solids (TSS).**
  - Effluent limitations have been retained from previous state operating permit, please see the **APPLICABLE DESIGNATION OF WATERS OF THE STATE** sub-section of the **Receiving Stream Information.**
- **pH.** Effluent limitation range is  $\geq 6.5$  or 6.5 – 9.0 Standard pH Units (SU), as per the applicable section of 10 CSR 20-7.015. pH is not to be averaged.

- **Total Ammonia Nitrogen.** Early Life Stages Present Total Ammonia Nitrogen criteria apply [10 CSR 20-7.031(4)(B)7.C. & Table B3] default pH 7.8 SU Background total ammonia nitrogen = 0.01 mg/L (Default).

| Season | Temp (°C) | pH (SU) | Total Ammonia Nitrogen<br>CCC (mg/L) | Total Ammonia Nitrogen<br>CMC (mg/L) |
|--------|-----------|---------|--------------------------------------|--------------------------------------|
| Summer | 26        | 7.8     | 1.5                                  | 12.1                                 |
| Winter | 6         | 7.8     | 3.1                                  | 12.1                                 |

Summer: April 1 – September 30

Chronic WLA:  $C_e = ((0.031 + 0.0)1.5 - (0.0 * 0.01))/0.031$   
 $C_e = 1.5 \text{ mg/L}$

Acute WLA:  $C_e = ((0.031 + 0.0)12.1 - (0.0 * 0.01))/0.031$   
 $C_e = 12.1 \text{ mg/L}$

$LTA_c = 1.5 \text{ mg/L} (0.665) = \mathbf{1.0 \text{ mg/L}}$   
 $LTA_a = 12.1 \text{ mg/L} (0.202) = 2.4 \text{ mg/L}$

[CV = 1.010, 99<sup>th</sup> Percentile, 30 day avg.]  
 [CV = 1.010, 99<sup>th</sup> Percentile]

Use most protective number of  $LTA_c$  or  $LTA_a$ .

**MDL = 1.0 mg/L (4.95) = 4.9 mg/L**  
**AML = 1.0 mg/L (1.33) = 1.3 mg/L**

[CV = 1.010, 99<sup>th</sup> Percentile]  
 [CV = 1.010, 95<sup>th</sup> Percentile, n =29]

Winter: October 1 – March 31

Chronic WLA:  $C_e = ((0.031 + 0.0)3.1 - (0.0 * 0.01))/0.031$   
 $C_e = 3.1 \text{ mg/L}$

Acute WLA:  $C_e = ((0.031 + 0.0)12.1 - (0.0 * 0.01))/0.031$   
 $C_e = 12.1 \text{ mg/L}$

$LTA_c = 3.1 \text{ mg/L} (0.737) = \mathbf{2.3 \text{ mg/L}}$   
 $LTA_a = 12.1 \text{ mg/L} (0.266) = 3.2 \text{ mg/L}$

[CV = 0.744, 99<sup>th</sup> Percentile, 30 day avg.]  
 [CV = 0.744, 99<sup>th</sup> Percentile]

Use most protective number of  $LTA_c$  or  $LTA_a$ .

**MDL = 2.3 mg/L (3.76) = 8.6 mg/L**  
**AML = 2.3 mg/L (1.24) = 2.8 mg/L**

[CV = 0.744, 99<sup>th</sup> Percentile]  
 [CV = 0.744, 95<sup>th</sup> Percentile, n =29]

- ***Escherichia coli (E. coli)*.** Monthly average of 206 per 100 ml as a geometric mean and Daily Maximum of 1030 during the recreational season (April 1 – October 31), to protect Whole Body Contact Recreation (B) designated use of the receiving stream, as per 10 CSR 20-7.031(4)(C). An effluent limit for both monthly average and daily maximum is required by 40 CFR 122.45(d).

**Minimum Sampling and Reporting Frequency Requirements.**

| PARAMETER        | SAMPLING FREQUENCY | REPORTING FREQUENCY |
|------------------|--------------------|---------------------|
| Flow             | once/month         | once/month          |
| BOD <sub>5</sub> | once/month         | once/month          |
| TSS              | once/month         | once/month          |
| pH               | once/month         | once/month          |
| Ammonia as N     | once/month         | once/month          |
| <i>E. coli</i>   | once/month         | once/month          |

**Sampling Frequency Justification:**

Sampling and Reporting Frequency retained from previous permit. The Clean Water Commission has directed the Department to proceed with amending 10 CSR 20-7.015 to reduce the sampling frequency required for E.coli to a lesser frequency, still protective of water quality standards, for smaller facilities, including those with discharges of 100,000 gallons per day or less.

**Sampling Type Justification**

As per 10 CSR 20-7.015, samples collected for mechanical plants shall be 24 hour composite samples.

**Part VII – Finding of Affordability**

Pursuant to Section 644.145, RSMo., the Department is required to determine whether a permit or decision is affordable and makes a finding of affordability for certain permitting and enforcement decisions. This requirement applies to discharges from combined or separate sanitary sewer systems or publically-owned treatment works.

Not Applicable;

The Department is not required to determine findings of affordability because the facility is not a **combined or separate sanitary sewer system for a publically-owned treatment works.**

## **Part VIII – 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.

### **PERMIT SYNCHRONIZATION:**

The Department of Natural Resources is currently undergoing a synchronization process for operating permits. Permits are normally issued on a five-year term, but to achieve synchronization many permits will need to be issued for less than the full five years allowed by regulation. The intent is that all permits within a watershed will move through the Watershed Based Management (WBM) cycle together will all expire in the same fiscal year. This will allow further streamlining by placing multiple permits within a smaller geographic area on public notice simultaneously, thereby reducing repeated administrative efforts. This will also allow the department to explore a watershed based permitting effort at some point in the future.

### **PUBLIC NOTICE:**

The Department shall give public notice that a draft permit has been prepared and its issuance is pending. Additionally, public notice will be issued if a public hearing is to be held because of a significant degree of interest in and water quality concerns related to a draft permit. No public notice is required when a request for a permit modification or termination is denied; however, the requester and permittee must be notified of the denial in writing.

The Department must issue public notice of a pending operating permit or of a new or reissued statewide general permit. The public comment period is the length of time not less than 30 days following the date of the public notice which interested persons may submit written comments about the proposed permit.

For persons wanting to submit comments regarding this proposed operating permit, then please refer to the Public Notice page located at the front of this draft operating permit. The Public Notice page gives direction on how and where to submit appropriate comments.

- The Public Notice period for this operating permit was from February 15, 2013 to March 15, 2013. No comments were received.

**DATE OF FACT SHEET:** 03/19/2013

### **COMPLETED BY:**

**HILLARY CLARK, ENVIRONMENTAL SPECIALIST  
MISSOURI DEPARTMENT OF NATURAL RESOURCES  
WATER PROTECTION PROGRAM  
OPERATING PERMITS SECTION - DOMESTIC WASTEWATER UNIT  
(573) 751-7326  
[Hillary.Clark@dnr.mo.gov](mailto:Hillary.Clark@dnr.mo.gov)**

**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.     | 2               |
| <b>EFFLUENT DISCHARGE RECEIVING WATER SENSITIVITY:</b>  |  |                 |
| Missouri or Mississippi River   | 0  |                 |
| All other stream discharges except to losing streams and stream reaches supporting whole body contact             | 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  | 3               |
| <b>PRELIMINARY TREATMENT - Headworks</b>  |  |                 |
| Screening and/or comminution  | 3  | 3               |
| Grit removal  | 3  |                 |
| Plant pumping of main flow (lift station at the headworks)  | 3  |                 |
| <b>PRIMARY TREATMENT</b>  |  |                 |
| Primary clarifiers  | 5  | 5               |
| Combined sedimentation/digestion  | 5  |                 |
| Chemical addition (except chlorine, enzymes)  | 4  |                 |
| <b>REQUIRED LABORATORY CONTROL – performed by plant personnel (highest level only)</b>                            |  |                 |
| 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   |                 |
| <b>ALTERNATIVE FATE OF EFFLUENT</b>   |  |                 |
| Direct reuse or recycle of effluent   | 6  |                 |
| Land Disposal – low rate  | 3  |                 |
| High rate   | 5  |                 |
| Overland flow   | 4  |                 |
| <b>Total from page ONE (1)</b>  | ----                                       | 13              |

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

| ITEM   | POINTS POSSIBLE | POINTS ASSIGNED |
|--|-----------------|-----------------|
| <b>VARIATION IN RAW WASTE (highest level only) (DMR exceedances and Design Flow exceedances)</b> |                 |                 |
| Variation do not exceed those normally or typically expected                                     | 0               | 0               |
| Recurring deviations or excessive variations of 100 to 200 % in strength and/or flow             | 2               |                 |
| Recurring deviations or excessive variations of more than 200 % in strength and/or flow          | 4               |                 |
| Raw wastes subject to toxic waste discharge  | 6               |                 |
| <b>SECONDARY TREATMENT</b>   |                 |                 |
| 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               |                 |
| <b>DISINFECTION</b>  |                 |                 |
| Chlorination or comparable   | 5               |                 |
| Dechlorination   | 2               |                 |
| On-site generation of disinfectant (except UV light)   | 5               |                 |
| UV light   | 4               |                 |
| <b>SOLIDS HANDLING - SLUDGE</b>  |                 |                 |
| Solids Handling Thickening   | 5               |                 |
| Anaerobic digestion  | 10              |                 |
| Aerobic digestion  | 6               |                 |
| Evaporative sludge drying  | 2               |                 |
| Mechanical dewatering  | 8               |                 |
| Solids reduction (incineration, wet oxidation)   | 12              |                 |
| Land application   | 6               |                 |
| Total from page <b>TWO (2)</b>   | ----            | 15              |
| Total from page <b>ONE (1)</b>   | ---             | 13              |
| <b>Grand Total</b>   | ---             | 28              |

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

**APPENDIX – RPA RESULTS:**

| Parameter                               | CMC*  | RWC Acute* | CCC* | RWC Chronic* | n** | Range max/min | CV*** | MF    | RP Yes/No |
|---|-------|------------|------|--------------|-----|---------------|-------|-------|-----------|
| Total Ammonia as Nitrogen (Summer) mg/L | 12.10 | 74.50      | 1.50 | 8.88         | 29  | 27.3/0.90     | 1.010 | 2.326 | Yes       |
| Total Ammonia as Nitrogen (Winter) mg/L | 12.10 | 59.24      | 3.10 | 7.06         | 29  | 27.2/0.99     | 0.744 | 2.326 | Yes       |

N/A – Not Applicable

\* - Units are (µg/L) unless otherwise noted.

\*\* - If the number of samples is 10 or greater, then the CV value must be used in the WQBEL for the applicable constituent. If the number of samples is < 10, then the default CV value must be used in the WQBEL for the applicable constituent.

\*\*\* - Coefficient of Variation (CV) is calculated by dividing the Standard Deviation of the sample set by the Mean of the same sample set.

RWC – Receiving Water Concentration. It is the concentration of a toxicant or the parameter toxicity in the receiving water after mixing (if applicable).

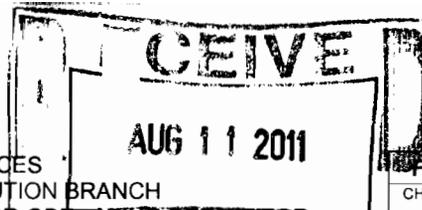
n – Is the number of samples.

MF – Multiplying Factor. 99% Confidence Level and 99% Probability Basis.

RP – Reasonable Potential. It is where an effluent is projected or calculated to cause an excursion above a water quality standard based on a number of factors including, as a minimum, the four factors listed in 40 CFR 122.44(d)(1)(ii).

Reasonable Potential Analysis is conducted as per (TSD, EPA/505/2-90-001, Section 3.3.2). A more detailed version including calculations of this RPA is available upon request.

AP 7040



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
 WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH  
**FORM B - APPLICATION FOR CONSTRUCTION OR OPERATING PERMIT FOR FACILITIES WHICH RECEIVE PRIMARILY DOMESTIC WASTE (700,000 gallons per day) UNDER MISSOURI CLEAN WATER LAW**

| FOR AGENCY USE ONLY |          |
|---------------------|----------|
| CHECK NUMBER        | 1509 LV  |
| DATE RECEIVED       | 8/11/11  |
| FEE SUBMITTED       | 1,000.00 |

**NOTE ► PLEASE READ THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM**

1. This application is for:

- An operating permit and antidegradation review public notice.
- A construction permit following an appropriate operating permit and antidegradation review public notice.
- A construction permit and a concurrent operating permit and antidegradation review public notice.
- A construction permit (submitted before Aug. 30, 2008 or antidegradation review is not required).
- An operating permit for a new or unpermitted facility. Construction Permit # \_\_\_\_\_
- An operating permit renewal: Permit #MO- 0056545 Expiration Date 11/08/2011
- An operating permit modification: Permit #MO- \_\_\_\_\_ Reason: \_\_\_\_\_

1.1 Is this a Federal/State Funded Project?  YES  NO Funding Agency/Project #: \_\_\_\_\_

1.2 Is the appropriate fee included with the application (See instructions for appropriate fee)?  YES  NO

**2. FACILITY (Outfall 001 of 001 )**

|   |                           |  |                   |
|---|---------------------------|--|-------------------|
| NAME<br>Homestead Village Wastewater Treatment Facility |                           | TELEPHONE WITH AREA CODE<br>(816) 559-3995 |                   |
| ADDRESS (PHYSICAL)<br>South End of Cherokee Drive       | CITY<br>Excelsior Springs | STATE<br>MO                                | ZIP CODE<br>64024 |

2.1 LEGAL DESCRIPTION: ¼, SW ¼, NE ¼, Sec. 31, T 53N, R 29W Ray County

2.2 UTM Coordinates Easting (X): 396570 Northing (Y): \_\_\_\_\_ 4357559  
 For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)

2.3 Name of receiving stream: Unnamed tributary of East Fork of Fishing River

**3. OWNER**

|                                   |                           |  |  |  |
|-----------------------------------|---------------------------|--|--|--|
| NAME<br>City of Homestead Village |                           | E-MAIL ADDRESS<br>outlaw1255@gmail.com | TELEPHONE WITH AREA CODE<br>(816) 559-3995 |  |
| ADDRESS<br>317 Ahner Drive        | CITY<br>Excelsior Springs | STATE<br>MO                            | ZIP CODE<br>64024                          |  |

3.1 Request review of draft permit prior to Public Notice?  YES  NO

**4. CONTINUING AUTHORITY: Permanent organization which will serve as the continuing authority for the operation, maintenance and modernization of the facility.**

|                                   |                           |  |                   |
|-----------------------------------|---------------------------|--|-------------------|
| NAME<br>City of Homestead Village |                           | TELEPHONE WITH AREA CODE<br>(816) 559-3995 |                   |
| ADDRESS<br>317 Ahner Drive        | CITY<br>Excelsior Springs | STATE<br>MO                                | ZIP CODE<br>64024 |

**5. OPERATOR**

|                        |                            |  |
|------------------------|----------------------------|--|
| NAME<br>Dennis Aldrich | CERTIFICATE NUMBER<br>2364 | TELEPHONE WITH AREA CODE<br>816-678-1374 |
|------------------------|----------------------------|--|

**6. FACILITY CONTACT**

|                     |                |  |
|---------------------|----------------|--|
| NAME<br>Frank James | TITLE<br>Mayor | TELEPHONE WITH AREA CODE<br>(816) 559-3995 |
|---------------------|----------------|--|

**7.0 ADDITIONAL FACILITY INFORMATION**

7.1 Description of facilities (Attach additional sheet if required). Attach a 1" = 2,000' scale U.S. Geological Survey topographic map showing location of all outfalls and downstream landowners. (See Item 9.)

7.2 Facility SIC code: 4952; Discharge SIC code: \_\_\_\_\_; Facility NAICS code: 221320; Discharge NAICS code: \_\_\_\_\_

7.3 Number of people presently connected or population equivalent (P.E.): 182 Design P.E.: 200  
 Number of units presently connected: Homes 12 Trailers 60 Apartments \_\_\_\_\_ Other \_\_\_\_\_  
 Design flow for this outfall: 20000 Total design flow for the facility: 20000 Actual flow for this outfall: 25000  
 Commercial Establishment: Daily number of employees working \_\_\_\_\_ Daily number of customers/guests \_\_\_\_\_

7.4 Length of pipe in the sewer collection system? 1500 feet miles (Please denote which unit is appropriate.)

7.5 Does any bypassing occur in the collection system or at the treatment facility?  Yes  No (If yes, attach explanation.)

7.6 Does significant infiltration occur in the collection system?  Yes  No (If yes, attach explanation and proposed repair.)

7.7 Is industrial waste discharged to the facility identified in Item 2?  Yes  No (If yes, see instructions.)

7.8 Will the discharge be continuous through the year?  Yes  No  
 a. Discharge will occur during the following months: January - December  
 b. How many days of the week will the discharge occur? 7

7.9 Is wastewater land applied?  Yes  No (If yes, attach Form I.)

7.10 Will chlorine be added to the effluent?  Yes  No  
 a. If chlorine is added, what is the resulting residual? \_\_\_\_\_ µg/l (micrograms per liter)

7.11 Does this facility discharge to a losing stream or sinkhole?  Yes  No

7.12 Attach a flow chart showing all influents, treatment facilities and outfalls.

7.13 Has a waste load allocation study been completed for this facility?  Yes  No

7.14 List all permit violations, including effluent limit exceedances in the last five years. Attach a separate sheet if necessary.  
 If none, write none. Attached

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Kansas City Regional Office

8. SLUDGE HANDLING, USE AND DISPOSAL

8.1 Is the sludge a hazardous waste as defined by 10 CSR 25?  Yes  No

8.2 Sludge Production, including sludge received from others: 4.2 Design Dry Tons/Year          Actual Dry Tons/Year

8.3 Capacity of sludge holding structures:  
 Sludge storage provided: 4,800 cubic feet;          days of storage; 15 average percent solids of sludge;  
 No sludge storage is provided.

8.4 Type of Storage:  Holding tank  Building  
 Basin  Other (Please describe)           
 Concrete Pad

8.5 Sludge Treatment:  
 Anaerobic Digester  Lagoon  Composting  
 Storage Tank  Aerobic Digester  Other (Attach description)  
 Lime Stabilization  Air or Heat Drying

8.6 Sludge Use or Disposal:  
 Land Application  Surface Disposal (Sludge Disposal Lagoon, Sludge held for more than two years)  
 Contract Hauler  Incineration  
 Hauled to Another Treatment Facility  Sludge Retained in Wastewater treatment lagoon  
 Solid Waste Landfill  Other          Attach explanation sheet.

8.7 PERSON RESPONSIBLE FOR HAULING SLUDGE TO DISPOSAL FACILITY  
 By Applicant  By Others (complete below)

NAME: H 4 H Septic

ADDRESS: 10350 Northwest River Rd. CITY: Parkville STATE: MO ZIP CODE: 64152

CONTACT PERSON: Russell Sickman TELEPHONE WITH AREA CODE: 816-330-4040 PERMIT NO. MO- 10033862

8.8 SLUDGE USE OR DISPOSAL FACILITY  
 By Applicant  By Others (Please complete below.)

NAME: Kaw Treatment Plant

ADDRESS:          CITY: Kansas City STATE: KS ZIP CODE:         

CONTACT PERSON: Scott Craig TELEPHONE WITH AREA CODE: 913-371-4242 PERMIT NO. MO-         

8.9 Does the sludge or biosolids disposal comply with federal sludge regulations under 40 CFR 503?  
 Yes  No (Please attach explanation)

9. DOWNSTREAM LANDOWNER (S). ATTACH ADDITIONAL SHEETS AS NECESSARY. SEE INSTRUCTIONS.

NAME: Willie Foster

ADDRESS: 14548 Y Hwy CITY: Excelsior Springs STATE: MO ZIP CODE: 64024

10. DRINKING WATER SUPPLY INFORMATION

10.1 WHAT IS THE SOURCE OF YOUR DRINKING WATER SUPPLY:  
 A. Public supply (municipal or water district water) Ray 2  
 If public, please give name of the public supply           
 B. Private well           
 C. Surface water (lake, pond or stream)         

10.2 Does your drinking water source serve at least 25 people at least 60 days per year (not necessarily consecutive days)?  
 Yes  No

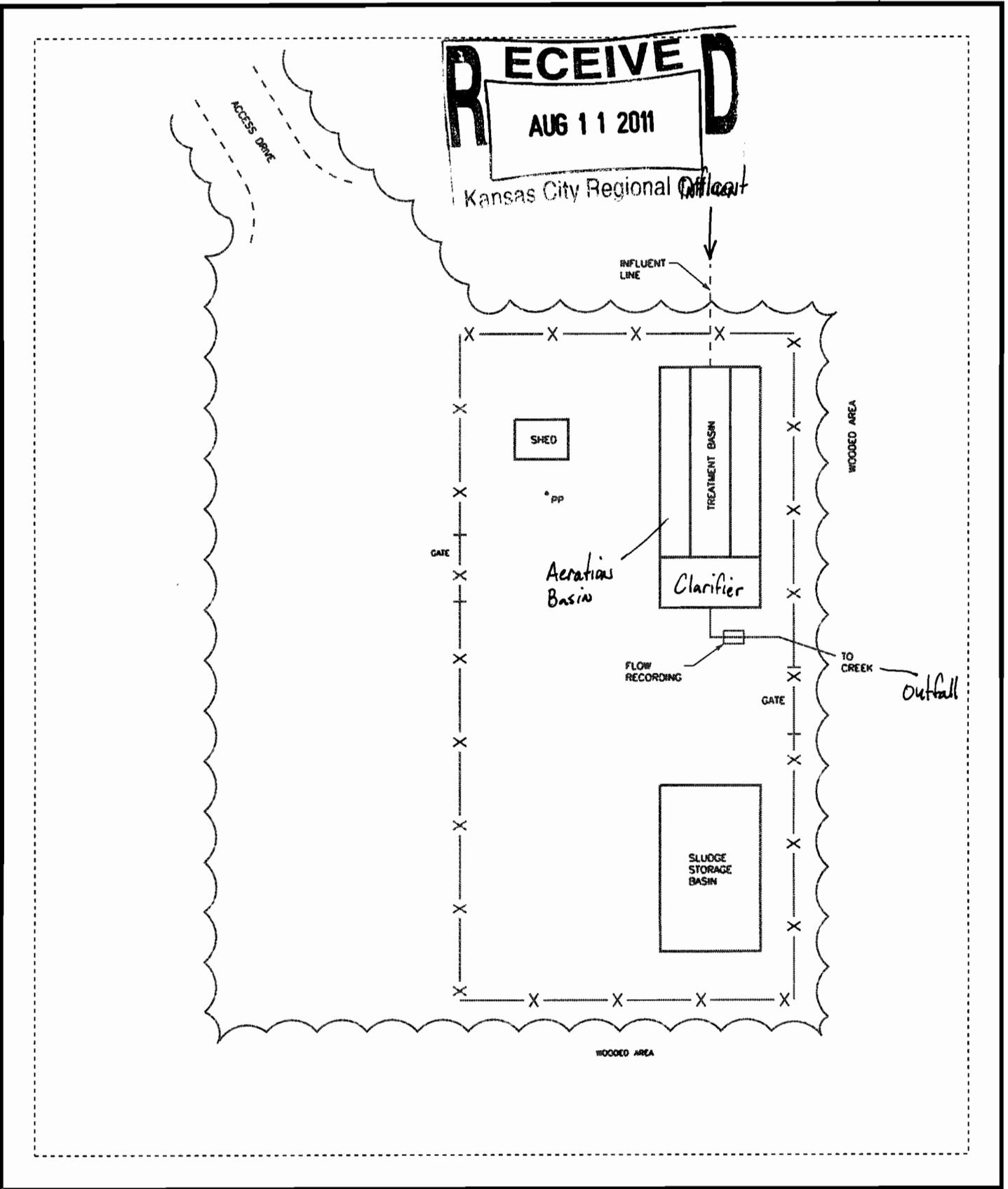
10.3 Does your supply serve housing which is occupied year round by the same people? This does not include housing which is occupied seasonally?  
 Yes  No

11. I certify that I am familiar with the information contained in the application, that to the best of my knowledge and belief such information is true, complete and accurate, and if granted this permit, I agree to abide by the Missouri Clean Water Law and all rules, regulations, orders and decisions, subject to any legitimate appeal available to applicant under the Missouri Clean Water Law.

NAME AND OFFICIAL TITLE (TYPE OR PRINT): Frank James Mayor TELEPHONE WITH AREA CODE: 816-559-3995

SIGNATURE: [Signature] DATE SIGNED: 6/24/2011





2335 E. Crawford Street | Salina, Kansas 67401-3713  
 P 785.827.3603 | F 785.827.3029

### EXISTING TREATMENT FACILITY

SHEET

**2**

DESIGNED BY

DRAWING NAME

PROJECT NO.

090652\_Sht-2.dgn

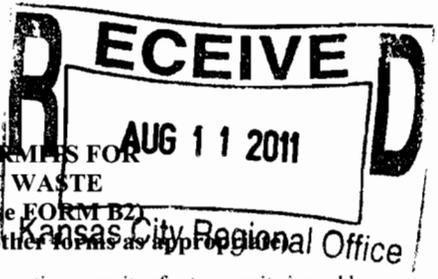
20090652.01

CHECKED BY

REFERENCE SHEET

REVISION DATE

ISSUE DATE



INSTRUCTIONS FOR COMPLETING FORM B  
APPLICATION FOR CONSTRUCTION OR OPERATING PERMITS FOR  
FACILITIES WHICH RECEIVE BASICALLY DOMESTIC WASTE

(Facilities over 100,000 gallons per day of domestic waste must use FORM B2)  
(Facilities that receive wastes other than domestic must fill out FORM A and other forms as appropriate)

1. Check which parameter is applicable. **Do not check more than one item.** Construction and operating permit refer to permits issued by the Department of Natural Resources, Water Protection Program, Water Pollution Branch. Effective Sept. 1, 2008, a facility will be required to use *MISSOURI'S ANTIDegradation Rule AND IMPLEMENTATION PROCEDURE*. For more information, this document is available on the Web at [www.dnr.mo.gov/env/wpp/docs/aip-cwc-app-050708.pdf](http://www.dnr.mo.gov/env/wpp/docs/aip-cwc-app-050708.pdf). This procedure will be applicable to new and expanded wastewater facilities and requires the proposed discharge to a water body to undergo a level of Antidegradation Review which documents that the use of a water body's available assimilative capacity is justified.

1.1 Self-explanatory.

1.2 An operating permit and antidegradation review public notice requires a Water Quality/Antidegradation Review Sheet to be submitted with the application (No fee required).

CONSTRUCTION PERMIT FEES (Please include fee with application.)

\$750 for a sewage treatment facility with a design flow of less than 500,000 gallons per day, or gpd.

\$2,200 for sewage treatment facility with a design flow of 500,000 gpd or more.

DOMESTIC OPERATING PERMIT FEES (Annual operating permit fees are based on flow and are due each year on the anniversary date of the permit.)

| Annual fee/Design flow    | Annual fee/Design flow      | Annual Fee/Design flow        |
|---------------------------|-----------------------------|-------------------------------|
| \$100.....<5,000 gpd      | \$375.....10,000-10,999 gpd | \$650.....16,000-16,999 gpd   |
| \$150.....5,000-5,999 gpd | \$400.....11,000-11,999 gpd | \$800.....17,000-19,999 gpd   |
| \$175.....6,000-6,999 gpd | \$450.....12,000-12,999 gpd | \$1,000.....20,000-22,999 gpd |
| \$200.....7,000-7,999 gpd | \$500.....13,000-13,999 gpd | \$2,000.....23,000-24,999 gpd |
| \$225.....8,000-8,999 gpd | \$550.....14,000-14,999 gpd | \$2,500.....25,000-29,999 gpd |
| \$250.....9,000-9,999 gpd | \$600.....15,000-15,999 gpd | \$3,000.....30,000 gpd -1 mgd |

New domestic wastewater treatment facilities must submit the annual fee with the original application.

**If the application is for a site-specific permit re-issuance, send no fees.** You will be invoiced separately by the department on the anniversary date of the original permit. Permit fees must be current for the department to reissue the operating permit. Late fees of 2 percent per month are charged and added to outstanding annual fees.

PUBLIC SEWER SYSTEM OPERATING PERMIT FEES (City, Public Sewer District, Public Water District, or other publicly owned treatment works). Annual fee is based on number of service connections. The table of fees is in 10 CSR 20-6.011 and is available at [www.sos.mo.gov/adrules/csr/current/10csr/10c20-6a.pdf](http://www.sos.mo.gov/adrules/csr/current/10csr/10c20-6a.pdf). New Public Sewer System facilities should not submit any fee as the department will invoice the permittee.

OPERATING PERMIT MODIFICATIONS, including transfers, are subject to the following fees:

- a. Municipals - \$200 each
- b. All others - 25 percent of annual fee

Note: Facility name or address changes where owner, operator and continuing authority remain the same are not considered transfers. Incomplete permit applications or related engineering documents will be returned by the department if they are not completed in the time frame established by the department in a comment letter to the owner. Permit fees for returned applications shall be forfeited. Permit fees for applications being processed by the department that are withdrawn by the applicant shall be forfeited.

2. If the facility has multiple outfalls, designate the outfall number and total number and use a separate form for each outfall. Name of Facility - The name by which is this facility locally known. Example: Southwest Sewage Treatment Plant, Country Club Mobile Home Park, etc. Give the street address or location of the facility. If the facility lacks a street name or route number, give the names of the closest intersection, highway, country road, etc.

2.1 Point of discharge should be given in terms of the legal description of the waste treatment plant. Sufficient information should be submitted that it may be located by department staff.

2.2 Global Positioning System, or GPS, is a satellite-based navigation system. The department prefers that a GPS receiver is used at the outfall pipe and the displayed coordinates submitted. If access to a GPS receiver is not available, use a mapping system to approximate the coordinates; the department's mapping system is available at [www.dnr.mo.gov/internetmapviewer/](http://www.dnr.mo.gov/internetmapviewer/).

2.3 Receiving stream(s) - Include the name of the stream or streams to which the discharge is directed and any subsequent tributary until a continuous flowing stream is reached.

3. Owner - Include the legal name and address of the owner.

3.1 Prior to submitting a permit to public notice, the Department of Natural Resources shall provide the permit applicant 10 days to review the draft permit for nonsubstantive drafting errors. In the interest of expediting permit issuance, permit applicants may waive the opportunity to review draft permits prior to public notice. Check yes to review the draft permit prior to public notice. Check no to waive the process and expedite the permit.

4. Continuing Authority - Include the permanent organization that will serve as the continuing authority for the operation, maintenance and modernization of the facility. The regulatory requirement regarding continuing authority is available at [www.sos.mo.gov/adrules/csr/current/10csr/10c20-6a.pdf](http://www.sos.mo.gov/adrules/csr/current/10csr/10c20-6a.pdf) or contact the appropriate Department of Natural Resources Regional Office.

5. Operator - Provide the name, certificate number and telephone number of the operator of the facility.

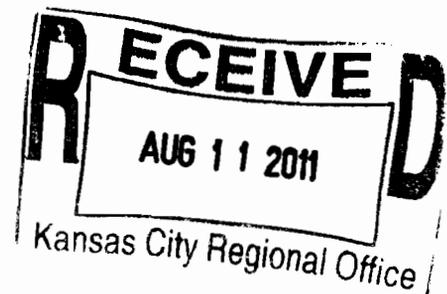
6. Provide the name, title and work telephone number of a person who is thoroughly familiar with the operation of the facility and with the facts reported in this application and who can be contacted by the department, if necessary.

**INSTRUCTIONS FOR COMPLETING FORM B  
APPLICATION FOR CONSTRUCTION OR OPERATING PERMITS FOR  
FACILITIES WHICH RECEIVE BASICALLY DOMESTIC WASTE  
(CONTINUED)**

- 7.1 Provide a brief description of the wastewater treatment facilities. Attach a 1"=2,000' scale U.S. Geological Survey topographic map showing location of all outfalls. This type of map is available on the Web at [www.dnr.mo.gov/internetmapviewer/](http://www.dnr.mo.gov/internetmapviewer/) or from the Department of Natural Resources' Division of Geology and Land Survey in Rolla, Missouri at 573-368-2125.
- 7.2 For Standard Industrial Codes, visit [www.osha.gov/pls/imis/sicsearch.html](http://www.osha.gov/pls/imis/sicsearch.html) and for the North American Industry Classification System at [www.census.gov/naics](http://www.census.gov/naics) or contact the appropriate Department of Natural Resources Regional Office. For example, a family style restaurant has a Facility SIC code of 5812 and a Facility NAICS code of 722210.
- 7.3 Indicate the total number of people presently served by the wastewater treatment facility. If this is a commercial establishment, indicate the number of employees and the number of guests or patrons served by the wastewater treatment facility on a daily basis.
- 7.4 Self-explanatory.
- 7.5 Include overflows of combined sewers and lift stations or bypassing of the wastewater treatment facility. Provide a detailed description of the circumstances that sewage bypassing occurs and the frequency of occurrence.
- 7.6 Self-explanatory.
- 7.7 Attach a list of industrial discharges into the system. For each industry, provide the name of facility, address, flow, type of industry/SIC code/ NAICS code and a list of the pollutants discharged by that industry into the collection system.
- 7.8 - 7.14 Self-explanatory.
- 8.1 A copy of 10 CSR 25 is available on the Web at [www.sos.mo.gov/adrules/csr/current/10csr/10csr.asp#10-25](http://www.sos.mo.gov/adrules/csr/current/10csr/10csr.asp#10-25) or at the Department of Natural Resources Regional Offices.
- 8.2 - 8.8 Self-explanatory.
- 8.9 Refer to University of Missouri Extension Environmental Quality publications about biosolids - numbers WQ420-426. Available on the Web at [extension.missouri.edu/explore/envqual/](http://extension.missouri.edu/explore/envqual/). In addition, the federal sludge regulations are available through the U.S. Government Printing Office at [www.gpoaccess.gov/cfr/index.html](http://www.gpoaccess.gov/cfr/index.html).
9. Provide the name and address of the first downstream landowner, different from that of the permitted facility, through whose property the discharge will flow. For discharges that leave the permitted facility and flow under a road or highway, or along the right-of-way, the downstream property owner is the landowner that the discharge flows to after leaving the right-of-way.
10. - 10.3 Self-explanatory.
- Signature - All applications must be signed as follows and the signatures must be **original**:
- For a corporation, by an officer having responsibility for the overall operation of the regulated facility or activity or for environmental matters.
  - For a partnership or sole proprietorship, by a general partner or the proprietor.
  - For a municipal, state, federal or other public facility, by either a principal executive officer or by an individual having overall responsibility for environmental matters at the facility.

This completed form, along with the applicable permit fees, should be submitted to the appropriate Regional Office. Submittal of an incomplete application may result in the application being returned. Map of regional offices with addresses and phone numbers can be viewed on the web at [www.dnr.mo.gov/regions/ro-map.pdf](http://www.dnr.mo.gov/regions/ro-map.pdf). If there are any questions concerning this form, please contact the appropriate Regional Office or the Department of Natural Resources, Water Protection Program, Water Pollution Branch, NPDES Permits and Engineering Section at 573-751-6825.

MO 780-1512 (09/08)



Homestead, Mo.  
Wastewater Treatment Facility Description

The existing facility utilizes a Smith and Loveless "Oxigest" treatment process which is a suspended growth treatment system whereby the biological treatment occurs as the wastewater mixes with a biological mass of microorganisms suspended in with the wastewater.

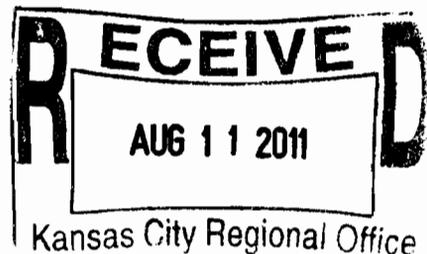
The influent wastewater enters the treatment basin through an inlet box with screening basket. The screening basket removes larger trash and debris from the wastewater flow prior to treatment.

The aeration chamber provides dissolved oxygen to the wastewater being treated.

The final stage of treatment of the wastewater occurs in the final clarifier. This process is utilized to remove and concentrate suspended solids remaining in the wastewater after the biological treatment has taken place in the aeration chamber. Waste sludge is transferred to the sludge holding basin for storage.

The sludge storage basin has a capacity of approximately 30,000 gallons. While the sludge is stored in the basin the organic matter continues to be treated through the process of digestion. Digestion is used to stabilize the organic matter in the sludge by oxidizing the biodegradable material over an extended period of time.

The City is currently evaluating viable alternatives to replace the existing treatment facility. One option being considered is to connect to the neighboring community of Excelsior Springs.



Homestead Village, MO.

Permit Violations

BOD – Nov. 2009

Dec. 2009

Mar. 2010

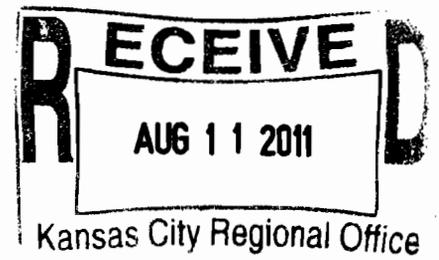
TSS – Feb. 2007

Nov. 2009

Oil & Grease – Mar. 2007

Apr. 2008

Fecal – Nov. 2009 – May 2011





Letters of Warning & Notices of Violation

Online Services  
 Contacts  
 Definitions

NOTICE TO USERS

The information that is searchable for Notices of Violation and Letters of Warning is updated daily and due to database issues, contains most but not all of the Notices of Violation and Letters of Warning issued by the Department.

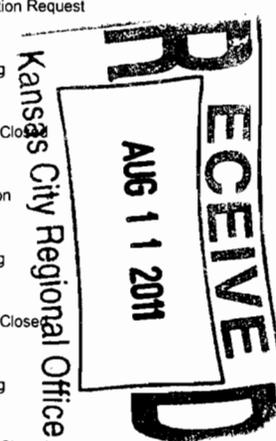
If you have questions about the information searched please contact the regional office that applies to your question. Click on the Contacts link above for information on the Department's Regional Offices.

Letters Of Warning & Notices Of Violation Search

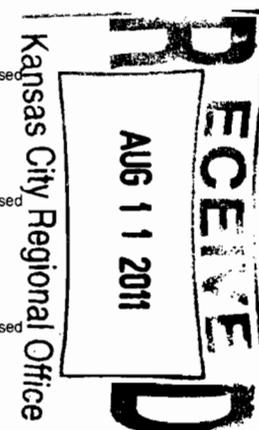
Search Criteria

Type: Inspection  
 Facility Name: homestead  
 City: All  
 Program: All  
 Zip Code:  
 County: RAY  
 Begin Date: mm/dd/yyyy  
 End Date: mm/dd/yyyy  
 Sort by: Facility Name

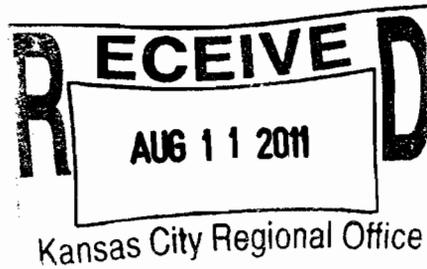
| Facility  | County | Program                       | Action Date | Action Taken               |
|---|--------|-------------------------------|-------------|----------------------------|
| HOMESTEAD VILLAGE WWTF<br>317 AHNER DR<br>EXCELSIOR SPRINGS, MO 64024       | RAY    | Water Pollution Control - WPP | 04/01/2002  | Enforcement Action Request |
| HOMESTEAD VILLAGE WWTF<br>317 AHNER DR<br>EXCELSIOR SPRINGS, MO 64024       | RAY    | Water Pollution Control - WPP | 07/22/2009  | Letter of Warning          |
| HOMESTEAD VILLAGE WWTF<br>317 AHNER DR<br>EXCELSIOR SPRINGS, MO 64024       | RAY    | Water Pollution Control - WPP | 07/22/2009  | Administratively Closed    |
| HOMESTEAD VILLAGE WWTF<br>317 AHNER DR<br>EXCELSIOR SPRINGS, MO 64024       | RAY    | Water Pollution Control - WPP | 11/15/2009  | Notice of Violation        |
| HOMESTEAD VILLAGE WWTF<br>317 AHNER DR<br>EXCELSIOR SPRINGS, MO 64024       | RAY    | Water Pollution Control - WPP | 12/23/2009  | Letter of Warning          |
| HOMESTEAD VILLAGE WWTF<br>317 AHNER DR<br>EXCELSIOR SPRINGS, MO 64024       | RAY    | Water Pollution Control - WPP | 12/23/2009  | Administratively Closed    |
| HOMESTEAD VILLAGE WWTF<br>317 AHNER DR<br>EXCELSIOR SPRINGS, MO 64024       | RAY    | Water Pollution Control - WPP | 03/24/2010  | Letter of Warning          |
| HOMESTEAD VILLAGE WWTF<br>317 AHNER DR<br>EXCELSIOR SPRINGS, MO 64024       | RAY    | Water Pollution Control - WPP | 03/24/2010  | Administratively Closed    |
| HOMESTEAD VILLAGE WWTF<br>317 AHNER DR<br>EXCELSIOR SPRINGS, MO 64024       | RAY    | Water Pollution Control - WPP | 03/24/2010  | Letter of Warning          |
| HOMESTEAD VILLAGE WWTF<br>317 AHNER DR<br>EXCELSIOR SPRINGS, MO 64024       | RAY    | Water Pollution Control - WPP | 03/24/2010  | Administratively Closed    |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN, MO 64024 | RAY    | Water Pollution Control - WPP | 04/28/2010  | Letter of Warning          |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN, MO 64024 | RAY    | Water Pollution Control - WPP | 04/28/2010  | Administratively Closed    |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN, MO 64024 | RAY    | Water Pollution Control - WPP | 06/03/2010  | Notice of Violation        |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN, MO 64024 | RAY    | Water Pollution Control - WPP | 06/29/2010  | Letter of Warning          |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN, MO 64024 | RAY    | Water Pollution Control - WPP | 06/29/2010  | Administratively Closed    |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN, MO 64024 | RAY    | Water Pollution Control - WPP | 07/29/2010  | Letter of Warning          |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN, MO 64024 | RAY    | Water Pollution Control - WPP | 07/29/2010  | Administratively Closed    |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN, MO 64024 | RAY    | Water Pollution Control - WPP | 07/29/2010  | Letter of Warning          |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN, MO 64024 | RAY    | Water Pollution Control - WPP | 07/29/2010  | Administratively Closed    |



|  |     |                               |            |                         |
|--|-----|-------------------------------|------------|-------------------------|
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN , MO 64024 | RAY | Water Pollution Control - WPP | 08/17/2010 | Return to Compliance    |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN , MO 64024 | RAY | Water Pollution Control - WPP | 09/01/2010 | Notice of Violation     |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN , MO 64024 | RAY | Water Pollution Control - WPP | 09/28/2010 | Letter of Warning       |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN , MO 64024 | RAY | Water Pollution Control - WPP | 09/28/2010 | Administratively Closed |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN , MO 64024 | RAY | Water Pollution Control - WPP | 09/28/2010 | Letter of Warning       |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN , MO 64024 | RAY | Water Pollution Control - WPP | 09/28/2010 | Administratively Closed |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN , MO 64024 | RAY | Water Pollution Control - WPP | 01/12/2011 | Letter of Warning       |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN , MO 64024 | RAY | Water Pollution Control - WPP | 01/12/2011 | Administratively Closed |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN , MO 64024 | RAY | Water Pollution Control - WPP | 01/12/2011 | Letter of Warning       |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN , MO 64024 | RAY | Water Pollution Control - WPP | 01/12/2011 | Administratively Closed |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN , MO 64024 | RAY | Water Pollution Control - WPP | 01/12/2011 | Letter of Warning       |
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| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN , MO 64024 | RAY | Water Pollution Control - WPP | 01/12/2011 | Administratively Closed |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN , MO 64024 | RAY | Water Pollution Control - WPP | 01/12/2011 | Letter of Warning       |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN , MO 64024 | RAY | Water Pollution Control - WPP | 01/12/2011 | Administratively Closed |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN , MO 64024 | RAY | Water Pollution Control - WPP | 06/14/2011 | Letter of Warning       |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN , MO 64024 | RAY | Water Pollution Control - WPP | 06/14/2011 | Administratively Closed |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN , MO 64024 | RAY | Water Pollution Control - WPP | 06/14/2011 | Letter of Warning       |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN , MO 64024 | RAY | Water Pollution Control - WPP | 06/14/2011 | Administratively Closed |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN , MO 64024 | RAY | Water Pollution Control - WPP | 06/24/2011 | Letter of Warning       |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN , MO 64024 | RAY | Water Pollution Control - WPP | 06/24/2011 | Administratively Closed |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN , MO 64024 | RAY | Water Pollution Control - WPP | 06/24/2011 | Letter of Warning       |
| HOMESTEAD VILLAGE WWTF<br>S END OF CHEROKEE DR<br>EXCELSIOR SPRIN , MO 64024 | RAY | Water Pollution Control - WPP | 06/24/2011 | Administratively Closed |



**LOCHNER**



H.W. Lochner, Inc.  
2335 East Crawford Street  
Salina, KS 67401

T 785.827.3603  
F 785.827.3029

[hwlochner.com](http://hwlochner.com)

August 5, 2011

Missouri Department of Natural Resources  
Kansas City Regional Office  
500 NE Colbern Road  
Lee's Summit, MO 64086-4710

Re: **Wastewater Treatment Facility Permit Application**  
Homestead Village, Mo

Enclosed please find one copy of the operating permit application for the City of Homestead Village's wastewater treatment facility.

Please feel free to contact me if you have any questions or need further information.

Sincerely,

**H.W. LOCHNER, INC.**

A handwritten signature in black ink, appearing to read "Chad Lawson". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Chad Lawson, P.E.  
Senior Project Manager  
Municipal Engineering

CRL/cl

Enclosures

Homestead Village WWTF  
Ray County  
MO-0056545

**FILE COPY**

STATE OF MISSOURI      Jeremiah W. (Jay) Nixon, Governor • Sara Parker Pauley, Director  
**DEPARTMENT OF NATURAL RESOURCES**

www.dnr.mo.gov

**SEP 07 2011**

CERTIFIED MAIL # 91 7108 2133 3939 0159 3911  
RETURN RECEIPT REQUESTED

City of Homestead Village  
Attn: The Honorable Mayor Frank James  
317 Ahner Drive  
Excelsior Springs, MO 64024

Dear Mayor James:

The Missouri Department of Natural Resources, Kansas City Regional Office received a Form B for renewal of the Homestead Village Wastewater Treatment Facility (WWTF) on August 11, 2011. The application was correctly completed; however, check #1509 for the amount of \$1,000.00 was submitted along with it in error.

The Homestead WWTF is a Publicly Owned Treatment Works (POTW) and is billed an annual operating fee based on the number of service connections. There is no fee required for permit renewal if annual operating fees are current. As no fees are currently due we are returning check #1509.

You will receive correspondence from a member of my staff once your permit renewal is assigned to a permit writer. If your permit is not renewed by the time of your current permit's expiration you are authorized to continue to operate under the expired permit until a new one is issued.

If you have any questions please call me at (816) 622-7051. Thank you.

Sincerely,

KANSAS CITY REGIONAL OFFICE



Jimmy Coles

JC/vj

Enclosure

RECEIVED  
AUG 11 2011



MISSOURI DEPARTMENT OF NATURAL RESOURCES  
WATER PROTECTION PROGRAM, WATER POLLUTION BRANCH  
**FORM B - APPLICATION FOR CONSTRUCTION OR OPERATING PERMIT FOR FACILITIES WHICH RECEIVE PRIMARILY DOMESTIC WASTE (≤100,000 gallons per day) UNDER MISSOURI CLEAN WATER LAW**

| FOR AGENCY USE ONLY |          |
|---------------------|----------|
| CHECK NUMBER        | 1509 LV  |
| DATE RECEIVED       | 8/11/11  |
| FEE SUBMITTED       | 1,000.00 |

**NOTE ▶ PLEASE READ THE ACCOMPANYING INSTRUCTIONS BEFORE COMPLETING THIS FORM**

1. This application is for:

- An operating permit and antidegradation review public notice.
- A construction permit following an appropriate operating permit and antidegradation review public notice.
- A construction permit and a concurrent operating permit and antidegradation review public notice.
- A construction permit (submitted before Aug. 30, 2008 or antidegradation review is not required).
- An operating permit for a new or unpermitted facility. Construction Permit # \_\_\_\_\_
- An operating permit renewal: Permit #MO- 0056545 Expiration Date 11/08/2011
- An operating permit modification: Permit #MO- Reason: \_\_\_\_\_

1.1 Is this a Federal/State Funded Project?  YES  NO Funding Agency/Project #: \_\_\_\_\_

1.2 Is the appropriate fee included with the application (See instructions for appropriate fee)?  YES  NO

**2. FACILITY (Outfall 001 of 001 )**

|   |                           |  |                   |
|---|---------------------------|--|-------------------|
| NAME<br>Homestead Village Wastewater Treatment Facility |                           | TELEPHONE WITH AREA CODE<br>(816) 559-3995 |                   |
| ADDRESS (PHYSICAL)<br>South End of Cherokee Drive       | CITY<br>Excelsior Springs | STATE<br>MO                                | ZIP CODE<br>64024 |

2.1 LEGAL DESCRIPTION: ¼, SW ¼, NE ¼, Sec. 31, T 53N, R 29W Ray County

2.2 UTM Coordinates Easting (X): 396570 Northing (Y): \_\_\_\_\_ 4357559  
For Universal Transverse Mercator (UTM), Zone 15 North referenced to North American Datum 1983 (NAD83)

2.3 Name of receiving stream: Unnamed tributary of East Fork of Fishing River

**3. OWNER**

|                                   |                           |  |                   |  |  |
|-----------------------------------|---------------------------|--|-------------------|--|--|
| NAME<br>City of Homestead Village |                           | E-MAIL ADDRESS<br>outlaw1255@gmail.com |                   | TELEPHONE WITH AREA CODE<br>(816) 559-3995 |  |
| ADDRESS<br>317 Ahner Drive        | CITY<br>Excelsior Springs | STATE<br>MO                            | ZIP CODE<br>64024 |  |  |

3.1 Request review of draft permit prior to Public Notice?  YES  NO

**4. CONTINUING AUTHORITY: Permanent organization which will serve as the continuing authority for the operation, maintenance and modernization of the facility.**

|                                   |                           |  |                   |
|-----------------------------------|---------------------------|--|-------------------|
| NAME<br>City of Homestead Village |                           | TELEPHONE WITH AREA CODE<br>(816) 559-3995 |                   |
| ADDRESS<br>317 Ahner Drive        | CITY<br>Excelsior Springs | STATE<br>MO                                | ZIP CODE<br>64024 |

**5. OPERATOR**

|                        |                            |  |
|------------------------|----------------------------|--|
| NAME<br>Dennis Aldrich | CERTIFICATE NUMBER<br>2364 | TELEPHONE WITH AREA CODE<br>816-678-1374 |
|------------------------|----------------------------|--|

**6. FACILITY CONTACT**

|                     |                |  |
|---------------------|----------------|--|
| NAME<br>Frank James | TITLE<br>Mayor | TELEPHONE WITH AREA CODE<br>(816) 559-3995 |
|---------------------|----------------|--|

**7.0 ADDITIONAL FACILITY INFORMATION**

7.1 Description of facilities (Attach additional sheet if required). Attach a 1" = 2,000' scale U.S. Geological Survey topographic map showing location of all outfalls and downstream landowners. (See Item 9.)

7.2 Facility SIC code: 4952; Discharge SIC code: \_\_\_\_\_; Facility NAICS code: 221320; Discharge NAICS code: \_\_\_\_\_

7.3 Number of people presently connected or population equivalent (P.E.): 182 Design P.E.: 200  
Number of units presently connected: Homes 12 Trailers 60 Apartments \_\_\_\_\_ Other \_\_\_\_\_  
Design flow for this outfall: 20000 Total design flow for the facility: 20000 Actual flow for this outfall: 25000  
Commercial Establishment: Daily number of employees working \_\_\_\_\_ Daily number of customers/guests \_\_\_\_\_

7.4 Length of pipe in the sewer collection system? 1500 feet/miles (Please denote which unit is appropriate.)

7.5 Does any bypassing occur in the collection system or at the treatment facility?  Yes  No (If yes, attach explanation.)

7.6 Does significant infiltration occur in the collection system?  Yes  No (If yes, attach explanation and proposed repair.)

7.7 Is industrial waste discharged to the facility identified in Item 2?  Yes  No (If yes, see instructions.)

7.8 Will the discharge be continuous through the year?  Yes  No  
a. Discharge will occur during the following months: January - December  
b. How many days of the week will the discharge occur? 7

7.9 Is wastewater land applied?  Yes  No (If yes, attach Form I.)

7.10 Will chlorine be added to the effluent?  Yes  No  
a. If chlorine is added, what is the resulting residual? \_\_\_\_\_ µg/l (micrograms per liter)

7.11 Does this facility discharge to a losing stream or sinkhole?  Yes  No

7.12 Attach a flow chart showing all influents, treatment facilities and outfalls.

7.13 Has a waste load allocation study been completed for this facility?  Yes  No

7.14 List all permit violations, including effluent limit exceedances in the last five years. Attach a separate sheet if necessary. If none, write none. Attached

CITY OF HOMESTEAD VILLAGE 07-02  
SEWER FUND  
317 AHNER DR.  
EXCELSIOR SPRINGS, MO 64024

80-660/1019  
049077

1509

DATE 6-27-11

PAY TO THE  
ORDER OF

Dept. of Natural Resources \$1,000.00

One thousand & 00/100 DOLLARS

Security Features  
Included  
Details on Back



MEMO Permit

Amisba Hauck

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