

**MUNICIPAL WASTEWATER-LAND APPLICATION PERMIT  
(Filtered, 2.2 Total Coliform System)  
LA-000186-01  
Stonebriar Subdivision**

**Stonebriar, Inc., 4810 Lakeshore Place, Boise, ID 83714, IS HEREBY**  
AUTHORIZED TO CONSTRUCT, INSTALL AND OPERATE A WASTEWATER-  
LAND APPLICATION TREATMENT SYSTEM IN ACCORDANCE WITH THE  
WASTEWATER-LAND APPLICATION RULES (IDAPA 58.01.17), THE WATER  
QUALITY STANDARDS AND WASTEWATER TREATMENT REQUIREMENTS  
(IDAPA 58.01.02), AND THE GROUND WATER QUALITY RULE (IDAPA  
58.01.11) AND ACCOMPANYING PERMIT APPENDICES AND REFERENCE  
DOCUMENTS. THIS PERMIT IS EFFECTIVE FROM THE DATE OF  
SIGNATURE AND EXPIRES ON **August 6, 2007.**

*Charles W. Quiss for SEW*

**Stephen West**  
**Boise Regional Office Administrator**  
**Idaho Department of Environmental Quality**

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**Date of Signature**

**DEPARTMENT OF ENVIRONMENTAL QUALITY**  
1445 North Orchard  
Boise, Idaho 83706-2239  
(208) 373-0550  
(208) 373-0287 fax

**POSTING ON SITE RECOMMENDED**

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The Sections, Appendices, and Reference Documents listed on this page are all elements of Wastewater-Land Application Permit and are enforceable as such. This permit does not relieve the permittee from responsibility for compliance with other applicable federal, state or local laws, rules, standards or ordinances.

### C. Facility Information

<b>Legal Name of Permittee</b>	Stonebriar, Inc.
<b>Type of Wastewater</b>	Municipal Wastewater
<b>Method of Treatment</b>	Sequencing Batch Reactor (biological treatment), coagulation, sand filtration, and UV disinfection. Effluent is discharged into on-site pond no. 5 and mixed with fresh irrigation and used as a source of irrigation water in areas approved by this permit
<b>Type of Facility</b>	Private
<b>Approved Application Areas</b>	Common areas adjacent to North Stonebriar Lane and designated open space on private lots 1 through 10.
<b>Facility Location</b>	Approximately $\frac{3}{4}$ of a mile east of Star Road, south of the Boise River
<b>Legal Location</b>	T4N, R1W, section 17
<b>County</b>	Ada
<b>USGS Quad</b>	Star
<b>Soils on Site</b>	0 to 2 feet: topsoil, dark brown sandy silt 2 to 3.5 feet: light brown to red-brown silty sand 3.5 to 5 feet: light gray, poorly graded sand with gravel
<b>Depth to Ground Water</b>	1.3 to 6 feet reported in permit application. Also, refer to Soils Investigation Report prepared by Materials Testing & Inspection, December 27, 2000
<b>Beneficial Uses of Ground Water</b>	Drinking water, agriculture
<b>Nearest Surface Water</b>	Boise River on northern boundary. The Lawrence Kennedy Canal and the Main Eureka Canal flow across the property
<b>Beneficial Uses of Surface Water</b>	Recreation, aquatic life, agriculture
<b>Facility Contact Person Mailing Address Phone/Fax Number</b>	Larry Shideler, President Stonebriar, Inc. 4810 Lakeshore Place Boise, Idaho 83703 (208) 377-9555 (208) 377-3014 fax

## **D. Site Map(s)**

1. Regional Map - Figure titled "Vicinity Map"
2. Site Map - Figure titled "Stonebriar Subdivision"
3. Detailed Site Map (see compliance activity CA-186-01)

**E. Environmental Monitoring Serial Numbers**  
**Computerized Data Reporting Serial Number Key**

<b>HYDRAULIC MANAGEMENT UNITS</b>	
<b>Description</b>	<b>Serial No.</b>
Vegetated landscape areas adjacent to North Stonebriar Lane and designated application areas on private lots, refer to Site Maps in Section D.	MU-018601

<b>WASTEWATER SAMPLING POINTS</b>	
<b>Description</b>	<b>Serial No.</b>
Influent to SBR treatment facility	WW-018601
Influent to UV disinfection system	WW-018602
Effluent discharge into pond no. 5	WW-018603
Irrigation water into pressure irrigation system	WW-018604

<b>SURFACE WATER SAMPLING POINTS</b>	
<b>Description</b>	<b>Serial No.</b>
Pond No. 5	SW-018601

<b>GROUND WATER MONITORING POINTS</b>	
<b>Description</b>	<b>Serial No.</b>
MW-1, southern portion of development (upgradient)	GW-018601
MW-2, north of pond no. 5 (downgradient)	GW-018602
MW-3, north of wastewater treatment system (downgradient)	GW-018603

Note: Refer to Section G., Compliance Activity CA-186-02 for ground water monitoring well requirements.

**F. Reference Documents Incorporated or to be Incorporated into the Permit**

- 1. Operation and Maintenance Manual (Plan of Operation)

## G. Compliance Schedule for Required Activities

The Activities in the following table shall be completed on or before the Completion Date unless modified by the DEQ in writing.

Compliance Activity Number Completion Date	Compliance Activity Description
<b>CA-186-01</b> <b>Prior to startup of pressure irrigation system</b>	<p>The Plan of Operations (Plan) dated October 29, 2001 shall be updated and submitted to the Department for review and approval prior to using reclaimed water in the pressure irrigation system. The updated plan shall include procedures and/or provisions required to meet the conditions specified in this permit.</p> <p>A detailed map showing the areas to be used by the pressure irrigation system containing reclaimed water shall be provided in the Plan.</p> <p>The Plan shall include irrigation schedules to address the shallow soil and ground water conditions present at this site.</p>
<b>CA-186-02</b> <b>Prior to startup of pressure irrigation system</b>	<p>Submit plans to the Department for review and approval for a minimum of three (3) shallow ground water monitoring wells. The monitoring wells shall be located in the following locations:</p> <ol style="list-style-type: none"> <li>1. Southern portion of the development (upgradient);</li> <li>2. North of pond no. 5 (downgradient); and</li> <li>3. North of the wastewater treatment system (downgradient).</li> </ol> <p>Upon approval, the wells shall be installed prior to startup of the pressure irrigation system.</p>

## H. Permit Limits and Conditions (Filtered, 2.2 Total Coliform System)

- 1) The Permittee is allowed to apply reclaimed water as prescribed in the tables below and in accordance with all other applicable permit conditions and schedules.

Category	Permitted Limits and Conditions			
<b>Type of Wastewater</b>	Domestic wastewater shall be oxidized, coagulated, clarified, filtered or treated by an equivalent process and disinfected so the median number of total coliform organisms does not exceed 2.2 per 100 milliliters prior to discharge into pond no. 5			
<b>Application Season</b>	Growing Season only, March 1 through October 31.			
<b>Irrigation Scheduling</b>	Reclaimed water locations where frequent human contact could occur shall be irrigated during periods of limited use.			
<b>Maximum Hydraulic Loading Rate, Growing Season (includes reclaimed water and supplemental irrigation water, if used)</b>	<p>For non-harvested vegetation or common area vegetation: The irrigation rates and schedules shall comply with those specified in the plan of operation.</p> <p>For harvested crops: Growing Season (GS) Hydraulic Loading Rate shall be no greater than the Irrigation Water Requirement (IWR) using data from the tables of the following University Of Idaho web site:  <a href="http://www.kimberly.uidaho.edu/water/appndxet/index.shtml">http://www.kimberly.uidaho.edu/water/appndxet/index.shtml</a>                      IWR is equal to the Mean IR data from these tables divided by the irrigation system efficiency. In lieu of these tables, current climatic and evaporation data, or 30-year average data may be used to calculate the IWR, as defined in the 1994 Technical Interpretive Supplement, pages IV-6 and IV-7. Assume no carryover soil moisture and a leaching rate of zero in calculating the IWR. Application shall generally follow consumptive use rates for the crop throughout the season.</p>			
<b>Posting Requirements and Access Restrictions</b>	<ol style="list-style-type: none"> <li>1. Ponds containing reclaimed water (ponds 4, 5, 8 and 10) shall be posted: "This Pond Contains Reclaimed Water, Do Not Enter" or equivalent.</li> <li>2. All access points to the pressure irrigation system containing reclaimed water shall be identified with appropriate warning signs and access to the pressure irrigation system shall be controlled to prevent use by individual lot owners.</li> </ol>			
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">Stonebriar Inc., Permit LA-000186-01</td> <td style="width: 20%; text-align: center;">May 21, 2002</td> <td style="width: 30%; text-align: center;">Page 8</td> </tr> </table>		Stonebriar Inc., Permit LA-000186-01	May 21, 2002	Page 8
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## H. Permit Limits and Conditions (Filtered, 2.2 Total Coliform System)

Category	Permitted Limits and Conditions
<b>Downgradient Ground Water Quality</b>	Ground water quality shall be in compliance with the <i>Idaho Ground Water Quality Rule</i> IDAPA 58.01.11.
<b>Initial Notification Requirements</b>	<p>The permittee shall provide the following written notification to all new homeowners:</p> <ol style="list-style-type: none"> <li>1. The pressure irrigation system may contain reclaimed water;</li> <li>2. The pressure irrigation system is under the control of the wastewater treatment management company;</li> <li>3. Homeowners are not allowed to access the pressure irrigation system.</li> </ol>
<b>Additional Notification Requirements</b>	The permittee shall provide written notification to all homeowners <b>if</b> the E.coli bacterium in any single sample for the pressure irrigation water exceeds 406 organisms per 100 ml. At a minimum, the notification shall include the E.coli sample results, the state surface water quality criteria, and provide warning to avoid any contact with the water delivered in the pressure irrigation system or the ponds containing reclaimed water.
<b>Buffer Zones</b>	<p>The following minimum distances shall be provided between areas using reclaimed water and</p> <p>Domestic water wells:           100 feet</p> <p>Municipal water wells:           Site specific (requires DEQ plan and specification review prior to construction)</p> <p>Surface water:                    0 feet (BMPs to prevent runoff into surface water are required)</p> <p>Residences:                        No application within the building pad areas on individual lots</p> <p>Public Access Areas:            0 feet</p>
<b>Grazing</b>	Grazing is allowed only in conformance with DEQ approved grazing management plan.

## H. Permit Limits and Conditions (Filtered, 2.2 Total Coliform System)

Wastewater Treatment System Requirements	Permitted Limits and Conditions
<b>Influent Flow Rate</b>	Daily influent flow rate shall not exceed 6,000 gpd
<b>Filtration System Requirements (prior to disinfection)</b>	<p>The 24-hour average turbidity shall not exceed 2 NTU (Nephelometric Turbidity Units) and the maximum turbidity shall not exceed 5 NTU.</p> <p>The turbidity shall be continuously monitored prior to disinfection. At a turbidity of 5 NTU or greater, effluent shall be recycled to the SBR treatment system.</p>
<b>Disinfection</b>	Prior to discharge into pond no. 5, the median number of total coliform bacteria shall not exceed 2.2 organisms per 100 milliliters as determined from the results of the last three days for which analyses have been completed. No single sample result shall exceed 23 organisms per 100 milliliters.
<b>Effluent Quality, BOD<sub>5</sub></b>	The monthly average BOD <sub>5</sub> shall not exceed 5 mg/l. The weekly average BOD <sub>5</sub> shall not exceed 7.5 mg/l.
<b>Effluent Quality, Total Suspended Solids (TSS)</b>	The monthly average TSS shall not exceed 5 mg/l. The weekly average TSS shall not exceed 7.5 mg/l.
<b>Effluent Quality, Total Phosphorous</b>	The monthly average total phosphorous shall not exceed 3 mg/l.

## I. Monitoring Requirements (Filtered, 2.2 Total Coliform System)

- 1) Appropriate analytical methods, as given in the *Handbook for Land Application of Municipal and Industrial Wastewater, April 1996*, or as approved by the Idaho Department of Environmental Quality (hereinafter referred to as DEQ), shall be employed. A description of approved sample collection methods, appropriate analytical methods and companion QA/QC protocol shall be included in the Operation and Maintenance Manual.
- 2) The permittee shall monitor and measure parameters as stated in the Facility Monitoring Schedule in this section. Samples shall be collected at times and locations that represent typical environmental and process parameters being monitored.
- 3) Monitoring locations are described in Section E. Environmental Monitoring Serial Numbers.
- 4) Ground water monitoring wells shall be purged a minimum of three (3) casing volumes prior to obtaining a sample of ground water. The static water level shall be measured prior to pumping or sampling the ground water.

Facility Monitoring Schedule

Frequency	Monitoring Point	Description and Type of Monitoring	Parameters
Daily	Final effluent into pond no. 5	Volume	Report in gallons per month
Continuous	Influent to UV disinfection system	Continuous in-line analyzer and recorder	Turbidity , NTU Report daily average and daily maximum
3 times per week	Final effluent into pond no. 5	Grab sample	Total Coliform
Weekly	Final effluent into pond no. 5	Composite sample	BOD <sub>5</sub> , Total Suspended Solids
Monthly	Influent to SBR treatment facility	Composite sample	BOD <sub>5</sub> , Total Suspended Solids
Monthly	Final effluent into pond no. 5	Composite sample	Total Kjeldahl Nitrogen, Nitrate-Nitrogen, Total Phosphorous
Three time per year (Mar, Jul, Oct)	Ground water monitoring wells	Grab sample, see note 4	Nitrate-Nitrogen, Total Phosphorous, Total Dissolved Solids
Annually (March)	Pond no. 5	Grab sample	Total Phosphorous
Annually (March)	Irrigation water delivered in the pressure irrigation (PI) system	Grab sample from pump discharge	Total Kjeldahl Nitrogen, Nitrate-Nitrogen, Total Phosphorous
Annually prior to PI system startup and monthly during the irrigation season	Pressure irrigation system source water	Grab sample from PI source water	E.coli bacteria

## **J. Reporting Requirements (Filtered, 2.2 Total Coliform System)**

The permittee shall submit an Annual Wastewater-Land Application Site Performance Report ("Annual Report") prepared by a competent environmental professional no later than January 31 of each year which shall cover the previous year from January 1 through December 31. The Annual Report shall include results for monitoring required in Section I, status of compliance activities in Section G, and an interpretive discussion of monitoring data.

Note: If the permittee monitors any parameter more frequently than required by this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the annual report.

## K. Standard Permit Conditions: Procedures and Reporting

1. The permittee shall at all times properly maintain and operate all structures, systems, and equipment for treatment, operational controls and monitoring, which are installed or used by the permittee to comply with all conditions of the permit or the Wastewater-Land Application Permit Regulations, in conformance with a DEQ approved, current Plan of Operations (Operations and Maintenance Manual) which describes in detail the operation, maintenance, and management of the wastewater treatment system. This Plan of Operations shall be updated as necessary to reflect current operations.
2. Wastewater(s) or recharge waters applied to the land surface must be restricted to the premises of the application site unless permission has been obtained from the DEQ authorizing a discharge into the waters of the State as stated in IDAPA 58.01.02.600.02.
3. Wastewater must not create a public health hazard or nuisance condition as stated in IDAPA 58.01.02.600.03. In order to prevent public health hazards and nuisance conditions the permittee shall:
  - a. Apply wastewater as evenly as practicable to the treatment area;
  - b. Prevent organic solids (contained in the wastewater) from accumulating on the ground surface to the point where the solids putrefy or support vectors or insects; and
  - c. Prevent wastewater from ponding in the fields to the point where the ponded wastewater putrefies or supports vectors or insects.
4. The permittee shall:
  - a. Manage the wastewater land application treatment site as an agronomic operation where vegetative cover is grown and harvested or grazed to utilize the nutrients and minerals in the wastewater, and,
  - b. Not hydraulically overload any particular areas of the wastewater land application treatment site.
5. All waste solids, including dredgings and sludges, shall be utilized or disposed in a manner which will prevent their entry, or the entry of contaminated drainage or leachate therefrom, into the waters of the state such that health hazards and nuisance conditions are not created; and to prevent impacts on designated beneficial uses of the ground water and surface water. The permittee's management of waste solids shall be governed by the terms of the DEQ approved Waste Solids Management Plan, which upon approval shall be an enforceable portion of this permit.
6. If the permittee intends to continue operation of the permitted facility after the expiration of an existing permit, the permittee shall apply for a new permit at least six months prior to the expiration date of the existing permit in accordance with the Waste Water Land Application Permit Regulations and include seepage tests on all lagoons per latest DEQ procedures.
7. The permittee shall allow the Director of the Idaho Department of Environmental Quality or the Director's designee (hereinafter referred to as Director), consistent with Title 39, Chapter 1, Idaho Code, to:
  - a. Enter the permitted facility,
  - b. Inspect any records that must be kept under the conditions of the permit.
  - c. Inspect any facility, equipment, practice, or operation permitted or required by the permit.
  - d. Sample or monitor for the purpose of assuring permit compliance, any substance or any parameter at the facility.
8. The permittee shall report to the Director under the circumstances and in the manner specified in this section:
  - a. In writing thirty (30) days before any planned physical alteration or addition to the permitted facility or activity if that alteration or addition would result in any significant change in information that was submitted during the permit application process.
  - b. In writing thirty (30) days before any anticipated change which would result in non-compliance with any permit condition or these regulations.
  - c. Orally within twenty-four (24) hours from the time the permittee became aware of any non-compliance which may endanger the public health or the environment at telephone numbers provided in the permit by the Director (see below)

DEQ Regional Office: see Permit Certificate  
Emergency 24 Hour Number 1-800-632-8000

## **K. Standard Permit Conditions: Procedures and Reporting**

- d. In writing as soon as possible but within five (5) days of the date the permittee knows or should know of any on-compliance unless extended by the DEQ. This report shall contain:
    - i. A description of the non-compliance and its cause;
    - ii. The period of non-compliance including to the extent possible, times and dates and, if the non-compliance has not been corrected, the anticipated time it is expected to continue; and
    - iii. Steps taken or planned to reduce or eliminate reoccurrence of the non-compliance.
  - e. In writing as soon as possible after the permittee becomes aware of relevant facts not submitted or incorrect information submitted, in a permit application or any report to the Director. Those facts or the correct information shall be included as a part of this report.
9. The permittee shall take all necessary actions to prevent or eliminate any adverse impact on the public health or the environment resulting from permit noncompliance.
  10. The permittee shall determine (on an on-going basis) if any noxious weed problems relate to the permitted sites. If problems are present, coordinate with the Idaho Department of Agriculture or the local County authority regarding their requirements for noxious weed control. Also address these control operations in an update to the Operations and Maintenance Manual.

## L. Standard Permit Conditions: Modifications, Violations, and Revocations

1. The permittee shall furnish to the Director within reasonable time, any information including copies of records, which may be requested by the Director to determine whether cause exists for modifying, revoking, re-issuing, or terminating the permit, or to determine compliance with the permit or these regulations.
2. Both minor and major modifications may be made to this permit as stated in IDAPA 58.01.17.700.01 and 02 with respect to any conditions stated in this permit upon review and approval of the DEQ.
3. Whenever a facility expansion, production increase or process modification is anticipated which will result in a change in the character of pollutants to be discharged or which will result in a new or increased discharge that will exceed the conditions of this permit, or if it is determined by the DEQ that the terms or conditions of the permit must be modified in order to adequately protect the public health or environment, a request for either major or minor modifications must be submitted together with the reports as described in G. Reporting Requirements, and plans and specifications for the proposed changes. No such facility expansion, production increase or process modification shall be made until plans have been reviewed and approved by the DEQ and a new permit or permit modification has been issued.
4. Permits shall be transferable to a new owner or operator provided that the permittee notifies the Director by requesting a minor modification of the permit before the date of transfer.
5. Any person violating any provision of the Waste Water Land Application Permit Regulations, or any permit or order issued thereunder shall be liable for a civil penalty not to exceed ten thousand dollars (\$10,000) or one thousand dollars (\$1,000) for each day of a continuing violation, whichever is greater. In addition, pursuant to Title 39, Chapter 1, Idaho Code, any willful or negligent violation may constitute a misdemeanor.
6. The Director may revoke a permit if the permittee violates any permit condition or the Wastewater Land Application Permit Regulations.
7. Except in cases of emergency, the Director shall issue a written notice of intent to revoke to the permittee prior to final revocation. Revocation shall become final within twenty (20) days of receipt of the notice by the permittee, unless within that time the permittee request an administrative hearing in writing to the Director.
8. The Director shall notify the permittee in writing of any revocation hearing at least twenty (20) days prior to the date set for such hearing. The hearing shall be conducted in accordance with Title 67, Chapter 52, Idaho Code.
9. If, pursuant to Idaho Code § 67-5247, the Director finds the public health, safety or welfare requires emergency action, the Director shall incorporate findings in support of such action in a written notice of emergency revocation issued to the permittee. Emergency revocation shall be effective upon receipt by the permittee. Thereafter, if requested by the permittee in writing the Director shall provide the permittee a revocation hearing and prior notice thereof. Such hearings shall be conducted in accordance with Title 67, Chapter 52, Idaho Code.
10. The provisions of this permit are severable and if a provision or its application is declared invalid or unenforceable for any reason, that declaration will not affect the validity or enforceability of the remaining provisions.
11. The permittee shall notify the DEQ at least six (6) months prior to permanently removing any permitted land application site from service. Prior to commencing site closure activities, the permittee shall: a) participate in a pre-site closure meeting with the DEQ; b) develop a site closure plan that identifies specific closure or cleanup tasks with scheduled task completion dates in accordance with agreements made at the pre-site closure meeting; and c) submit the completed site closure plan to the DEQ for review and approval within forty-five (45) days of the pre-site closure meeting. The permittee must complete the DEQ approved site closure plan.