In compliance with the provisions of the Utah Water Quality Act, Title 19, Chapter 5, Utah Code Annotated 1953, as amended, the Act,

Circle Four Farms  
P. O. Box 100  
Milford, UT 84751

is granted a renewed ground water discharge permit for the operation of the Smithfield BioEnergy Plant and a Collection System for twenty-three existing finisher farm sites. This permit is for the construction and operation of an Anaerobic Digester System for all finisher farms in the Skyline Farm Complex. These farm sites and their anaerobic lagoons are still covered under the existing permit UGW010002. The Smithfield BioEnergy Plant is located in the SW ¼ of the SE ¼ of Section 4, Township 30 South, Range 11 West, Salt Lake Base & Meridian, approximately ten miles west of Minersville, Utah. This operation is permitted as an experimental alternative treatment method.

The permit is based on representations made by the permittee and other information contained in the administrative record. It is the responsibility of the permittee to read and understand all provisions of this permit.

The Facilities shall be operated in accordance with conditions set forth in the permit and the Utah Administrative Rules for Ground Water Quality Protection (R317-6).

This permit shall become effective on July 26, 2008.

This permit and authorization to operate shall expire at midnight on July 26, 2013.

Signed this 15th day of July 2008.

________________________________________  ______________________
Walter L. Baker, P.E.  
Executive Secretary  
Utah Water Quality Board
TABLE OF CONTENTS

PART I. SPECIFIC CONDITIONS ..............................................................................................................................1
A. GROUND WATER CLASSIFICATION ..............................................................................................................1
B. BACKGROUND WATER QUALITY ..................................................................................................................1
C. GROUND WATER PROTECTION/COMPLIANCE LEVELS .............................................................................1
D. BEST AVAILABLE TECHNOLOGY AND PERFORMANCE STANDARD ..................................................1
   1. Best Available Technology ......................................................................................................................1
   2. Performance Standard for Best Available Technology ...........................................................................4
   3. Closure Plan .........................................................................................................................................5
   4. Supplemental Organic Feedstocks (SOF) ..............................................................................................5
E. COMPLIANCE MONITORING ..........................................................................................................................6
   1. Compliance Monitoring Wells ................................................................................................................6
   2. Monitoring Period ...................................................................................................................................7
   3. Monitoring Requirements ......................................................................................................................7
   4. Protection and Compliance Levels ........................................................................................................7
   5. Monitoring Details ..................................................................................................................................8
F. NON-COMPLIANCE STATUS ..........................................................................................................................9
   1. Probable Noncompliance Status .............................................................................................................9
   2. Out-of-Compliance Status ......................................................................................................................10
   3. Failure to Maintain Best Available Technology Required by Permit ................................................10
   4. Additional Notification ..........................................................................................................................11
   5. Contingency Plan ..................................................................................................................................11
G. COMPLIANCE SCHEDULE ............................................................................................................................11

PART II. REPORTING REQUIREMENTS ................................................................................................................13
A. REPORTING ADDRESS ...............................................................................................................................13
B. SEMI-ANNUAL GROUND WATER QUALITY MONITORING REPORT ......................................................13
   1. Report Submission Schedule ................................................................................................................13
   2. Report Contents .......................................................................................................................................13
C. ANNUAL LAGOON PERFORMANCE MONITORING REPORT .....................................................................14
D. SLUDGE PROFILE MONITORING REPORT ................................................................................................14
E. PROBABLE NONCOMPLIANCE AND NONCOMPLIANCE REPORTING ..................................................14
F. DAMAGE TO MONITORING WELLS AND REVERSAL OF HYDRAULIC GRADIENT ................................15
G. FAILURE OF BEST AVAILABLE TECHNOLOGY REPORTING ..............................................................15
H. REPRESENTATIVE SAMPLING ....................................................................................................................15
I. ANALYTICAL PROCEDURES ......................................................................................................................15
J. PENALTIES FOR TAMPERING ....................................................................................................................15
K. COMPLIANCE SCHEDULES ......................................................................................................................16
L. RECORDS CONTENTS .................................................................................................................................16
M. RETENTION OF RECORDS .......................................................................................................................16
N. INSPECTION AND ENTRY ............................................................................................................................16
O. Electronic Filing Requirements ..................................................................................................................16

PART III. COMPLIANCE RESPONSIBILITIES ....................................................................................................17
A. DUTY TO COMPLY .....................................................................................................................................17
B. PENALTIES FOR VIOLATIONS OF PERMIT CONDITIONS ........................................................................17
C. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE .....................................................................17
D. DUTY TO MITIGATE ..................................................................................................................................17
E. PROPER OPERATION AND MAINTENANCE .............................................................................................17

ii
PART IV. GENERAL REQUIREMENTS ................................................................................................................18
A. PLANNED CHANGES ........................................................................................................................................18
B. ANTICIPATED NONCOMPLIANCE..........................................................................................................................18
C. PERMIT ACTIONS .............................................................................................................................................18
D. DUTY TO REAPPLY ..........................................................................................................................................18
E. DUTY TO PROVIDE INFORMATION ..................................................................................................................18
F. OTHER INFORMATION ......................................................................................................................................18
G. SIGNATORY REQUIREMENTS ...........................................................................................................................18
H. PENALTIES FOR FALSIFICATION OF REPORTS ..............................................................................................19
I. AVAILABILITY OF REPORTS ..............................................................................................................................20
J. PROPERTY RIGHTS ...........................................................................................................................................20
K. SEVERABILITY ..................................................................................................................................................20
L. TRANSFERS .....................................................................................................................................................20
M. STATE LAWS ..................................................................................................................................................20
N. REOPENER PROVISIONS ................................................................................................................................20

Appendix I  Compliance Monitoring Well Background and Protection / Compliance Level

Appendix II  Monitoring Well Locations

Applicable Circle Four Farms Operations Documents for this permit include but are not limited to:

Collection System and SBE Plant Operation and Maintenance Manual

Circle Four Farms Sampling and Analysis Plan

Anaerobic Lagoon Systems Operation and Maintenance Manual

Spill Prevention and Response Manual

Sludge Disposal and Farm Closure Plan

Nutrient Management Plan for Land Application
PART I. SPECIFIC CONDITIONS

A. GROUND WATER CLASSIFICATION

Ground water class as defined in UAC R317-6-4 is indicated for each farm site in Appendix I of Permit No. UGW010002. Ground water class for the Smithfield BioEnergy (SBE) Plant is presented in Appendix I of this permit. Ground water classification is determined through background ground water monitoring in the monitoring wells associated with the SBE plant and containment basins.

B. BACKGROUND WATER QUALITY

Ground water quality information at the SBE Plant is presented in Appendix I of this permit. All parameters in Appendix I are in units of mg/l, except pH. Background is defined as the mean concentration in the well during the background monitoring period. Background water quality information for finisher farm sites is presented in Appendix I of Permit No. UGW010002.

C. GROUND WATER PROTECTION/COMPLIANCE LEVELS

Protection/compliance levels for SBE Plant are presented in Appendix I of this permit. Protection levels are based on background sampling performed to date and on the requirements of the criteria of UAC R317-6-4. Compliance levels are based on the greater of the protection level or the background mean plus twice the standard deviation. Ground water protection and compliance levels for each farm site are presented in Appendix I of Permit No. UGW010002.

D. BEST AVAILABLE TECHNOLOGY AND PERFORMANCE STANDARD

1. Best Available Technology

The administration of this permit is founded on the use of best available treatment technology, in accordance with the requirements of UAC R317-6-1.3 and UAC R317-3-2 through 3-6 and 3-9.

The construction permit for the SBE Plant that describes construction standards for the collection and treatment system for finisher farms was issued on July 25, 2003. The SBE Plant includes anaerobic digesters for treatment and a biogas production facility. The project was completed in two phases, Phase I and II. Farm sites included in each phase are listed in Table 1.

<table>
<thead>
<tr>
<th></th>
<th>Layout</th>
<th>Farm Sites</th>
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<tbody>
<tr>
<td>Phase I</td>
<td>East Skyline Layout</td>
<td>41311 through 41314</td>
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<tr>
<td></td>
<td>Central Skyline Layout</td>
<td>41306 through 41308</td>
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<td></td>
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<td>41315 &amp; 41322</td>
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<tr>
<td>Phase II</td>
<td>West Skyline Layout</td>
<td>41316 through 41321</td>
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<td></td>
<td>North Skyline Layout</td>
<td>41301 through 41305</td>
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</tbody>
</table>

Construction standards for the existing anaerobic lagoon treatment systems for these finisher farm sites are detailed in the construction permits. The construction permits associated with each farm site are listed in Table 2.
TABLE 2

<table>
<thead>
<tr>
<th>Construction Permits for Anaerobic Lagoon Systems</th>
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</thead>
<tbody>
<tr>
<td><strong>Farm Sites</strong></td>
</tr>
<tr>
<td>41302, 41303, 41304, 41305</td>
</tr>
<tr>
<td>41306 through 41315</td>
</tr>
<tr>
<td>41316 through 41323</td>
</tr>
<tr>
<td><strong>Construction Permit Issued</strong></td>
</tr>
<tr>
<td>August 10, 1995</td>
</tr>
<tr>
<td>May 13, 1996</td>
</tr>
<tr>
<td>July 1, 1997</td>
</tr>
</tbody>
</table>

BAT Description for Collection System and SBE Plant

The hog waste can be collected from all of the finisher farms that are located in the Skyline Farm Complex. The manure is conveyed through a Collection System to the SBE Plant. Prior to anaerobic digester treatment, manure is concentrated in a gravity thickener tanks. The underflow from the gravity thickener tanks is conveyed to the digesters for treatment and for biogas production. The biogas is collected and conveyed to a biomethanol conversion plant. The effluent from the SBE Plant is conveyed back to the existing primary lagoons. A diversion valve connection is installed to either allow the wastewater from the recharge pits to continue to flow into the existing anaerobic lagoon system, or to be diverted into the buffer basins for treatment in the SBE Plant.

Collection System The system is designed to transfer wastewater from each farm site to the SBE Plant. The collection system from most farms consists of on-farm buffer basin and concrete wet-well pump station usually adjacent to each existing primary lagoon, four inflow equalization basins adjacent to lagoon systems and conveyance pipelines.

**On-farm Buffer Basin** – is installed adjacent to each existing primary lagoon of farm sites included in the Central, East and North Skyline layouts. Wastewater is conveyed from recharge pits to the on-farm buffer basin. The buffer basin will have a total depth of 13.5 or 11.1 feet depending on its location. All of the buffer basins are lined with a 60-mil with flexible membrane liners (FML) made of high-density polyethylene (HDPE). A 6-inch pipe in the bottom of the basin will flow wastewater by gravity to the adjacent wet-well pump station. Wastewater from farms located in West Skyline, except site 41318, will gravity flow to the West Skyline inflow equalization basin.

**Wet-Well Pump Station** – The wet well is constructed adjacent to each buffer basin to transfer wastewater from the buffer basin to the inflow equalization basin. Each wet well will usually have a total depth of 18 or 16 feet depending on its location and a precast concrete manhole with a minimum concrete strength of 4,000 psi.

**Inflow Equalization Basin (IEB)** – Central, East, North and West Skyline collection systems have IEBs located adjacent to the existing anaerobic lagoon systems of sites 41306, 41312, 41303 and 41317 respectively. The IEB at Central skyline will also be utilized as on-farm buffer basin for site 41306. The Central, West and the East IEBs will each have a total depth of 22 feet. The North IEB will have a total depth of 17.5 feet. All of the IEBs are lined with a 60-mil HDPE liner.

**Conveyance Pipelines** – SDR 17 HDPE pipelines are installed to convey wastewater to and from the SBE Plant. The pipelines will have a sewage air release valves spaced at
2,500 feet to prevent air locks in the collection pipelines.

SBE Plant The plant consists of four influent manholes, four gravity thickener tanks, four anaerobic digesters, four effluent equalization basins and four effluent return pump stations. All facilities in the SBE Plant shall be covered, except the gravity thickeners, to capture any biogas and potentially odorous gases.

Influent Manholes – force main pipelines from the set of farms will enter HDPE manholes prior to flowing into the gravity thickeners. Each manhole will have a diameter of 5 feet and a maximum water depth of 10 feet, a reinforced concrete floor thickness of 12 inches, and a wall thickness of 1.5 inches with a minimum concrete strength of 4,000 psi. Potentially odorous off gases shall be collected and treated from the manholes and conveyed to off-gas scrubbers.

Gravity Thickener – is an uncovered circular concrete tank that receives wastewater flows from the influent manhole. The gravity thickeners also hold scum from discharging with the supernatant liquid. This is accomplished by means of a baffle and weir system. Scum then collects on the exposed water surface of the thickener and is skimmed by a skimmer arm into a scum collection box and conveyed to join the thickener underflow to be digested. The thickener separates the wastewater into underflow and supernatant. Each thickener will have maximum liquid depth of 16 feet, a reinforced concrete floor thickness of 12 inches, and a wall thickness of 12 inches with a minimum concrete strength of 4,000 psi. Three of the thickeners will each have a diameter of 65 feet and one thickener will have a diameter of 50 feet.

Anaerobic Digester – thickened underflow from the bottom of gravity thickener is pumped to the digester for treatment. Each digester will have a maximum water depth of 34 feet. All of the digesters are lined with a 60-mil HDPE. Each digester shall be covered with a gas-tight floating HDPE cover to capture biogas. Biogas is extracted from under the cover with biogas blowers and discharged into the biomethanol plant.

Return Equalization Basin (REB) – will receive supernatant from the digesters. Each REB will have a maximum water depth of 7 feet. All REBs shall be lined with a 60-mil HDPE plastic liner. The REB shall be covered with a gas-tight floating HDPE cover to capture any biogas release.

Effluent Return Pump Station (ERPS) – is a PVC lined concrete wet-well that is located between each REB and the gravity thickeners and receives flow from REB. Supernatant from the gravity thickener will also enter this pump station where it will mix with REB flow and be pumped back to the primary lagoons at each farm site. Each ERPS will have a maximum water depth of 10 feet and a reinforced concrete floor thickness of 10 inches and a wall thickness of 8 inches with a minimum concrete strength of 4,000 psi. The ERPS are enclosed. Potentially odorous off gases shall be collected and treated from the return pumping stations and conveyed to off-gas scrubbers.

Wastewater Evaporation Basin – to evaporate excess SBE Plant process water.

Wastes from the hog-raising operations may be treated in the SBE Plant. Wastes from outside sources may be supplemented to enhance biogas production in the digesters. Wastewater from the unit basins or digesters may be land-applied on an emergency basis. Land application may only occur at or below the agronomic rate according to the most recently revised and approved
version of the Nutrient Management Plan (NMP) for Land Application. For the purposes of this permit, the agronomic rate is defined as the rate where all available nitrogen is taken up by crops or other plants before it can leach below the root zone, and where other waste constituents are applied at rates that do not cause ground or surface water pollution or plant toxicity incompatible with the intended use of the land. Emergency waste generated as a result of significant spills, the clean up of a contamination event, or the necessary removal of waste from the facility to allow the investigation of a possible leak or to perform repairs may be land applied in accordance with the NMP.

2. Performance Standard for Best Available Technology

Compliance with the requirements for use of best available technology (BAT) shall be demonstrated by construction, maintenance and operation of the collection and the digester systems according to the construction permits issued for with this permit.

a) *Basin and Digester Liner* BAT will also be demonstrated by maintaining a performing seepage rate at any point on the liner which is no greater than that provided by one foot of clay with permeability in the order of $1 \times 10^{-7}$ cm/sec. Performance of the liners shall be evaluated for compliance by the monitoring required in Part I.E. Liner integrity was verified prior to operation with the approved construction quality assurance/quality control (QA/QC) plans contained in the application for this permit.

The liner integrity must be maintained. Deterioration of materials or any other situation that prevents the liner from functioning according to the approved design shall constitute non-compliance with this permit. After completion of construction, synthetic liners must remain in contact with the prepared soil base of the basins and digesters. Adequate slack and ballast will also be provided if necessary, to minimize stresses and suspensions of the liner at the toe of the dikes due to variations in ambient temperature and incident solar radiation. Any large suspensions or billowing of synthetic liner is considered a failure of this performance standard. The formation of bulges or “whales” in the liner when the basins or digesters contain water is an indication of a leak in the liner. When whales form in the liner, the liner must be repaired in an expeditious manner. Impact to the underlying soils must be assessed in conformance with the provisions detailed in the most recently revised and approved version of the Spill Prevention and Response Plan.

b) *Collection System and SBE Plant Operation* The performance standard for collection system and SBE Plant is based on operating and maintaining the systems in a manner consistent with the design criteria detailed in the construction permit. The collection system and SBE Plant must be operated in accordance with the most recently revised and approved Collection System and SBE Plant Operation and Maintenance Manual, which has been developed by the permittee. Performance of the collection system and the central plant shall be demonstrated by the monitoring specified in Part I.E.5.b.

The gravity thickeners were installed without covers. The impact of odor production from uncovered gravity thickeners in the SBE Plant must be closely monitored and periodically evaluated by Circle Four. In the event of production of objectionable odor from the SBE Plant, Circle Four will be required to cover the gravity thickeners or to install other effective facilities to correct the odor problem. Covers or other appropriate freezing prevention methodologies will also be required if freezing impairs the proper operation of the thickeners. Circle Four will submit a schedule for installing covers or other facilities within 30 days of notice from the Executive Secretary stating such covers are necessary for either odor control or freezing.
c) **Land Application** Circle Four has employed land application annually to manage lagoon wastewater from the lagoon system at farm site 41203 where an impermeable cover is on the primary lagoon. Land application is currently limited to the parcels of land described in the most recently revised and approved version of the Land Application Plan. Land application of wastewater from the farm sites covered by this permit is not planned as a routine method of wastewater treatment, but may need to be employed in an emergency situation as a result of significant spills, the clean up of a contamination event, or the necessary removal of waste from a facility to allow the investigation of a possible leak or to perform repairs. Land application of wastes generated at any of the facilities covered by this permit may not be performed on a routine basis without first notifying and receiving the approval of the Executive Secretary. Land application of wastes generated at any of the facilities covered by this permit may not be performed on any parcel of land not described above without first notifying and receiving the approval of the Executive Secretary. Any land application of wastes generated at any of the facilities covered by this permit must be performed in accordance with the most recently revised and approved version of the Nutrient Management Plan for Land Application.

3. Closure Plan

Any waste handling structure closure from the Collection System and SBE Plant must be undertaken in compliance with the most recently revised and approved version of the Sludge Disposal and Farm Closure Plan that has been prepared by the permittee. Closure also includes conveyance of all wastewater out of the facilities back to the existing lagoon systems, and removal of all sludge and digested materials and debris from the SBE Plant, in accordance with the Plan. Pipelines must be capped off at the ends and unit basins must be dismantled and covered with a minimum of two feet of soil.

Prior to closure of any collection system or SBE Plant, the permittee shall submit to the Executive Secretary a site-specific closure plan for disposition of the liquids, solids and liner material of the waste handling system(s) to be closed. A plan for land application of the liquids and solids at appropriate agronomic rates, on-site or at other approved sites, or other disposal methods, will be submitted for approval by the Executive Secretary. The liner material will be tested according to an approved testing plan to determine an appropriate means of disposal that will not lead to ground water contamination. The monitoring wells will continue to be sampled for a post closure monitoring period as determined by the Executive Secretary.

4. Supplemental Organic Feedstocks (SOF)

To enhance the biogas production in the digester system, Circle Four may supplement wastewater inflow with organic waste generated from various outside sources. Circle Four must obtain approval prior to introducing any new SOF material for a trial period or for full-scale application. In order to obtain the approval for a 90-day trial period,

1. Verbally or in writing notify DWQ of the sources and brief description of the proposed SOF. Circle Four is allowed to input six test-loads of SOF in the digester system to develop preliminary information to determine whether or not to proceed with the SOF. The six test-loads will not exceed one load per day or a maximum of 6000 gallons per day for a total of six days.

2. A formal written notice will be submitted to DWQ if Circle Four desires to proceed with
the 90-day trial period based on the preliminary information obtained from the six test-loads. The written notice will incorporate the following items:

- Circle Four will perform and submit analyses on wastewater composition of the proposed SOF and results of analyses for biological oxygen demand (BOD), chemical oxygen demand (COD), pH, alkalinity, total Kjeldahl nitrogen (TKN), ammonia, volatile fatty acids, total solids, total suspended solids, volatile solids, VSS, nutrients and inorganic metals (phosphorous, potassium, sulfur, calcium, magnesium, sodium, iron and manganese) and heavy metals (arsenic, cadmium, copper, lead, mercury, selenium, zinc)

- Estimated quantity of the proposed SOF

- Point of SOF application in the digester system

- Estimated sludge production rate from the proposed SOF

- A signed statement from Smithfield BioEnergy and Circle Four Farms indicating consent to continue with the input of the proposed SOF from outside sources

After the submittal of the above items to DWQ, Circle Four must obtain an approval from DWQ prior to proceeding with the 90-day trial period.

Upon completion and evaluation of the 90-days trial study, Circle Four will notify DWQ in writing its intention to convert the trial study to a full-scale application. The notification will incorporate a summary of the trial period and results of additional analysis on normal digester operations, if available. The notification must also incorporate a proposed quantity of SOF for the full-scale application.

Circle Four may discontinue SOF application at any time during the 90-day trial period. No further action will be required from Circle Four or DWQ if Circle Four desires not to proceed with utilizing the SOF in full-scale application.

E. COMPLIANCE MONITORING

The permittee is required to monitor ground water quality and source activities that could potentially impact the ground water quality according to the provisions of Part I.E.5 to assure compliance with the terms of this permit.

1. Compliance Monitoring Wells

The network of monitoring wells shall provide the ability to detect contamination in the uppermost ground water that could result from excess basin seepage. Under the provisions of this permit, ground water contamination in the shallow aquifer under the SBE Plant would be a reason for the permittee to take remedial action before deeper aquifers are affected.

a) Location of Monitoring Wells

The permittee has installed a monitoring well system, comprised of one upgradient and two down gradient monitor wells at the SBE Plant and at the containment basin, to
establish the ground water gradient underlying the plant and to monitor ground water quality in both the upgradient and downgradient wells. The permittee will be required to drill additional wells if the groundwater flow directions are different than expected as revealed when the wells are drilled. The locations and other information for these wells are given in Appendix II.

The permittee has installed a monitoring well system at each farm site to establish the ground water gradient underlying each existing anaerobic lagoon system. Due to the close proximity of the on-farm buffer basin and the inflow equalization basin to the existing anaerobic lagoon system, installation of additional monitoring well system is not required. The existing monitoring well system will provide the ability to detect contamination in the uppermost groundwater that could result from excess seepage from the on-farm buffer basins and inflow equalization basins. The locations and status of the existing wells are described in Appendix II of Permit No. UGW010002.

b) Damage to Monitoring Wells

If a monitoring well is damaged or is otherwise rendered inadequate for its intended purpose or if a previous hydraulic gradient between two monitor wells is reversed, the Executive Secretary shall be notified in writing within five days of the permittee becoming aware of the condition.

c) Future Modification of Monitoring Well Network

If at any time the Executive Secretary determines the monitoring well network to be inadequate due to a change in gradient or for any other reason, the permittee shall submit within 30 days of receipt of notification a plan and compliance schedule to modify the monitoring well network.

2. Monitoring Period

The permittee shall conduct the monitoring detailed in Part I.E.5 for the term of the permit.

3. Monitoring Requirements

The permittee shall comply with the ground water standards, protection/compliance levels which have been developed for this permit and other monitoring requirements contained in the Utah Ground Water Quality Protection Regulations (UAC R317-6). The monitoring required in Part I.E.5 is based on compounds which may be discharged to ground water or may characterize ground water from different sources and which may be sampled at monitoring wells. The ground water regulations also contain standards for contaminants such as metals, pesticides and volatile organic compounds. Accordingly the permittee must not discharge these or any other contaminants that could impair beneficial uses of the ground water, even though the permit does not require monitoring for them.

4. Protection and Compliance Levels

a) Application

The monitoring requirements listed below in Part I.E.5 apply to all upgradient and downgradient wells. The protection levels for indicator parameters are calculated using
the Ground Water Quality Protection Regulations (UAC R317-6) and background water quality data. The compliance levels are the greater of the protection level and the mean background plus twice the standard deviation.

b) Exceedance in Upgradient Well

If the compliance levels listed in Appendix I are exceeded in any upgradient well, the permittee shall note the exceedance in the next semi-annual monitoring report. If ground water elevations indicate that the well is no longer upgradient of the lagoon, or if ground water mounding has developed, the exceedance shall be treated as a non-compliance event according to the provisions of Part I.F. As part of the resolution of the non-compliance situation, the permittee may be required to propose changes to the monitoring plan for the site sufficient to demonstrate that ground water is not being polluted in violation of UAC R317-6.

5. Monitoring Details

a) Semi-annual Ground Water Quality Compliance Monitoring

Semi-annual ground water compliance monitoring shall be conducted by the permittee under the provisions of this permit.

Sample collection, handling and analysis shall be conducted in accordance with the most recently revised and approved version of the Circle Four Farms Sampling and Analysis Plan.

Unless revised by the Circle Four Farms Sampling and Analysis Plan, the field parameters to be measured during the semi-annual monitoring shall be: temperature, specific conductance, pH, and ground water elevation. Ground water elevations shall be determined according to Part I.E.5.c.

Unless revised by the Circle Four Farms Sampling and Analysis Plan, the laboratory parameters to be measured during the semi-annual monitoring shall be: Nitrate plus Nitrite as Nitrogen, Ammonia, Bicarbonate, Chloride, and Total Dissolved Solids (TDS).

The results of the semi-annual compliance monitoring shall be submitted to the Division of Water Quality along with supporting raw data in the Semi-annual Ground Water Quality Monitoring Report according to Part II.B.

b) Background Ground Water Quality Monitoring

Background ground water quality has been established in the upgradient monitoring wells for the SBE Plant covered by this permit for the purpose of establishing protection/compliance levels. For any new wells, the permittee shall collect at least eight independent samples at equal time intervals over a one-year period from the upgradient well and at least one sample from each downgradient well. The samples will be analyzed for the following parameters: temperature, specific conductance, pH, nitrate plus nitrite as nitrogen, ammonia, bicarbonate, chloride, total dissolved solids (TDS), sodium, potassium, magnesium, calcium, carbonate, phosphate, and sulfate. Sample collection, handling, and analysis shall be conducted in accordance with the most
c) Depth to Ground Water and Ground Water Elevation

Depth to ground water shall be measured to the nearest 0.01 foot below the reference point at the top of the well casing. For each monitoring well, the permittee shall submit a report to the Division of Water Quality accompanied by a surveyor’s report indicating the elevation, in feet above mean sea level to the nearest 0.01 foot, of the reference point at the top of the well casing from which all ground water depths are measured.

Ground water elevations shall be measured semi-annually at all active monitoring wells at the farm sites covered by this permit. Ground water elevations shall be calculated by subtracting the depth to ground water measurement from the elevation of the reference point at the top of the well casing and reported in feet above mean sea level to the nearest 0.01 foot. Ground water elevation calculations for each semi-annual ground water sampling event shall be submitted with the Semi-annual Ground Water Quality Monitoring Report.

For the purpose of constructing ground water potentiometric surface contour maps, ground water elevation data shall be collected within 48 hours for each farm site and two weeks for farm site clusters (NE Blue Mtn, SW Blue Mtn, West Skyline, etc.). Ground water potentiometric contour maps shall be constructed from these data and submitted to the Division of Water Quality with the next Semi-annual Ground Water Quality Monitoring Report according to Part I.B.

d) Laboratory Approval

All water analyses shall be performed by a laboratory certified by the State of Utah in accordance with the most recently revised and approved version of the Circle Four Farms Sampling and Analysis Plan and the provisions of UAC R317-6-6.3.

e) Future Modification of Monitoring Plan

If the Executive Secretary or permittee determine that hydrogeologic conditions at the SBE Plant do not allow a direct comparison of upgradient and downgradient ground water quality, protection and compliance levels shall be established based on ground water quality in the downgradient well. In this event, the Executive Secretary shall direct the permittee to begin collection of background water quality data in the downgradient well according to Part I.E.5.c. Alternatively, the permittee may propose another method of compliance monitoring within 90 days of the determination that upgradient-downgradient comparison is not possible.

F. NON-COMPLIANCE STATUS

1. Probable Noncompliance Status

Probable noncompliance status exists if the results of the semi-annual ground water quality monitoring indicate that the compliance levels developed for this permit and the levels in
Appendix I of Permit No. UGW010002 for farm sites included in this permit are exceeded in any downgradient well. In this case the permittee shall resample all monitor wells at the site where the probable noncompliance has occurred, submit the analytical results thereof, and notify the Executive Secretary of the probable noncompliance status within 30 days of the initial detection.

2. Out-of-Compliance Status

Out-of-compliance status exists when the value for any one ground water pollutant exceeds the compliance levels in two consecutive sample events from a compliance monitoring point that are required under the terms of this permit, in accordance with UAC R317-6-6.16. The standard deviations and compliance limits for monitoring wells located at each finisher farm site are listed in Appendix I of Permit No. UGW010002. Standard deviations cannot be calculated for some parameters since most of the analyses show concentrations below the detection limit. In this case compliance is equal to the protection level. Out of compliance status for exceedance of bicarbonate and chloride occurs only when their respective protection levels are exceeded and the compliance level for total dissolved solids is also exceeded.

a) Notification and Accelerated Monitoring

Upon determination by the permittee, in accordance with UAC R317-6-6.16, that an out-of-compliance exists, the permittee shall, in accordance with UAC R317-6-6.17:

1) Verbally notify the Executive Secretary of the out-of-compliance within 24 hours, and provide written notice within 5 days of the detection, and

2) Immediately implement an accelerated schedule of quarterly ground water monitoring for all wells at the farm site where the exceedance occurred, which shall continue for at least two quarters or until the facility is brought into compliance.

b) Source and Contamination Assessment Study Plan

Within 30 days of the verbal notice to the Executive Secretary, the permittee shall submit an assessment study plan and compliance schedule for:

1) Assessment of the source or cause of the contamination, and determination of steps necessary to correct the source, if the contamination is caused by facilities or activities for which the permittee is responsible.

2) Assessment of the extent of the ground water contamination and any potential dispersion.

3) Evaluation of potential remedial actions to restore and maintain ground water quality, and ensure that the ground water standards will not be exceeded at the downgradient compliance monitoring wells.

3. Failure to Maintain Best Available Technology Required by Permit

A facility will be determined to be in out-of-compliance status if best available technology has failed or cannot be maintained according to the provisions required by this permit, unless:
a) The permittee has notified according to Part I.F.2, and

b) The failure was not intentional or was not caused by the permittee's negligence, either in action or failure to act, and

c) The permittee has taken adequate remedial measures in a timely manner or has developed an approvable remedial action plan and implementation schedule for restoration of best available control technology, an equivalent control technology, or closure of the facility (implementation of an equivalent technology will require permit modification and reissuance), and

d) The permittee has demonstrated that any discharge of a pollutant from the facility is not in violation of the provisions of UCA 19-5-107.

4. Additional Notification

In the event of out-of-compliance status due to either an exceedance of ground water protection levels or a failure of Best Available Technology, the permittee shall notify the Beaver County Commission and the Southwest Utah District Health Department within 24 hours or the first working day following a spill.

5. Contingency Plan

If, after review of ground water monitoring data and other relevant information, the Executive Secretary determines that use of any digester or basin has caused an exceedance of ground water protection levels at any compliance monitoring point, the permittee shall conduct a Contamination Investigation to determine the extent and severity of contamination caused by the digester or basin and submit it for review by the Division of Water Quality within 45 days of determination of out-of-compliance status. After review of this report the Executive Secretary may require the permittee to develop a Corrective Action Plan to remediate the contamination. Actions taken under the plan may include emptying liquids and sludge from the leaking digester or basin into one of the other lagoons in the permittee’s farm complex, repairing or reconstructing the digester or basin liner as needed, constructing temporary holding ponds lined with flexible membrane liners, and developing wells for the purpose of extracting the contaminated ground water. Contaminated ground water may be stored in the lagoons or land applied according to the most recently revised and approved Nutrient Management Plan for Land Application, if necessary and feasible.

Significant hog waste spills from the waste handling system must be addressed in compliance with the most recently revised and approved version of the Spill Prevention and Response Manual that has been prepared by the permittee. Minor spill events shall be reported with the next Semi-annual Ground Water Quality Monitoring Report according to Part II.B

G. COMPLIANCE SCHEDULE

1. Change in Facility Status

In the event of any planned change in operational status of the Smithfield BioEnergy Plant
and/or central treatment and processing components listed in Part I.D.1, the permittee shall provide advanced written notice to the Executive Secretary.
PART II. REPORTING REQUIREMENTS

A. REPORTING ADDRESS

Written reports submitted in compliance with this Part shall be submitted to the Executive Secretary, Utah Division of Water Quality at the following address:

Attention: Ground Water Protection Program
State of Utah
Division of Water Quality
P.O. Box 144870
288 North 1460 West
Salt Lake City, Utah 84114-4870

B. SEMI-ANNUAL GROUND WATER QUALITY MONITORING REPORT

1. Report Submission Schedule

The semi-annual ground water quality monitoring report shall be submitted to the Division of Water Quality according to the schedule presented in Table 3 unless modified by the Executive Secretary.

<table>
<thead>
<tr>
<th>Monitoring Period</th>
<th>Report Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>January thru June</td>
<td>August 15</td>
</tr>
<tr>
<td>July thru December</td>
<td>February 15</td>
</tr>
</tbody>
</table>

2. Report Contents

The semi-annual ground water quality monitoring report shall include the following items:

a) Field data sheets, or copies thereof, including the field parameters required in Part I.E.5 or as listed in the most recently revised and approved Circle Four Farms Sampling and Analysis Plan; well name/number; date and time of sampling event; names of sampling crew; depth to ground water; type of sampling pump or bailer; measured casing volume; volume of water purged before sampling; and any pertinent comments relating to sampling conditions.

b) Laboratory analytical data sheets, or copies thereof, including: date sampled, date received, and the results of analysis for each parameter including: value or concentration, units of measurement, method of analysis; method detection limit (MDL), date of analysis. The analytical methods and the method detection limits for every parameter must conform to those specified in the most recently revised and approved version of the Circle Four Farms Sampling and Analysis Plan.

c) Results of the annual sampling and analysis of water supply and production wells and of the lagoon wastewater including the items listed in a) and b) above where
applicable. These results shall be submitted in the first semi-annual report following the receipt of the analytical data for these sampling events.

d) Results of background monitoring including the items in a) and b) above. These results shall be submitted in the first semi-annual report following the receipt of the analytical data for these sampling events.

e) Ground water elevations in all active monitoring wells, and potentiometric contours derived from them, plotted on a map of the farm sites.

f) Field driller’s logs, as-built drawings, and surveyor’s report indicating elevation and location for any new monitoring, water supply, and production wells completed during the quarter covered by the monitoring report.

g) Any information and analysis including any supporting data required by the most recently revised and approved Nutrient Management Plan for Land Application.

h) If the permittee monitors any potential pollutant at a compliance monitoring point more frequently than required by this permit, using approved test procedures as specified in this permit, the results of this monitoring shall be included in the reporting of the data submitted in the Semi-annual Ground Water Quality Monitoring Report. Such increased frequency shall also be indicated.

i) Results of the lagoon performance annual monitoring as required in Part I.5.b.

j) Results of compliance level exceedance in any upgradient ground water monitoring well.

k) Insignificant spill events, which do not require action according to the most recently, revised and approved Spill Prevention and Response Plan.

C. ANNUAL LAGOON PERFORMANCE MONITORING REPORT

The report of the annual lagoon performance monitoring shall be submitted within 30 days of completion of all sampling, monitoring, and analysis.

D. SLUDGE PROFILE MONITORING REPORT

The report of the sludge profile monitoring shall be submitted within 30 days of completion of all sampling, monitoring, and analysis.

E. PROBABLE NONCOMPLIANCE AND NONCOMPLIANCE REPORTING

1. The permittee shall report any probable noncompliance as required by Part I.F.

2. The permittee shall report any noncompliance as required by Part I.F.

3. The permittee shall verbally report any noncompliance, which may endanger public health or the environment as soon as possible, but no later than 24 hours from the time the permittee first became aware of the circumstances. The report shall be made to the Utah Department of Environmental Quality 24 hour number, (801) 538-6333, or to the
4. A written submission shall also be provided to the Executive Secretary within five days of the time that the permittee becomes aware of the noncompliance. The written submission shall contain:

   a) A description of the noncompliance and its cause;

   b) The period of noncompliance, including exact dates and times;

   c) The estimated time noncompliance is expected to continue if it has not been corrected; and,

   d) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

5. Any noncompliance not required to be reported as specified in this Part, shall be reported with the submission of the Semi-annual Ground Water Quality Monitoring Report.

F. DAMAGE TO MONITORING WELLS AND REVERSAL OF HYDRAULIC GRADIENT

The permittee shall report any damage to monitoring wells and reversals in hydraulic gradient as required by Part I.E.1.b.

G. FAILURE OF BEST AVAILABLE TECHNOLOGY REPORTING

The permittee shall report any failure of the best available technology as required in Part I.F and described in Part I.D.2.

H. REPRESENTATIVE SAMPLING

Samples taken in compliance with the monitoring requirements established under Part I shall be representative of the monitored activity.

I. ANALYTICAL PROCEDURES

Water sample analysis must be conducted according to test procedures specified under UAC R317-6-6.3 L, unless other test procedures have been specified in this permit.

J. PENALTIES FOR TAMPERING

The Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or by both.
K. **COMPLIANCE SCHEDULES**

Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any Compliance Schedule of this permit shall be submitted no later than 14 days following each schedule date.

L. **RECORDS CONTENTS**

1. Records of monitoring information shall include:
   
a) The date, exact place, and time of sampling or measurements;
b) The individual(s) who performed the sampling or measurements;
c) The date(s) and time(s) analyses were performed;
d) The name of the certified laboratory that performed the analyses;
e) The analytical techniques or methods used; and,
f) The results of such analyses.

M. **RETENTION OF RECORDS**

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

N. **INSPECTION AND ENTRY**

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

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of the permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and,
4. Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the Act, any substances or parameters at any location.

O. **Electronic Filing Requirements**

In addition to the submittal of the hard copy data required in this Part, the permittee shall also submit the required data in the electronic format specified by the Executive Secretary where applicable.
PART III. COMPLIANCE RESPONSIBILITIES

A. DUTY TO COMPLY

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give advance notice to the Executive Secretary of the Water Quality Board of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

B. PENALTIES FOR VIOLATIONS OF PERMIT CONDITIONS

The Act provides that any person who violates a permit condition implementing provisions of the Act is subject to a civil penalty not to exceed $10,000 per day of such violation. Any person who willfully or negligently violates permit conditions is subject to a fine not exceeding $25,000 per day of violation. Any person convicted under Section 19-5-115(2) of the Act a second time shall be punished by a fine not exceeding $50,000 per day. Nothing in this permit shall be construed to relieve the permittee of the civil or criminal penalties for noncompliance.

C. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. DUTY TO MITIGATE

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

E. PROPER OPERATION AND MAINTENANCE

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.
PART IV. GENERAL REQUIREMENTS

A. PLANNED CHANGES

The permittee shall give notice to the Executive Secretary as soon as possible of any planned physical alterations or additions to the permitted facility which could significantly change the nature of the facility or increase the quantity of pollutants discharged.

B. ANTICIPATED NONCOMPLIANCE

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

C. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

D. DUTY TO REAPPLY

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application should be submitted at least 180 days before the expiration date of this permit.

E. DUTY TO PROVIDE INFORMATION

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

F. OTHER INFORMATION

When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or any report to the Executive Secretary, it shall promptly submit such facts or information.

G. SIGNATORY REQUIREMENTS

All applications, reports or information submitted to the Executive Secretary shall be signed and certified.

1. All permit applications shall be signed as follows:

   a) For a corporation: by a responsible corporate officer;
b) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively.

c) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official.

2. All reports required by the permit and other information requested by the Executive Secretary shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a) The authorization is made in writing by a person described above and submitted to the Executive Secretary, and,

b) The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

3. Changes to Authorization. If an authorization under Part IV.G.2. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part IV.G.2. must be submitted to the Executive Secretary prior to or together with any reports, information, or applications to be signed by an authorized representative.

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

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

H. Penalties for Falsification of Reports

The Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than six months per violation, or by both.
I. AVAILABILITY OF REPORTS

Except for data determined to be confidential by the permittee, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Executive Secretary. As required by the Act, permit applications, permits, effluent data, and ground water quality data shall not be considered confidential.

J. PROPERTY RIGHTS

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

K. SEVERABILITY

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

L. TRANSFERS

This permit may be automatically transferred to a new permittee if:

1. The current permittee notifies the Executive Secretary at least 30 days in advance of the proposed transfer date;

2. The notice includes a written agreement between the existing and new permittee containing a specific date for transfer of permit responsibility, coverage, and liability between them; and,

3. The Executive Secretary does not notify the existing permittee and the proposed new permittee of his or her intent to modify, or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph 2 above.

M. STATE LAWS

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, penalties established pursuant to any applicable state law or regulation under authority preserved by Section 19-5-117 of the Act.

N. REOPENER PROVISIONS

This permit may be reopened and modified (following proper administrative procedures) to include the appropriate limitations and compliance schedule, if necessary, if one or more of the following events occurs:
1. If new ground water standards are adopted by the Board, the permit may be reopened and modified to extend the terms of the permit or to include pollutants covered by new standards. The permittee may apply for a variance under the conditions outlined in R317-6.4(D).

2. Changes have been determined in background ground water quality.

3. If information or data becomes available which demonstrates that an adverse public health impact is occurring, linked to the facilities covered under this permit, this permit may be opened to incorporate additional requirements including additional or new Best Available Technology requirements if necessary.
### APPENDIX I

**UGW010012 - Compliance Monitoring Well Background and Protection / Compliance Levels**

**Smithfield BioEnergy Plant**

(MUBB, MDBB1, MDBB2)

Class IA; 1.25 X BG or 0.25 X GWQS

<table>
<thead>
<tr>
<th>Parameter / Method</th>
<th>Background Level (mg/L)</th>
<th>Protection Level (mg/L)</th>
<th>Compliance Level (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MDL (mg/L)</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>pH /</td>
<td>na</td>
<td>7.65</td>
<td>0.12</td>
</tr>
<tr>
<td>N+N / 4500-NO3 E</td>
<td>0.1</td>
<td>0.42</td>
<td>0.10</td>
</tr>
<tr>
<td>Ammonia / 350.3</td>
<td>0.1</td>
<td>0.10</td>
<td>na</td>
</tr>
<tr>
<td>Bicarbonate / 2320</td>
<td>5.0</td>
<td>155</td>
<td>17</td>
</tr>
<tr>
<td>Chloride / 4500-CI B</td>
<td>1.0</td>
<td>27.58</td>
<td>1.22</td>
</tr>
<tr>
<td>TDS / 2540-C 4</td>
<td>20.0</td>
<td>326.0</td>
<td>34</td>
</tr>
</tbody>
</table>

**Notes:**

1. Well in parentheses indicates the well in which compliance levels are established for the indicated farm site.

2. Protection Level for Ammonia equals ground water class multiplier X drinking water advisory; Protection Level for N+N equals ground water class multiplier X ground water quality standard; Protection Level for Chloride equals the greater of the ground water class multiplier X drinking water advisory or Background Mean X ground water class multiplier; Protection Levels for Bicarbonate and TDS equal Background Mean X ground water class multiplier (refer to R317-6-4 of the Utah Administrative Code for the appropriate multiplier). Drinking water advisory for Ammonia is 30 mg/L and for Chloride is 250 mg/L; groundwater quality standard for N+N is 10 mg/L.

3. Compliance Level equals the greater of the Protection Level or Background Mean + (2 X SD)

4. Ground water class is based on the TDS Background Mean; Class I - TDS < 500 mg/L; Class II - TDS >500 and <3000 mg/L; Class III - TDS >3000 and <10,000 mg/L; Class IV - TDS >10,000 mg/L (refer to R317-6-3 of the Utah Administrative Code for ground water class designation)

5. Groundwater class multiplier. Class I - 1.25 X background concentration or 0.25 X groundwater quality standards; Class II - 1.25 X background concentration or 0.25 X groundwater quality standard; Class III - 1.5 X background concentration or 0.5 X groundwater quality standard(refer to R317-6-3 of the Utah Administrative Code for ground water class multiplier)

Last Revision: May 2008

BG - Background concentration; GWQS - Groundwater quality standards; MDL - Method Detection Limit; SD - Standard Deviation; N+N - Total Nitrogen in Nitrate and Nitrite; TDS - Total Dissolved Solids; na - not applicable
APPENDIX I

UGW010012 - Compliance Monitoring Well Background and Protection / Compliance Levels

Smithfield Containment Basin
(SBMU, SBMD1, SBMD2 *)

Class IA; 1.25 X BG or 0.25 X GWQS

<table>
<thead>
<tr>
<th>Parameter / Method</th>
<th>MDL (mg/L)</th>
<th>Background Level (mg/L)</th>
<th>Protection Level (mg/L)</th>
<th>Compliance Level (mg/L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>na</td>
<td>7.42</td>
<td>na</td>
<td>6.5 - 8.5</td>
</tr>
<tr>
<td>N + N / 4500-NO3 E</td>
<td>0.1</td>
<td>0.40</td>
<td>0.40</td>
<td>2.5</td>
</tr>
<tr>
<td>Ammonia / 350.3</td>
<td>0.1</td>
<td>0.00</td>
<td>na</td>
<td>7.5</td>
</tr>
<tr>
<td>Bicarbonate / 2320</td>
<td>5.0</td>
<td>159</td>
<td>165</td>
<td>198</td>
</tr>
<tr>
<td>Chloride / 4500-Cl^-</td>
<td>1.0</td>
<td>40</td>
<td>44</td>
<td>49</td>
</tr>
<tr>
<td>TDS / 2540-C</td>
<td>20.0</td>
<td>492</td>
<td>549</td>
<td>614</td>
</tr>
</tbody>
</table>

Notes:

Last Revision: May 2008

BG - Background concentration; GWQS - Groundwater quality standards; MDL - Method Detection Limit; SD - Standard Deviation; N+N - Total Nitrogen in Nitrate and Nitrite; TDS - Total Dissolved Solids; na - not applicable

1 - Well in parentheses indicates the well in which compliance levels are established for the indicated farm site.

2 - Protection Level for Ammonia equals ground water class multiplier X drinking water advisory; Protection Level for N+N equals ground water class multiplier X ground water quality standard; Protection Level for Chloride equals the greater of the ground water class multiplier X drinking water advisory or Background Mean X ground water class multiplier; Protection Levels for Bicarbonate and TDS equal Background Mean X ground water class multiplier (refer to R317-6-4 of the Utah Administrative Code for the appropriate multiplier). Drinking water advisory for Ammonia is 30 mg/L and for Chloride is 250 mg/L; groundwater quality standard for N+N is 10 mg/L.

3 - Compliance Level equals the greater of the Protection Level or Background Mean + (2 X SD)

4 - Ground water class is based on the TDS Background Mean; Class I - TDS < 500 mg/L; Class II - TDS >500 and <3000 mg/L; Class III - TDS >3000 and <10,000 mg/L; Class IV - TDS >10,000 mg/L (refer to R317-6-3 of the Utah Administrative Code for ground water class designation)

5 - Groundwater class multiplier. Class I - 1.25 X background concentration or 0.25 X groundwater quality standards; Class II - 1.25 X background concentration or 0.25 X groundwater quality standard; Class III - 1.5 X background concentration or 0.5 X groundwater quality standard (refer to R317-6-3 of the Utah Administrative Code for ground water class multiplier)

* variable water quality at site. SBMD2 used to calculate protection level
### APPENDIX II

**UGW010012  Smithfield BioEnergy Plant**

**Monitoring Well Location for the SBE Plant and Containment Basin**

<table>
<thead>
<tr>
<th>Monitoring Well Type</th>
<th>Well No.</th>
<th>Latitude NAD 83</th>
<th>Longitude NAD 83</th>
<th>Hinge Elevation</th>
<th>Date Elevation Measured</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upgradient from Treatment Plant</td>
<td>MUBB</td>
<td>38° 13’ 23.13”</td>
<td>113° 05’ 32.61”</td>
<td>5042.4</td>
<td>10/1/2003</td>
<td>active</td>
</tr>
<tr>
<td>Downgradient from Treatment Plant</td>
<td>MDBB1</td>
<td>38° 13’ 29.24”</td>
<td>113° 05’ 29.33”</td>
<td>5039.9</td>
<td>10/1/2003</td>
<td>active</td>
</tr>
<tr>
<td>Downgradient from Treatment Plant</td>
<td>MDBB2</td>
<td>38° 13’ 29.27”</td>
<td>113° 05’ 26.04”</td>
<td>5040.3</td>
<td>10/1/2003</td>
<td>active</td>
</tr>
<tr>
<td>Upgradient from Containment Basin</td>
<td>SBMU</td>
<td>38° 13’ 21.04”</td>
<td>113° 05’ 19.99”</td>
<td>5043.9</td>
<td>9/12/2006</td>
<td>active</td>
</tr>
<tr>
<td>Downgradient from Containment Basin</td>
<td>SBMD1</td>
<td>38° 13’ 29.01&quot;</td>
<td>113° 05’ 13.90&quot;</td>
<td>5041.8</td>
<td>9/12/2006</td>
<td>active</td>
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<tr>
<td>Downgradient from Containment Basin</td>
<td>SBMD2</td>
<td>38° 13’ 29.01&quot;</td>
<td>113° 05’ 10.74&quot;</td>
<td>5042.9</td>
<td>9/12/2006</td>
<td>active</td>
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</table>

Last Revision: April 2008