

# Attachment 2 - Operations Plan

## **3.0 – OPERATIONS PLAN**

The Operation Plan for the SL has been written to address the requirements of Utah State Solid Waste Regulations R315-302 and describes the operations of the SL.

The following section details the operational specifics of the SL. Forms used in the documentation of the operation are included in Appendix C.

### **3.1 SCHEDULE OF CONSTRUCTION**

The future development of the SL will be incremental in nature. Development of the landfill was modified from the initial site plans. The site started development at the northwest property corner and will move sequentially to the south and east. The development of the landfill is broken into Phases to facilitate long term operations and minimize the area of landfill requiring final cover at any one time. The minimization of the area required to have final cover will also lower the financial assurance requirements for landfill closure. Actual development has started in Phase 8 then will move to 7, 6, 6, 4, 3, 2 and finish in Phase 1 as indicated on Drawing 7 (Appendix A). The development of the landfill was reversed for better site access.

### **3.2 DESCRIPTION OF WASTE HANDLING PROCEDURES**

#### **3.2.1 General**

SL has implemented a waste control program designed to efficiently manage the disposal of hogs and other industrial wastes generated by the Smithfield operations while minimizing the potential for municipal solid waste (MSW), construction and demolition (C&D) wastes, hazardous waste, or unacceptable wastes being delivered to the SL. The program is designed to protect the health and safety of employees as well as to protect against the contamination of the environment.

The landfill site is not be open for public use, waste from Smithfield operation waste is the only waste permitted at the site.

All Smithfield vehicles delivering wastes to the site access the site through a locked gate. Each driver maintains a delivery records so all waste delivery to the SL can be tracked. Since access to the site is through a secure gate and the landfill operations are restricted to Smithfield wastes, no attendant is on site.

Loads are observed at each of the tipping areas by the truck drivers to determine if waste from sources other than the Smithfield operations has been placed into the disposal bins. If a discharged load contains inappropriate or unacceptable material, the truck driver will immediately notify the Manager. The Manager will assess the nature of the waste and if the discharger is not immediately identified, the area where the unacceptable material was discharged will be cordoned off. Unacceptable material will be moved to a designated area for identification and preparation for proper disposal.

### **3.2.2 Public C&D Wastes**

Not accepted at the SL, only wastes generated by Smithfield operations are permitted.

### **3.2.3 Public MSW and Commercial Wastes**

Not accepted at the SL, only wastes generated by Smithfield operations are permitted.

### **3.2.4 Industrial Wastes**

The SL receives only minor amounts of industrial waste from the Smithfield operations that are not dead swine. The industrial waste generated at the site may vary over time but typically include small amounts of construction debris, lunch trash, plastic gloves, artificial insemination disposables, wood pallets, plastic flooring, cardboard boxes and plastic bags. No industrial waste from any other operation is accepted.

### **3.2.5 Green Wastes**

Not accepted at the SL.

### **3.2.6 Special Wastes**

#### ***3.2.6.1 Used Oil and Batteries***

Not accepted at the SL.

### ***3.2.6.2 Bulky Wastes***

Not accepted at the SL.

### ***3.2.6.3 Tires***

Not accepted at the SL.

### ***3.2.6.4 Dead Animals***

Dead animals (swine) generated by the Smithfield operations are accepted at the SL. Dead animals from other sources are not accepted. All dead animals received are covered at the end of the working day with a minimum of six inches of soil.

### ***3.2.6.5 Medical and Asbestos Waste***

Not accepted at the SL.

### ***3.2.6.6 Grease Trap Waste and Car Wash Sediment***

Not accepted at the SL.

### ***3.2.6.7 Household Hazardous Wastes***

Not accepted at the SL.

## **3.3 WASTE INSPECTION**

### **3.3.1 Landfill Spotting**

Learning to identify and exclude prohibited and hazardous waste from the SL is necessary for the environmentally safe operation of the facility. The Truck Drivers are required to receive initial and periodic waste screening training.

### **3.3.2 Random Waste Screening**

Random inspections of incoming loads are conducted according to the schedule established by the Manager but no less than once per one hundred loads. If frequent violations are detected, additional random checks will be scheduled at the discretion of the Manager.

If a suspicious or unknown waste is encountered, the Truck Driver or possibly the Operator will proceed with the waste screening as follows:

- The Random Load Inspection Record (Appendix C) is completed.
- Protective gear is worn (leather gloves, steel-toed boots, and hard hat).
- The suspect material is spread out with landfill equipment or hand tools and visually examined. Suspicious markings or materials, like the ones listed below, are investigated further:
  - Materials other than hogs
  - Waste resembling MSW
  - Waste resembling C&D
  - Containers labeled hazardous
  - Material with unusual amounts of moisture
  - Other wastes not accepted by the Landfill
- The Manager will be called if unstable wastes that do not appear to have originated from the Smithfield operations are encountered.

### **3.3.3 Removal of Hazardous or Prohibited Waste**

Should hazardous or prohibited wastes be discovered during random waste screening or during tipping, the waste will be removed from the landfill as follows:

- If the generator is known, they will be asked to retrieve the waste and informed of the proper disposal options.
- If the origin of the waste is not known, Operators will remove the waste from the disposal trench and notify the Manager.
- The Manager will assess the nature of the waste and arrange to have the waste transported to the proper disposal site.

A record of the removal of all hazardous or prohibited wastes will be kept in the site operational records.

### **3.3.4 Notification Procedures**

The following agencies and people are to be contacted if any hazardous materials or hazardous waste is discovered at the landfill:

- Jim Webb, Environmental and Public Affairs Manager.....(435) 387-6046
- Southwest Utah Public Health Department ..... (435) 586-2437
- Executive Secretary, DWMRC.....(801) 536-0200
- Iron Co. Fire Department ..... (435) 586-4408

A record of conversation will be completed as each of the entities is contacted. The record of conversation is kept in the site operational records.

## **3.4 FACILITY MONITORING AND INSPECTION**

### **3.4.1 Groundwater**

The SL is not required to monitor for groundwater; however, after discussions with the DEQ and County Officials SL has installed a monitoring system for the Class IIIb landfill. Based on historical mapping of groundwater levels and direction of flow three wells were installed at the site: one upstream (background) and two downstream of the property. The well locations are shown on Sheet 2 (General Arrangement) in Appendix A. The wells have been installed to sufficient depth in order to intercept native groundwater as well as anticipated seasonal fluctuations.

Groundwater levels will be monitored annually to verify the direction of groundwater flow. After validation of the collected data additional wells may be installed as necessary to establish the appropriate number of upstream/downstream wells. Samples are collected annual and analyzed in accordance with the regulations of the Utah code. Sample results are sent to the State of Utah Division of Drinking water as part of the comprehensive Smithfield water sampling package.

### **3.4.2 Surface Water**

Surface water is managed through a system of roads, berms and associated ditches surrounding the active landfill operations.

Run-off from the final cover will be managed by a combination of berms and ditches. The berms will be placed to divert the water around the active area to perimeter ditches.

Smithfield staff inspects the drainage system periodically. Temporary repairs are made as required to any observed deficiencies until permanent repairs can be scheduled. Smithfield staff or a licensed general contractor will repair drainage facilities as required.

### **3.4.3 Leachate Collection**

The SL is not required to collect or monitor leachate, therefore; no leachate monitoring or inspection activities are performed.

### **3.4.4 Landfill Gas**

The SL is not required to collect or monitor landfill gas, therefore; no landfill gas monitoring or inspection activities are performed.

### **3.4.5 General Inspections**

Site inspections are necessary to prevent malfunctions and deterioration, operator errors, and discharges that may cause or lead to release of wastes to the environment or a threat to human health. Since operations of the facility are not daily, Operators, when they are on site conduct the site inspections.

- All equipment is on a regular maintenance schedule. Each piece of used on-site is maintained at other facilities since operation of the landfill is only periodic.
- Facility inspections are completed on an as needed basis. Any needed corrective action items are recorded and the Operators complete needed repairs. If a problem is of an urgent nature, the problem is corrected immediately and the Manager notified.
- All trucks hauling dead animals or other waste will be inspected regularly to ensure that no part of the load leaks and that the operational fluids of the truck are not leaking.

## **3.5 CONTINGENCY AND CORRECTIVE ACTION PLANS**

The following sections outline procedures to be followed in case of fire, explosion, run-on/run-off contamination, or suspected groundwater contamination:

The Iron County Fire Department will be contacted in all cases where hazardous materials are suspected to be involved.

### **3.5.1 Fire**

The potential for fire in most landfills is a concern. Since the predominant wastes are dead animals, the threat of fire is extremely low.

In the very unlikely event that a fire occurs at the SL, the Iron County Fire department will be called if it appears that landfill personnel and equipment cannot contain the fire. To assist in readiness for potential fire hazards the Fire department has been contacted and informed of the nature of operations at the site. A response from the County Fire Warden is included with other agency correspondence in Appendix D of this repermit.

In case of fire, the Manager will be notified immediately. A written report detailing the event will be placed in the operating record within seven days, including any corrective action taken.

### **3.5.2 Explosion**

The potential for an explosion in most landfills is a possibility. Since the predominant wastes are dead animals, the threat of explosion is extremely low.

If an explosion occurs or seems possible, all personnel will be accounted for and the landfill evacuated. Corrective action will be immediately evaluated and implemented as soon as practicable.

The Manager will be notified immediately and the Iron County Fire department will be called. The Executive Secretary will be notified immediately.

### **3.5.3 Failure of Run-On/Run-Off Containment**

The purpose of the run-on/run-off control systems is to manage the stormwater falling on or near the active area of the landfill. Where possible, water is diverted away from the landfill by utilizing ditches and berms. These ditches are inspected on a regular basis and repaired as needed. The landfill site will be sloped to direct the run-on away from operational areas. The Manager will be notified immediately if a failure of the run-off system is discovered.

### **3.5.4 Groundwater Contamination**

If ground water contamination is ever suspected, studies to evaluate the potential contamination will be conducted and the existence and/or extent of contamination will be documented. This program may include the installation of ground water monitoring wells. A ground water monitoring program would be developed and corrective action taken as deemed necessary, with the approval of the Executive Secretary.

### **3.6 CONTINGENCY PLAN FOR ALTERNATIVE WASTE HANDLING**

The most probable reason for a disruption in the waste handling procedures at the SL will be weather related. The landfill may close during periods of inclement weather such as high winds, heavy rain, snow, flooding, or any other weather-related condition that would make travel or operations dangerous. The SL may also close for other reasons like fire, natural disaster, etc. The likelihood of a disruption in operations is very unlikely but possible, the Smithfield staff will minimize the possibility of disruption of waste disposal services from an operational standpoint.

The Iron County Class I landfill has accepted waste from the Smithfield operations in the past and if necessary utilized in the event of an emergency.

In case of equipment failure, replacement equipment will be rented or leased to continue operations while repairs are being made.

### **3.7 DISEASE AND VECTOR CONTROL**

The vectors that may be encountered at the SL are flies, birds, mosquitoes, rodents, skunks, and snakes. Due to the rural location of the landfill, stray house pets may occasionally be encountered at the landfill. The program for controlling these vectors is as follows:

#### **3.7.1 Insects**

Eliminating breeding areas is essential in the control of insects. Smithfield staff will minimize the potential breeding areas by daily covering all waste with a minimum of six inches of soil. The landfill topography will be sloped to reduce ponded water.



### **3.7.2 Rodents**

Reducing potential food sources minimizes rodent populations at the landfill. Due to the nature of the SL wastes, all waste will be covered daily with a minimum of six inches of soil. The application of daily cover over all waste disposal areas will minimize the potential food sources for rodents.

In the unlikely event of a significant increase in the number of rodents at the SL, a professional exterminator will be contacted. The exterminator would then establish an appropriate protocol for pest control in accordance with all county, state and federal regulations.

### **3.7.3 Birds**

It is anticipated that the SL will have minimal problems with birds. Good land filling practices of daily covering of working areas, and the minimization of ponded water will alleviate most of the bird problems.

### **3.7.4 Household Pets**

Because of the landfill's location, some stray cats and dogs may wander onto the property. If stray animals are encountered (and can be caught) they will be turned over to the animal shelter. If the Truck Drivers or Operators are unable to apprehend the animals, they will be chased off the property.

### **3.7.5 Wildlife**

The SL may have a variety of wildlife located on or near the landfill property. Through correspondence with the Division of Wildlife Resources' Utah Natural Heritage Program it was determined that only one species, the *kit fox*, is currently included on the sensitive species list (See letter in Appendix D). Other wildlife may include deer, snakes, foxes, skunks, and coyotes. If problem skunks or snakes are encountered, they will be exterminated. If other site wildlife becomes a problem, the landfill will coordinate with the Division of Wildlife Resources to provide methods and means to eliminate the problem.

In the event that any of these vectors become an unmanageable problem, the services of a professional exterminator will be employed.

### **3.7.6 Fugitive Dust**

The main road leading to the SL is paved, however; the access road to the disposal areas is an improved dirt/gravel road and will need occasional dust control measures. General landfill activities, site access by vehicles compounded by the occasional high wind may present a fugitive dust problem. If the dust problem elevates above the “minimum avoidable dust level”, Smithfield personnel will apply water to problem areas.

### **3.7.7 Litter Control**

The relatively small volume and type of waste managed by the SL facility will help to keep the amount of litter small. However; due to the nature of landfilling operations, blowing litter may still be an occasional problem. Smithfield personnel perform routine litter cleanup to keep the landfill and surrounding properties clear of windblown debris.

### **3.8 RECYCLING**

Due to the nature of the waste, there will be no recycling at the SL operations.

### **3.9 TRAINING PROGRAM**

As part of the initial training of new employees, all new employees receive a site orientation. Additionally, new employees will be made aware of the contents of the landfill’s permit requirements.

Regular safety and equipment maintenance training sessions are held to ensure that employees are aware of the latest technologies and that good safety practices are used at all times. Documentation of all personnel training will be kept in the personnel files.

### **3.10 RECORDKEEPING**

An operating record will be maintained as part of a permanent record on the following items:

- Types of wastes received on a monthly basis. Daily logs will be stored at the Managers office.
- Deviations from the approved Operations Plan.
- Personnel training and notification procedures.
- Random load inspection log.

### **3.11 SUBMITTAL OF ANNUAL REPORT**

Smithfield staff will submit a copy of its annual report for the SL to the Executive Secretary by March 1 of each year for the most recent calendar or fiscal year of facility operation. The annual report will include facility activities during the previous year and will include, at a minimum, the following:

- Name and address of facility.
- Calendar or fiscal year covered by the annual report.
- Annual quantity, in tons or volume, in cubic yards, and estimated in-place density in pounds per cubic yard of solid waste.
- Annual update of required financial assurances mechanism pursuant to Utah Administrative Code R315-309.
- Training programs completed.

### **3.12 INSPECTIONS**

The Manager will inspect the facility to minimize malfunctions and deterioration, operator errors, and discharges that may cause or lead to the release of wastes to the environment or to a threat to human health. These inspections are conducted on a quarterly basis, at a minimum. A Landfill Inspection Form (Appendix C) will be kept as part of the operating record. This log includes at least the date and time of inspection, the printed name and handwritten signature of the inspector, a notation of observations made, and the date and nature of any repairs or corrective actions. Inspection records are available to the Executive Secretary or an authorized representative upon request.

### **3.13 RECORDING WITH COUNTY RECORDER**

Plats and other data, as required by the Iron County, will be recorded with the Iron County Recorder as part of the record of title no later than 60 days after certification of closure.

### **3.14 STATE AND LOCAL REQUIREMENTS**

The Smithfield will maintain compliance with all applicable state and local requirements including zoning, fire protection, water pollution prevention, air pollution prevention, and nuisance control. Smithfield will obtain and maintain a Conditional Use Permit according to the requirements of the Iron County Zoning Department. The initial CUP permit conditions and Circle Four's (Smithfield's) responses are included in Appendix H of this permit.

### 3.15 SAFETY

Smithfield personnel are required to participate in an ongoing safety program. This program complies with the Occupational Safety and Health Administration (OSHA), and the National Institute of Occupational Safety and Health (NIOSH) regulations as applicable. This program is designed to make the site and equipment as secure as possible and to educate personnel about safe work practices.

### 3.16 EMERGENCY PROCEDURES

In the event of an accident or any other emergency situation, the Truck Driver or Operator will immediately contact the Manager and proceed as directed. If the Manager is not available, the Truck Driver or Operator will call the appropriate emergency numbers below:

- Iron County Central Dispatch..... 911
- Iron County Fire Department.....(435) 586-4408
- Iron County Sheriff’s Office.....(435) 867-7550
- Beaver Valley Hospital ..... (435) 438-7100
- Jim Webb, Environmental and Public Affairs Manager.....(435) 387-6046 (O)
- Jim Webb, Environmental and Public Affairs Manager..... (435) 691-0825 (C)