Peterson Hill Operation Plan
October 2008

Bonneville County
605 N. Capital Ave.
Idaho Falls, Idaho 83402
(208) 528-5550

TABLE OF CONTENTS

OPERATION CONSIDERATIONS

A. Purpose of Facility

The sanitary landfill serves as the sole municipal solid waste landfill for Bonneville County, Idaho. The service area includes all of Bonneville County for a total constituent population of approximately 100,000. The County diverts construction and demolition debris to the hatch [pit. The municipal solid waste landfill currently accepts between 65,000 and 75,000 tons of waste per year.

The large majority of all the waste received at the landfill arrives from the county's transfer station.

The County has made an exception to allow the residence of Bone to dispose of their household Waste at the landfill. The landfill has a total projected life of approximately 150 years based upon current waste generation rates and service population.

B. General Operation Procedures

The Landfill is open to the general public by appointment only. Anyone wishing access to the landfill for special loads i.e. dead animals, contaminated soils, etc. must first contact the Bonneville County Transfer Station at (208)528-5550. A sign indicating the prohibition of the public at the site is located at the main access gate. The entire perimeter of the waste disposal area of the landfill is fenced. The public takes their waste to the transfer station in Idaho Falls where it is inspected and screened by transfer station employees, separated if necessary, and compacted into transfer trailers. The waste is then delivered to the site via 110 cubic yard "walking floor" trailers. In the spring of the year the waste generated by the Swan Valley residence is brought to the landfill. The operator keeps track of loads coming in, estimates the quantity, and screens the loads for hazardous materials. All special loads delivered to the landfill are documented on random load inspection sheets. At the end of each month, these records are sent to the transfer station to be recorded.

C. Daily Operation & Equipment

The landfill is usually staffed with two operators. One operator utilizes a Cat 826H landfill compactor for compacting the waste at the site each day that the site receives waste. The compactor operator inspects each load as it is unloaded by the transfer trailer. The operator is trained to identify hazardous and other unacceptable waste types. The other operator utilizes a scraper and a Cat 973 loader to place daily and intermediate soil cover. The daily and

intermediate cover is excavated with a scraper and transported to the work area to use. Cover is then placed with the loader. Daily cover is placed to a depth of six inches and intermediate cover to a depth of 12 inches. Cover material is obtained from stockpiles created from cell construction or from the next projected phase of landfill development. The landfill hours of operation vary due to weather and the amount of waste to be moved each day. Landfill equipment is maintained by Western States and by County Road and Bridge Department and serviced within its preventive maintenance program. In the event of equipment breakdown, County Road and Bridge equipment or rental equipment is used until repairs can be made to the landfill equipment.

D. Vector & Disease control

The landfill controls vectors and disease primarily by the application of daily and intermediate soil cover. Any diseased animals that are in need of immediate burial will be done according to the Department of Ag rules.

E. Preparation and closure of cells

The landfill will be designed in 10 to 20 acre cells that will last, on the average, approximately 10 to 15 years depending upon the stage of the fill. Phase 2 is projected to have a life of approximately 15 years.

The County will submit plans, specifications and supporting documentation for each cell expansion to Idaho DEQ and obtain approval prior to proceeding with construction. The county will contract the preparation of each cell in advance of its need. The preparation work will include topsoil and general soil excavation and stockpiling, sub grade preparation and installing of the liner and Leachate collection system and construction of necessary roads, Leachate collection pond and associated ditches.

Installation of final covers will be constructed by county forces. This construction will include final contouring, placement of cover soil, top soil, and vegetation.

F. Leachate Control and Management

Due to low amounts of moisture that fall in the area coupled with the on- and off-site drainage control that has been included in the design of the landfill, the landfill site has generated only minor amounts of Leachate to date. Leachate production will continue to be minimized by utilizing a low permeability final cover, daily cover, good positive drainage control and achieving final cover in portions of the landfill as quickly as possible. However, Leachate production will be monitored in the collection pond to document the effectiveness of final cover and drainage systems. The Leachate level within the pond will be monitored on a weekly basis and after all major precipitation events. The landfill staff will record the water level within the pond. The Leachate pond level records will be kept at the transfer station for a minimum of five years.

All Leachate collected within Phases 1 and 2 will be directed by gravity to the Leachate collection pond. If the Leachate pond exceeds 50% of its total capacity, the county will undertake measures to properly dispose of the collected Leachate. Disposal options will include recirculation of the Leachate onto the Phase 2 waste mass or trucking Leachate to a licensed wastewater treatment plant. Recirculation of Leachate will be accomplished by utilizing a pump, overland piping and sprinkler heads to deliver the water to the waste mass. During such events, the volume of Leachate that is recirculated or disposed of will be measured and recorded before and after the Leachate is removed. On a twice a year bases, (spring and fall) or as needed the Leachate collection pipe from the pond to the manhole and from the manhole to the toe of the cell will be cleaned by high pressure nozzle and water. (AAA Sewer or comparable).

G. Groundwater Monitoring

The county is currently under contract with Rocky Mountain Environmental to sampling the Rhodes domestic well and the leachate from the discharge pipe. A certified laboratory analysis of each sample for volatile organic compounds (VOCs) and selected inorganic constituents as listed in 40 CRF 258, Appendix I.

H. Explosive Gas Monitoring

The county monitors the site for explosive gases on a routine basis in accordance with the 40 CFR 258.23. The County performs monitoring on quarterly basis. The County maintains records of gas monitoring conducted on site at the Transfer station.

The methane levels within the building cannot exceed 25% 0f the lower explosive limit (LEL) and cannot exceed the LEL at the facility property boundary as measured within the gas monitoring wells on-site. If the levels of methane ever exceed the Federal standards in either the gas monitoring wells or the building, the County will immediately take all necessary steps to ensure protection of human health and notify the DEQ and local Health District of the problem. Within seven days of detection, the County will place in the operation record the methane gas levels detected, a description of the steps taken to protect human health and mitigate the situation as appropriate. Within sixty days of the exceedance, the County will implement a remediation plan and submit it to the DEQ and Health Department for approval. In addition, if the methane levels in the building exceed 25% of the lower explosive limit, the County will restrict access to the building until the situation is resolved.

Procedure for monitoring combustible gas tubes at the landfill

Equip-Bascom-Turner Instruments model "Gas-sentry Detectors model # CGI-221".

The procedure consists of uncapping the well, lowering the sensor's tube approximately 6' down the petot tube and turning the gas detector to the % Gas mode. As per the instructions indicated in the detector's instructional manual the detector will test the % of gas and indicate a percentage if any. An entry into the log book is then made at the well site indicating which well the sample was taken, time and percentage as indicated on the detector. Typically a note is added with the quarterly entry indicating wind speed, temperature, current weather conditions, detector type and when detector was calibrated. Detector is calibrated and documented once a year; however it is typically checked with the calibration tank before each sequence.

I. Litter Control

The County utilizes several litter fences to control litter on site. The County provides labor as

deemed necessary to handpick litter that has accumulated on the perimeter fences and outside the landfill area. The County also has a contract with the jail work release program for litter picking. The work release program crew provides labor when necessary for paper picking on site. Prohibiting public access to the site also helps mitigate litter problems. Delivery of waste in transfer trailers allows rapid covering of the waste on windy days due to the limited active face area. The County has also installed the necessary signs and gates to help prevent indiscriminate dumping at the landfill site. If necessary local law enforcement agencies will be used to prevent littering and indiscriminate dumping at the entrance gate and access roads leading to the site.

J. Waste Acceptance

The landfill accepts municipal solid waste transferred from the Counties Transfer Station. (Excluding special loads which are delivered directly to the landfill). Nearly 100% of the waste received at the transfer station is inspected and screened by transfer station employees. Random load inspections are also done at the transfer station to help insure proper screening. 1% of all loads entering the transfer station are separately screened again by a transfer station employee. Each designated load is taken off to the side, inspected for type of waste, unacceptable waste, documented on random load inspection form and observed as it is being unloaded. The compactor operator at the landfill also inspects each transfer trailer load as it is being dumped. This inspection provides confirmation of the transfer station's waste-screening procedures. The only other wastes received at the landfill are special loads such as dead animals and contaminated soils which are arranged by appointment only. Prior to any load of contaminated soil being accepted, it will be approved through DEQ with a written Letter of Approval received. The landfill staff inspects all special loads received under appointment. Operators at the transfer station and the landfill are both trained to identify hazardous wastes and or PCBs. No acceptable hazardous wastes and or PCBs are not accepted at the landfill and are sent to appropriate facilities handling these materials. In the event that. No acceptable hazardous waste and or a PCB waste is found, DEQ will be immediately notified. The transfer station has separate disposal area for batteries, tires, and waste oil. Household Hazardous Waste and conditionally exempt

Small Quantity Hazardous Wastes are accepted at the landfill.

K. Special and Hazardous Wastes

(1) General

The County is responsible to periodically send its operators to schools that will qualify them to identify and handle special and hazardous wastes. Any non acceptable waste identified by an operator will be handled in accordance with the Standard BMPs outlined in the Hazardous Waste First Responders training classes. The waste is also inspected at the transfer station prior to being hauled to the hill. District Seven and DEQ will be notified in the discovery of any no acceptable Hazardous waste.

(2) Liquids

Bulk or noncontained liquid wastes are not allowed at either the landfill of transfer station. Sludge that is unable to meet the paint filter test is also not accepted by the landfill. The transfer station staff inspects loads for liquid wastes. Household quantities of liquids are allowed at the transfer station and subsequently the landfill. The landfill does not accept seepage wastes.

(3) Spills

If a hazardous waste spill occurs, the operator will immediately restrict access to the area until the situation is under control. Telephone numbers of reputable, licensed firms that handle such spills will be available at the landfill. The County will be responsible to keep such firms on call in case such an emergency occurs. District Seven and the DEQ will be notified in the event of a spill.

(4) Fires

Fires will be handled in a preventive as well as corrective manner. Operators will inspect for hot loads. Any hot loads will be isolated and extinguished before they are placed in the landfill. If a fire occurs on the active fill, the operators will use their equipment to push the burning waste away from the active landfill area. The landfill crew will then use its loader and scraper to extinguish the fire with soil. If the landfill crew is unable to contain a fire with their manpower and equipment, the Road & Bridge Department's equipment and manpower resources will be brought in. If the County is still unable to control the fire, the Bonneville County Fire District will be called

to assist. Finally, if necessary, the County will bring in local contractors to provide the necessary resources to help extinguish the fire. District Seven and DEQ will be notified in the event of a fire.

(5) Asbestos

The landfill does not accept asbestos. All Construction and Demolition materials, which is most likely to contain Asbestos, is sent to the Hatch Pit where documentation is required to verify that any ACM has been abated prior to the load being accepted by the county.

(6) Bulky Wastes

Bulky wastes such as white goods are separated at the transfer station and recycled.

(7) Construction & Demolition waste

Construction and Demolition (C&D) waste loads that arrive at the transfer station are sent to the hatch pit, which is the County's licensed C&D disposal area.

(8) Burn pit

No burning will be conducted at the sanitary landfill site.

(9) Dead Animal Pit

The county will maintain a small separate pit area for dead animal disposal. The County has used an open pit system to dispose of the dead animals. After the completion of the current dead animal pit, the County will implement a trench system which will be easier to maintain and utilize less use of soil. At the end of each working day, the dead animals will be covered completely with at least 6 inches of cover and upon completion of the work week they will be covered with at least 12 inches of cover. The finish cover will consist of at least 3 feet of cover.

(10) Waste Oil

Waste oil is accepted at the transfer station and recycled. Any waste oil generated by landfill equipment will be used for heat in the oil furnace located at the landfill.

L. Climatic monitoring

The county monitors daily climatic conditions at the landfill with a weather station. The County keeps daily records of temperature, wind speed, humidity, and precipitation.

M. Record Keeping

Up to date records of all activities at the landfill are kept at the transfer station. The following records will be kept as a minimum:

(1) Load counts of transfer trailer tipping at the site on a daily basis. Records of actual waste weights will also be kept.

(2) Inspection reports completed by the Environmental Health Division of the District Health Department and the Department of environmental Quality. Also inspection reports filed by any other Local, State or Federal Agency.

(3) Any groundwater, Leachate, or methane gas monitoring data as required by the operations plans.

(4) Log of special occurrences such as fires, earth slides, and unusual and/or sudden settlement of disposal areas, injury and/or property damage, accidents, explosions, spills, flooding, and other unusual events.

(5) Record of third party requests for disposal of prohibited (regulated) wastes. The records will include type of refused waste, identity of the waste owner or transporter, and recommendations discussed for an acceptable disposal facility.

(6) Log of any problems causing operations to cease, including, but not limited to, fire, equipment failure, or wind.

(7) Log of any changes in or deviations from the operations plan as specified in the approval or conditional use permit for the facility.

(8) Log of the daily climatic conditions.

(9) Closure and Post Closure care plans.

(10) Training records for employees.

(11) Approved design plans, Specifications, as-constructed drawings and QA/QC reports for construction of landfill liner and final cover systems.

(12) Cost estimates and financial assurance documentation.

(13) The above records and the permit and operations plan will be available for review at the time of inspection by the District Health Department.

N. Financial Assurance

The County uses the local government test to comply with State if Idaho regulations governing financial assurance. Financial assurance documentation is included as part of the county's annual audit, this information can be obtained from the County Clerk's Office.

THIS OPERATIONAL PLAN FOR THE PETERSON HILL LANDFILL IS SUBMITTED FOR APPROVAL. PLEASE REVIEW THE PLAN AND IF APPROVED PLEASE SIGN AND DATE THE PLAN.

SUBMITTED BY: _____ DATE: _____
BONNEVILLE COUNTY COMMISSIONERS

APPROVED BY: _____ DATE: _____
DISTRICT SEVEN HEALTH DEPT.