Attachment 2

Operations Plan

3.0 – OPERATIONS PLAN

The Operation Plan for the Landfill has been written to address the requirements of Utah State Solid Waste Regulations and describes the proposed operations at the facility.

The following section details the operational specifics of the Landfill. Forms used to document the operations of the Landfill are included in Appendix C.

3.1 SCHEDULE OF CONSTRUCTION

The construction and operation of the Landfill has been broken down into two Phases as indicated on Drawing 3 (Appendix A); Phase A will consist of the development and filling of the first three cells. Phase A will include all site development activities including water diversion structures and site support facilities. Soil excavated from Cell 1 will be utilized for the general site grading of the support area, creation of site access roads and water diversion and retaining structures. As Cell 1 begins accepting C& D wastes; Cell 2 will be excavated to provide cover soil for the Cell 1 operations. Excess excavated soils from Cell 2 will be stockpiled for use as final cover. Cell 3 will be developed in the same manner with excavated soils being utilized for operational cover or stockpiled for future use.

Phase B will be developed by excavating the Cell 4 area. Soils from Cell 4 will be utilized as final cover for the Phase A area. Excess soil from Cell 4 will be stockpiled for use in the final cover of the Phase B area. As Cell 4 begins to accept waste; Cell 5 will be excavated to provide operational cover soils. Cell 6 will be developed in the same manner with excavated soils being utilized for operation cover or stockpiled for future use. The Landfill will be constructed and commence operations following legislative approval.

The excavation depth of each Cell may vary due to the actual depth of soil overlying the bedrock. The excavated surface indicated on Drawing 3 (Appendix A) are approximate only

since the depth to bedrock will vary across the site. The actual depth of excavation for each Cell is not crucial in the design or operation of the facility as long as the minimum 2% bottom slope and maximum 3:1 side slopes are maintained.

The operation of the Landfill will be continual in nature, the Phased arrangement is more of a design concept rather than actual operational milestones. Based on the projected waste stream, Phase A will provide operational airspace for approximately 11 to 12 years, with design capacity being reached in 2031 or early 2032. Phase B will commence operation in approximately 2032 and last until approximately 2043. The landfill capacities are initially based upon reported waste acceptance of 30,000 tons per year (2018-2020) and escalating at 25% for an additional two years, then at 2% growth (mirroring current population growth) each year thereafter.

3.2 DESCRIPTION OF WASTE HANDLING PROCEDURES

3.2.1 General

The waste control program is designed to detect and deter attempts to dispose of hazardous, municipal solid waste or other unacceptable wastes at the Landfill. The program is designed to protect the health and safety of employees, customers, and the general public, as well as to protect against the contamination of the environment.

The Landfill will be open for public and private disposal. Signs will be posted at the Landfill access point to clearly indicate (1) the types of wastes that are accepted at the C&D facility; (2) the types of wastes not accepted at the site; and (3) the penalty for illegal disposal. The following waste handling procedure will be followed to minimize the potential for non C&D waste being incorporated in the Landfill:

- All vehicles delivering wastes to the site will be met at the gate by a Landfill Technician. The Landfill Technician will inquire as to the contents of each incoming load and enter the description of the vehicle and waste content into the Daily Log.
- The vehicle will be directed to the drop off facility (for recyclables), working face (for C&D), Washington County Landfill operations (for MSW), or rejected due to unacceptable materials.
- Any vehicle suspected of carrying unacceptable materials (liquid waste, sludges, or hazardous waste) will be prevented from entering the disposal areas unless the driver can provide evidence that the waste is acceptable for disposal at the site. ONP, LLC reserves the right to refuse service to any suspect load. Vehicles carrying unacceptable materials will be required to exit the site without discharging their loads.
- Loads will be regularly surveyed at the tipping area. If a discharged load contains inappropriate or unacceptable material, the discharger will be required to reload the material and remove it from the Landfill. 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.

No open burning or smoking will be allowed near the work face.

3.2.2 Waste Acceptance Records

A monthly summary of all landfill transactions will be created and kept on file at the Landfill or sent to the ONP, LLC offices for storage.

3.2.3 Waste Disposal

The geometry of the Landfill is such that the waste will be pushed upslope into place. The C&D wastes will be dumped at the toe of the work face when possible and spread up the slope in one- to two-foot lifts, keeping the slope at a typical five to one (horizontal to vertical) configuration.

Work face dimensions will be kept narrow enough to minimize blowing litter and reduce the amount of soil needed for cover.

Typically, the track loader will be operated with the bucket facing uphill. Equipment operations across the slope will be avoided to minimize the potential of equipment tipping over. In addition to safety concerns, a toe of slope to crest of slope working orientation provides the following benefits:

- Increases effective compaction.
- Increased visibility for waste placement and compaction.
- More uniform waste distribution.

The wastes will be compacted by making three to five passes up and down the slope. Compaction reduces litter, differential settlement, and the quantities of cover soil needed. Compaction also extends the life of the site, reduces unit costs, and leaves fewer voids to help reduce vector problems. Care will be taken that no holes will be left in the compacted waste. Voids will be filled with additional waste as they develop. Cover soils will be applied to all areas of the active cell at a minimum of every 30 days.

3.2.4 Special Wastes – Wastes Excluded from the Landfill

3.2.4.1 Used Oil and Batteries

Used Oil and Batteries will not be accepted at the Landfill.

3.2.4.2 Appliances

White goods will be accepted at the Landfill and be separated for recycling. All appliances containing refrigerants will be segregated in a separate area and stored until the refrigerant is removed. The appliances will be loaded into a metal bin for recycling. Used cars will not be accepted at the facility.

3.2.4.3 Tires

Tires will not be accepted at the Landfill.

3.2.4.4 Dead Animals

Dead animals will not be accepted at the Landfill.

3.2.4.5 Asbestos Waste

Asbestos waste will not be accepted at the Landfill.

3.2.4.6 Grease By-Products

Grease By-Product wastes will not be accepted at the Landfill.

3.2.4.7 Sewer Sludge

Sewer sludge of any kind (wet or dry) will not be accepted at the Landfill.

3.3 WASTE INSPECTION

3.3.1 Landfill Spotting

Learning to identify and exclude prohibited and hazardous waste from the Landfill is required to maintain the Class VI classification and necessary for the safe operation of the facility. The Landfill Technicians are required to receive initial and periodic hazardous waste screening inspection training. Waste screening certificates of the training received will be kept in the personnel files.

3.3.2 Random Waste Screening

Random inspections of incoming loads will be conducted according to the schedule established by the Landfill Supervisor. If frequent violations are detected, additional random checks will be scheduled at the discretion of the Landfill Supervisor.

If a suspicious or unknown waste is encountered, the Landfill Technician will proceed with the waste screening as follows:

- The driver of the vehicle containing the suspect material will be directed to the waste screening area.
- The waste screening form (Appendix C) will be completed.
- Protective gear will be worn (leather gloves, steel-toed boots, and hard hat).
- The suspect material will be spread out with landfill equipment or hand tools and visually examined. Suspicious marking or materials, like the ones listed below, are investigated further:
  - Containers labeled hazardous
  - Material with unusual amounts of moisture
  - Biomedical (red bag) waste
  - Unidentified powders, smoke, or vapors
  - Liquids, sludges, pastes, or slurries
  - Asbestos or asbestos contaminated materials
  - Batteries
  - Other wastes not accepted by the Landfill

- The Landfill Supervisor will be called if unstable wastes that cannot be handled safely or radioactive wastes are discovered or suspected.

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:

- The waste will be loaded back on the hauler's vehicle. The hauler will then be informed of the proper disposal options.

- If the hauler or generator is no longer on the premises and is known, they will be asked to retrieve the waste and informed of the proper disposal options.
- The Landfill Supervisor will arrange to have the waste transported to the proper disposal site and then bill the original hauler or generator.

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

3.3.4 Hazardous or Prohibited Waste Discovered After the Fact

If Hazardous or prohibited wastes are discovered at the Landfill after the hauler has left the premises, the following procedure will be used to remove them:

- Access to the area will be restricted.
- The Landfill Supervisor will be immediately notified.
- The Landfill Technician will remove the waste from the working face if it is safe to do so.
- The waste will be isolated in a secure area of the Landfill and the area cordoned off.
- Local authorities will then be notified as appropriate.

The DSHW, the hauler (if known), and the generator (if known) will be notified within 24 hours of the discovery. The generator (if known) is responsible for the proper cleanup, transportation, and disposal of the waste.

3.3.5 Notification Procedures

The following agencies and people are contacted if any hazardous materials are discovered at the Landfill:

- Landfill Supervisor.....(435) 703-4742
- Washington County Health Department.....(435) 673-3528
- Director, DSHW.....(801) 536-0200

- Washington City Fire Department ..... (435) 673-4788

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

3.4 FACILITY MONITORING AND INSPECTION

3.4.1 Groundwater

The Landfill is not required to monitor groundwater.

3.4.2 Surface Water

Run-on diversion structures will be installed around the perimeter of the Landfill site during the initial construction as shown on Drawing 3 and detailed on Drawing 6 (Appendix A). The diversion structures envisioned are ditches, but berms may also be added in small areas if necessitated by topography. Potential run-on waters will be prohibited from accessing the working area of the landfill and diverted towards the Virgin River. Drawing 6 (Appendix A) shows the section view of the storm water diversion ditches.

ONP, LLC staff will inspect the drainage system monthly. Temporary repairs will be made as required to any observed deficiencies until permanent repairs can be scheduled. ONP, LLC or a licensed general contractor will repair drainage facilities as required.

3.4.3 Leachate Collection

The Landfill is not required to collect or monitor leachate.

3.4.4 Landfill Gas

The Landfill is not required to monitor landfill gas.

3.4.5 General Inspections

Routine inspections will be 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. Landfill Technicians will be responsible for conducting and recording routine inspections of the landfill facilities according to the following schedule:

- Landfill Technicians (when operating equipment) will perform a pre-operational inspection of all equipment daily. A post-operational inspection will be performed at the end of each shift while equipment is cooling down.
- All equipment will be on a regular maintenance schedule. A logbook will be maintained on each piece of equipment and any repairs and comments concerning the inspection will be recorded in the log.

- Facility inspections will be completed on a quarterly basis. Any needed corrective action items will be recorded, and the Landfill Technicians will complete any needed repairs. If a problem is of an urgent nature, the problem will be corrected immediately.

3.5 CONTIGENCY AND CORRECTIVE ACTION PLANS

The Washington City Fire Department will be contacted in all cases where hazardous materials are suspected to be involved. The following sections outline procedures to be followed in case of fire, explosion, run-on/run-off contamination, or suspected groundwater contamination:

3.5.1 Fire

The potential for fire is a concern in any landfill. The Landfill will follow a waste handling procedure to minimize the potential for a landfill fire. If any load comes to the facility on fire, the driver of the vehicle will be directed to a pre-designated area away from the working face. The burning waste will be unloaded, spread out, and immediately covered with sufficient amounts of soil to smother the fire. Once the burning waste cools and is deemed safe, the

material will then be incorporated into the working face. Some loads coming to the facility may be on fire but not detected until after being unloaded at the working face. If a load of waste that is on fire is unloaded at the working face, the load of waste will be immediately removed from the working face, spread out, and covered with soil.

The Washington City Fire department will be called if it appears that facility personnel and equipment cannot contain any fire. The Washington City Fire department will also be called if a fire is burning below the disposal surface or is difficult to reach or isolate.

In case of fire, the Landfill Supervisor 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

If an explosion occurs or seems possible, all personnel and customers will be accounted for and the Landfill will be evacuated. A corrective action plan will immediately be evaluated and implemented as soon as practicable.

The Landfill Supervisor will be notified immediately, and the Washington City Fire department will be called. The Director will be notified immediately.

3.5.3 Failure of Run-On/Run-Off Containment

The purpose of the run-on/run-off control system is to manage the stormwater falling in or near the Landfill. Were possible, water will be diverted away from the facility by utilizing ditches and berms. These ditches will be inspected on a regular basis and repaired as needed. All precipitation falling near the facility will flow around the site perimeter towards the Virgin River.

If a run-off ditch or berm fails, temporary berms or ditches will be constructed until a permanent run-off structure can be repaired.

Any temporary berms or other structures will be checked at least every 2 hours during the storm event until storm water flow has stopped. Permanent improvements or repairs will be made as soon as practicable.

The Landfill Supervisor will be notified immediately if a failure of the run-off systems is discovered. The event will be fully documented in the operating record, including any corrective actions implemented within 14 days.

3.5.4 Groundwater Contamination

The Landfill will not have ground water monitoring wells. 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 Director.

3.6 CONTINGENCY PLAN FOR ALTERNATIVE WASTE HANDLING

The most probable reason for a disruption in the waste handling procedures at the Landfill will be weather related. The facility 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 Landfill may also close for other reasons like fire, natural disaster, etc. In general, the ONP, LLC staff will minimize the possibility of disruption of waste disposal services from an operational standpoint.

In case of equipment failure, waste will be temporarily diverted for disposal at the Washington Oounty Landfill while repairs to site equipment are being made.

3.7 MAINTENANCE PLAN

3.7.1 Groundwater Monitoring System

The Landfill will be exempt from requirements for groundwater monitoring. As a result, no groundwater monitoring system is planned.

3.7.2 Leachate Collection and Recovery System

The Landfill will be exempt from requirements for leachate collection. As a result, no leachate collection and recovery system is planned.

3.7.3 Gas Monitoring System

The Landfill will be exempt from requirements for a landfill gas monitoring system. No gas collection system is planned.

3.8 DISEASE, VECTOR, DUST, AND LITTER CONTROL

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

3.8.1 Insects

The elimination of breeding areas is essential in the control of insects. The facility will minimize the breeding areas by covering the waste with soil at a minimum of every 30 days and maintaining surfaces to reduce ponded water.

3.8.2 Rodents

Reducing potential food sources minimizes rodent populations at the landfill. Due to the nature of the C&D wastes, limited food is available and a significant numbers of mice or rats are therefore not anticipated.

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

3.8.3 Birds

It is anticipated that the Landfill will have minimal problems with birds due to the nature of the C&D wastes. Good land filling practices of waste compaction, daily covering of working faces, and the minimization of ponded water, and the nature of the waste should alleviate most of the bird related problems. If the occasional need arises, the birds will be encouraged to leave by using cracker and whistler shells.

3.8.4 Household Pets

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

3.8.5 Wildlife

The Landfill may have a variety of wildlife located on or near the landfill property. 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 facility 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.

3.8.6 Fugitive Dust

The roads leading to the Landfill are paved, however; site access roads to the working face will be improved dirt/gravel road and will need occasional dust control measures. General landfill activities, site access by vehicles compounded with occasional high winds may present a fugitive dust problem. If the dust problem elevates above the "minimum avoidable dust level", facility personnel will apply water to the problem areas. A combination of gravel and a dust palliative may be utilized if dust becomes prevalent.

3.8.7 Litter Control

The nature of the C&D waste anticipated to be received at the Landfill is such that it will naturally resist blowing. However; due to the nature of landfilling operations, it is anticipated blowing litter will still be an occasional problem. Landfill personnel will perform routine litter cleanup to keep the landfill and surrounding properties clear of windblown debris.

Whenever possible, the working face will be placed down wind so that blowing litter is worked into the landfill face. During windy conditions, landfill personnel will minimize the spreading of the waste to reduce the quantity of windblown debris.

3.9 RECYCLING AND MATERIAL REUSE

Material reuse and recycling activities are planned to be conducted in conjunction with the C&D operations. Metals, appliances, wood, and other re-useable or recyclable materials will be accepted at the Landfill. As the recycling markets fluctuate; other recyclable materials may be added to the list of material that the facility accepts.

3.10 TRAINING PROGRAM

As part of the initial training of new employees, site specific training will be required. All on-site personnel will be required to review the approved permit annually.

All personnel associated with the operation of the landfill receive site specific training annually. The "Sanitary Landfill Operator Training Course" offered by the Solid Waste Association of North America (SWANA) will be required for the Landfill Supervisor. SWANA waste screening will also be required of all Landfill Technicians. Certificates of completion will be kept in personnel files.

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

3.11 RECORDKEEPING

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

- Number of vehicles entering the landfill and types of wastes received on a monthly basis.
- Daily logs forms will be submitted to the ONP, LLC office for storage.
- Deviations from the approved Plan of Operation.
- Personnel training and notification procedures.
- Random load inspection log.

3.12 SUBMITTAL OF ANNUAL REPORT

ONP, LLC will submit a copy of its annual report to the Director 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.

3.13 INSPECTIONS

The Landfill Supervisor, or his/her designee, 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 will be conducted on a quarterly basis, at a minimum. An inspection log (Appendix C) will be kept as part of the operating record. This log will include 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 will be available to the Director or an authorized representative upon request.

3.14 RECORDING WITH COUNTY RECORDER

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

3.15 STATE AND LOCAL REQUIREMENTS

The Landfill will maintain compliance with all applicable state and local requirements including zoning, fire protection, water pollution prevention, air pollution prevention, and nuisance control.

3.16 SAFETY

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

3.17 EMERGENCY PROCEDURES

In the event of an accident or any other emergency situation, the Landfill Technician will immediately contact the Landfill Supervisor and proceed as directed. If the Landfill Supervisor is not available, the Landfill Technicians will call the appropriate emergency number posted by the telephone. The emergency telephone numbers for the facility are:

- Washington County Central Dispatch..... 911
- Washington City Fire Department..... (435) 673-4788
- Washington County Sheriff's Office ..... (435) 637-5730
- St. George Regional Hospital ..... (435) 251-1000
- Landfill Supervisor..... (435) 703-4742

Purgatory Landfill

Daily Log

Date: _____

Load #	Time	Vehicle Identification	Size of Load (Cu. Yds.)	Type of Waste	Charge
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

_____

Signature of Inspector

Purgatory Landfill

Random Load Inspection

Date of Inspection: _____

Owner of Load: _____

Address of Owner: _____

Description of Materials in Load:

_____

_____

_____

_____

_____

_____

Approximate Quantity of Load:

_____ Tons

_____ Cu. Yds.

_____

Signature of Owner / Carrier

_____

Signature of Inspector

Purgatory Landfill

Site Inspection Form

DATE OF INSPECTION: _____

LANDFILL AREA: _____

PERSONNEL ON SHIFT: _____

_____

GENERAL SITE CONDITIONS: _____

_____

_____

_____

_____

SPECIFIC CONDITIONS:

Closed Cover Condition: _____

Daily Cover: _____

Run-On Structures: _____

Run-Off Structures: _____

Fences: _____

Site Structures: _____

CORRECTIVE ACTION REQUIRED: _____

_____

_____

_____

_____

Signature of Inspector