

## Attachment 2 - Plan of Operation

## **SECTION 3 – PLAN OF OPERATION**

This Plan of Operation has been written to address the requirements of UAC R315-302-2 and briefly describes the operations of the NVL facility.

The purpose of the Plan of Operation is to provide the Manager, Foreman, Operators and Attendants with standard procedures for day-to-day operation of the landfill. A copy of the final permit application (including the Plan of Operation) and Landfill Permit (issued by the DWMRC) will be kept at the landfill for reference.

As previously stated, the function of the NVL is to provide for the responsible disposal of MSW generated by the citizens of Cache County. The landfill is subject to and will be operated in accordance with applicable sections of the Utah Solid Waste Permitting and Management Committee Rules, Utah Administrative Code (R315-301 through 320).

### **3.1 SCHEDULE OF CONSTRUCTION**

Construction of the NVL facility started in 2015 with the design and construction of a paved access road from SR 142 near Clarkston to the NVL site. Concurrent with the development and construction of the access road, site civil work started at the NVL site. Site development work included cell excavation, site road construction, storm water structures and general site earthwork. Following the construction of the road and preliminary site development, the first lined landfill cell and associated leachate pond was constructed during the 2017 construction season with the second lined landfill cell being completed in October of 2019 with a second lined leachate pond being constructed in August of 2020.

The near-term development sequence envisioned for the NVL is as follows:

- Excavation of Cell 3 is ongoing for the duration of 2022.
- Installation of drain mat in leachate pond / Cell 2 – fall of 2022.

- Construction of Cell 3 liner – summer of 2023

The construction of additional cells at the NVL site will be performed as needed but are anticipated to occur every 5 or 6 years moving forward.

Site soils will be utilized as the primary cover materials for daily, intermediate, and final cover construction as well as for general embankment construction. With the exception of access road surfaces, the NVL is designed such that no import soil will be required for site development or landfill operations, all required soils will be available on Logan City property associated with the NVL operations.

## **3.2 WASTE STREAM MANAGEMENT - DESCRIPTION OF HANDLING PROCEDURES**

### **3.2.1 General**

An effective waste control program is designed to detect and deter attempts to dispose of hazardous and other unacceptable wastes and has been implemented at the NVL. 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 is not open for public disposal (with the exception of occasional special waste loads) and will be accessed via locked gate by landfill employees only. Signs are posted at the landfill entrance clearly indicating that the facility is owned and operated by Logan City (along with contact information for the City) with signage indicating that the facility is a private facility.

Most of the waste being delivered to the NVL is processed through the transfer station. Initial processing at the transfer station will include the initial waste screening and weighing of the MSW. Occasionally it may be beneficial for the City to haul waste collected in the northwest portion of the County directly to the NVL facility. If that is the case, waste will be

delivered directly to the NVL facility where it will be weighed on site and screened for improper waste at the site by an Operator, Attendant, or Inspector.

Logan City personnel's efforts to deter disposal of hazardous and unacceptable waste begins with the collection of MSW. Collection truck drivers are instructed to observe all waste they collect and screen the waste as it is collected. All waste delivered to Logan City facilities stop at a scalehouse to be weighed where the scale attendant inquires about the nature of each load as part of the weighing transaction. Construction and Demolition (C&D) waste is directed to the Logan Landfill while all MSW is processed through the transfer station and delivered to the NVL.

At the scale, any vehicle suspected of carrying unacceptable materials (liquid waste, sludges, or hazardous waste) is prevented from entering the transfer station unless the driver can provide evidence that the waste is acceptable for disposal at a MSW facility. Logan City reserves the right to refuse service to any suspect load. Vehicles carrying unacceptable materials will be required to exit the site without discharging their load and the Bear River Health Department will be informed about the incident. If a load is suspected of containing unacceptable materials (but not rejected at the scalehouse), the following information will be recorded: date, time, name of the hauler, driver, telephone number of hauler, vehicle license plate, and source of the waste. The scalehouse attendant will then notify the transfer station personnel that a load is suspect, and that load will be further inspected as the hauler deposits the load on the transfer station tipping floor. If the load is acceptable to be sent to the NVL it will be loaded into transfer trucks, if not it will be loaded back into the haulers vehicle and rejected for disposal. Appendix D contains typical forms to be utilized to document waste inspections.

If a discharged load contains inappropriate or unacceptable material, the discharger will be required to reload the material and remove it from the transfer station. 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 but not transferred to the NVL.

If waste delivered to the NVL is found to be unacceptable upon waste screening performed at the landfill, the area where the unacceptable waste is located will be cordoned off. Unacceptable material will be moved to a designated area within the lined landfill cell for identification and prepared for proper disposal.

### **3.2.2 Waste Acceptance**

Waste delivered to the NVL will be primarily through the transfer station where the bulk of the waste acceptance activity will take place. Logan City currently uses a software package entitled "SMS Turbo" in the scalehouse to record information about incoming loads being disposed of at the Logan Landfill or at the NVL. The program records data like weights, waste type, account information and amount charged. With this program Logan City personnel are able to track all incoming waste as well as bill and receive payment from all customers.

Currently a vehicle with waste stops on the scale; the scale operator identifies the load as to whether it is a commercial hauler, general public or private individual with an account. The proper codes are entered into the computer identifying the material, hauler, and account number. All loads larger than a pickup or a single axle trailer are weighed and charged accordingly. This information is printed on a two-part ticket; the customer receives one copy and one copy is saved for use by the Manager, or any other employee who has responsibilities relating to the landfill that may need information from these tickets.

Solid waste transaction tickets are ultimately stored at the Logan City Environmental Center. All transactions are backed up on a nightly basis to the Logan City's computer network. Data extracted from the scale house computer is used to create a portion of the daily landfill record. Any or all transactions may be retrieved as necessary.

A remotely controlled scale is installed at the NVL to weigh the city trucks as they enter the facility. Since the only vehicles that haul to the NVL are city trucks (or special wastes processed at the transfer station), the information tracked will be limited to the day of disposal, vehicle hauling the load and the weight of the load only if the load has not been weighed through the transfer station. The tare weight will be periodically determined for each of the City collection trucks that will potentially be hauling directly so the weight of waste hauled to the NVL can readily be documented.

For waste that may be delivered directly to the NVL (waste in collection trucks operating in the northwest portion of the County) waste screening will be done as needed or scheduled according to the procedures outlined in Section 3.3 Waste Inspection. No open burning will be allowed in association with the NVL nor will smoking be allowed anywhere on the landfill.

### **3.2.3 Waste Disposal**

Once waste is delivered to the site, the waste 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 maximum of three to one (horizontal to vertical) configuration.

Work face dimensions will be kept narrow enough to minimize blowing litter and reduce the amount of material needed for daily cover. Typically, the width of the working face will be two to four times the width of the compactor blade (30 - 60 feet). The narrow working face will help to facilitate complete compaction of the waste and keeps the width narrow enough to minimize the amount of daily cover required.

Typically, the compactor will be operated with the blade 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:

- Minimizes blowing litter problems

- Increases equipment compactive effectiveness
- Increased visibility for waste placement and compaction, and
- More uniform waste distribution.

Grade stakes or other grade control measures will be used if necessary to control cell height and top surface grade. The top of the interim surfaces will typically range from 2 to 5 percent to promote runoff within the cell which will be directed to the leachate pond. The working heights of each cell ranges from 10 to 15 feet depending upon operational access considerations.

Wastes is 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 landfill, reduces unit costs, and leaves fewer voids to help reduce vector problems. Care will be taken that no holes are left in the compacted waste. All voids will be filled with additional waste as necessary.

Intermediate cover is applied to all areas of the active cell that will not receive additional waste within 30 days. Intermediate cover will consist of an additional 12 inches of soil being placed over the 6 inches of daily cover soil.

### **3.2.4 Special Wastes**

#### **3.2.4.1 *Used Oil and Batteries***

The existing Logan Landfill is a "Used Oil Recycle Center". When a customer has used oil to dispose of, they fill out the form "UTAH DIYer USED OIL LOG" provided by UDEQ. A report generated from this form is turned in quarterly stating the amount of oil deposited and the customer's names. Waste oil will continue to be accepted at the Logan Landfill. No used oil will be transferred to or accepted at the NVL.

The existing Logan Landfill provides an area to collect and store used batteries and will continue to do as part of the operation of the transfer station. Batteries are stored until a

sufficient number is accumulated to facilitate delivery to a recycler. No batteries will be transferred to or accepted at the NVL.

#### **3.2.4.2 *Bulky Wastes***

White goods are currently accepted at the Logan Landfill and are separated for recycling. All appliances containing refrigerants are segregated in a separate area, with refrigerant being removed by a qualified contractor. Bulky waste (i.e., furniture, appliances) will continue to be accepted at the Logan Landfill as part of the transfer station operation. Some bulky waste will be transferred to NVL through the transfer station while other bulky waste will be recycled as appropriate.

Used cars will not be accepted at the NVL. Persons seeking to dispose of used car bodies will be directed to take the car to local recyclers: Valley Metal Recycling, Dd Auto Salvage Inc., or Western Metals located near Plymouth, Utah.

#### **3.2.4.3 *Tires***

The existing Logan Landfill charges for and accepts tires from the general public. Commercial tire outlets are prohibited from disposing of tires at the landfill. All tires are stored in a designated tire storage area. When sufficient quantities of tires are collected, a tire recycler is called, and the tires are removed from the facility for recycling. Tires will continue to be accepted at the Logan Landfill as part of the transfer station operations. However, no tires will be transferred to or accepted at the NVL.

#### **3.2.4.4 *Dead Animals***

Dead animals are currently accepted as part of the transfer station operation. Dead animals are processed according to the size of the animal. Small animals will be incorporated into the general waste mass and processed directly into transfer trucks. Large animals (horses and cows) may be processed into a designated roll off container at the transfer station or arrangements may be made with Logan City staff to directly haul the dead animal to the NVL.



NVL personnel incorporates the dead animals into the working face of the landfill. The incorporation of the carcasses into the landfill is accomplished by pushing up the toe of the face and depositing the animal in the bottom of the toe; waste is then pushed over the top of the animal.

#### **3.2.4.5 *Asbestos Waste***

The Logan Landfill is permitted to accept asbestos waste. Asbestos waste is handled, transported, and disposed in a manner that will not permit the release of asbestos fibers into the air and that complies with Sections R315-315-2 of the State regulation. No transporter or disposal facility shall accept friable asbestos waste unless the waste has been adequately wetted and containerized. The Logan Landfill will continue to accept asbestos waste as part of the transfer station operations until an asbestos cell is constructed as part of the NVL operations.

#### **3.2.4.6 *Grease Pit and Animal Waste By-Products***

Waste from restaurant grease traps and slaughterhouse by-products is accepted at the NVL after processing at the transfer station. These wastes require 24 to 48 hour notice before disposal and require the hauler to initially transport the wastes to the transfer station for weighing. Transfer station employees notify the NVL personnel that a special waste load will be delivered directly to the NVL. The transporter will then haul the wastes directly to the NVL and present a copy of the weight ticket from the transfer station and discharge the load as directed. If the waste passes the paint filter test, it will be at the toe of the working face and immediately covered. If excess liquid is present in the waste, the waste will be unloaded on a specially prepared drying pad within the lined cell. The waste will remain on the drying pad until the moisture has been sufficiently reduced to pass the paint filter test. Once the waste passes the paint filter test, the waste will be deposited at the toe of the working face where it will be immediately covered.

### **3.3 WASTE INSPECTION**

#### **3.3.1 Landfill Spotting**

Learning to identify and exclude prohibited and hazardous waste is necessary for the safe operation of all landfills. The Operators (or Attendants) assigned to the NVL will be required to receive initial and periodic hazardous waste inspection training. Certificates of initial and annual training will be kept in the personnel files of the landfill personnel.

Hazardous wastes have either physical or chemical characteristics that could harm human health or the environment. A waste is considered hazardous if it falls into either of two categories: 1) a listed waste, or 2) a characteristic waste. Hazardous wastes will not be accepted at the NVL. Logan City has a household hazardous waste exclusion and collection program operated as part of the Logan Landfill.

Small quantity generators (<100 kg/month) and household quantities are exempt from hazardous waste regulations. However, hazardous wastes are most likely to enter the landfill mixed in with common household waste being processed through the transfer station. Public education and periodic waste screening are the tools to be utilized to minimize the amount of inadvertent hazardous waste entering the NVL.

#### **3.3.2 Random Waste Screening**

Although most of the waste to be disposed of at the NVL will be processed through the transfer station (including waste screening), random inspections of incoming loads will be conducted according to the schedule established by the landfill management. A portion of the waste collected from the northern portions of the county may be hauled directly to the site by Logan City collection trucks once a week. More than one percent of the vehicles coming in the landfill on that day will be selected randomly for inspection according to the schedule. If frequent violations are detected, additional random checks will be scheduled at the discretion of the landfill Manager with waste screening results shared with the transfer station management.

If a suspicious or unknown waste is encountered, the Operator 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 within the lined cell.
- The waste screening form will be completed by the Operator (or Attendant if utilized at the NVL) and placed on file.
- Protective gear will be worn (leather gloves, steel-toed boots, goggles, coveralls, and hard hat) while waste is screened.
- The suspect material will be spread out with the compactor or hand tools and visually examined.
- Suspicious marking or materials, like the ones listed below, will be 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 management 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 is loaded back on the hauler's vehicle (Logan City truck). The landfill management will arrange to have the waste transported to the proper disposal site and attempt to locate the waste origin. The landfill management will also inform Bear River Health Department about the incident.

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 in the landfill, the following procedure will be used to remove them:

- Access to the area will be restricted.
- The landfill management will be immediately notified.
- The Operator 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 lined landfill and the area cordoned off.
- Logan City's Hazardous Materials Team (HazMat) will be notified.
- The Bear River Health Department will also be notified

The DWMRC and the generator (if known) will be notified within 24 hours of the discovery. The generator (if known) of the hazardous will be 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:

Tyler Richards, Landfill Manager..... (435) 716-9756  
Bear River Health Department..... (435) 792-6500  
Issa Hamud, Environmental Dept. Director ..... (435) 716-9752 or (435) 881-5339  
Logan City Fire Department ..... (435) 716-9500

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 Ground Water**

The NVL staff will comply with all aspects of the required ground water monitoring requirements as referenced in R315-308. The Ground Water Monitoring Plan includes sampling and analysis plans and frequency of sampling indicated to meet the regulatory requirements for the monitoring of ground water at the NVL. Appendix E includes a copy of the most recent Ground Water Monitoring Report.

#### **3.4.2 Surface Water**

The NVL permit drawings (Appendix A) illustrate the locations and details of the surface water drainage control systems for both run-on and run-off. With regards to this permit, run-on water is defined as the water that will be diverted around the landfill area and diverted into existing drainages. Run-off is the water that falls on the landfill footprint that does not contact waste. Run-off will be directed to a run-off pond. Storm water that falls within the footprint of the landfill and comes in contact with waste is defined as leachate and will be directed to a lined leachate pond.

In general, run-on is prevented from running into the active landfill area by ditches associated with a perimeter access road. The permit drawings (Appendix A) indicate the location of the existing and future run-off basins. Calculations of the anticipated run-off volumes are shown in Appendix F. 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 through culverts to the run-off pond.

Ditches and berms used for management of the run-on waters are shown on the permit drawings (Appendix A) with the run-on calculations presented in Appendix F.

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

Prior to waste placement at the NVL, Logan City prepared and submitted for approval a Utah Pollutant Discharge Elimination System (UPDES) Multi-Sector General Permit for Storm Water Discharges Associated with Industrial Activity, Coverage No. UTR000703. Appendix G contains the Notice of Intent (NOI) associated with the current UPDES permit.

### **3.4.3 Leachate Collection**

The NVL has a composite landfill liner system installed in all of the landfill cells which serves as the primary element in the leachate collection system. The leachate collection and recovery system (LCRS), installed in each of the lined landfill cells, will be maintained so that it operates from initial construction throughout the post-closure maintenance period. The LCRS consists of lined landfill cells, drainage media to transport leachate along the cell bottoms, leachate collection pipes, and a lined leachate pond.

The LCRS system is inspected no less than quarterly by landfill staff for signs of deterioration. Logan City personnel or a licensed contractor will make required repairs to the system as required. Cleanouts will be located to aid in system operation and maintenance and will be detailed as part of individual cell designs.

#### **3.4.4 Landfill Gas**

An active landfill gas management system will be constructed at the NVL concurrent with the construction of the final cover. Details of the landfill gas collection system will be developed and submitted to the DWMRC for approval prior to final cover construction.

This facility is monitored for methane gas on a quarterly basis with concentrations of methane gas being measured with a hand-held gas monitor. Gas readings are recorded at any site structures developed on landfill property, all ground water monitoring well locations, and at all property boundaries. Readings are recorded on the "Gas Log" sheet and kept on file in the office.

If methane releases are detected in excess of 25 percent of the LEL, in any landfill structure or more than 100 percent of LEL at the property boundary, the procedure outlined in the "Explosive Gases" section will be followed. The forms utilized by landfill personnel to record gas monitoring activities are included in Appendix D.

Logan City has applied for and has been issued a Title V Operating Permit from the Division of Air Quality. A copy of the current Title V Operating Permit is included as Appendix H. Associated with the Title V Operating Permit, Logan City has conducted tier 2 landfill gas testing and a five-year estimate for non-methane organic compounds (NMOC) emissions at the NVL. A copy of the most current NMOC Emissions Report is included in Appendix H.

#### **3.4.5 General Inspections and Quarterly Inspection**

Routine inspections are necessary to prevent malfunctions and deterioration of landfill control systems, operator errors, and discharges that may cause or lead to release of wastes to the environment or a threat to human health. Operators are responsible for conducting and recording routine inspections of the landfill facilities according to the following schedule:

Operators will perform pre-operational inspections of all equipment daily. A post-operational inspection is performed at the end of each shift while equipment is cooling down.

All equipment is on a regular maintenance schedule. A logbook is maintained on each piece of mobile equipment that includes a record of any repairs and operational related comments concerning the equipment. Oil samples are pulled and analyzed when each machine is serviced, and testing results are recorded in the machine log.

Facility inspections are completed on a quarterly basis. Any needed corrective action items are recorded and the Operators (Attendants) complete needed repairs. If a problem is of an urgent nature, the problem will be corrected immediately.

Scale maintenance is performed annually at a minimum. If specific problems arise before scheduled maintenance, scale maintenance is performed as required. The scale is certified on an annual basis.

Landfill personnel also conduct quarterly inspections. Quarterly inspections are performed by a team of qualified landfill employees and is intended to assess the condition of various areas of the landfill. Quarterly inspections include dust control activities, cover conditions, waste control, scale operations, perimeter fence, run-off / run-on system, roads, buildings, ground water monitoring wells, tipping face, disease vector control activities, and general facility appearance. The forms utilized by landfill personnel to record general and quarterly inspection activities are included in Appendix D.

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

The following sections outline procedures that will be followed in case of fire, explosion, ground water contamination, release of explosive gases, or failure of the storm water management system.



HazMat will be contacted in all cases where hazardous materials or materials contaminated with PCB's are suspected to be involved.

### **3.5.1 Fire**

The potential for fire is a concern in all landfills. The NVL staff follow a waste handling procedure to minimize the potential for a landfill fire. If any load comes to the landfill on fire, the driver of the vehicle will be directed to an 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 be incorporated into the working face. Some loads coming to the landfill 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 Logan Fire Department will be called if it appears that landfill personnel and equipment cannot contain any fire at the landfill. The Logan Fire Department will also be called if a fire is burning below the landfill surface or is difficult to reach or isolate.

In case of fire, the Manager and Director 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 Release of Explosive Gases**

Methane gas generation and concentration is not anticipated to be a problem at the NVL. However, due to the production of methane in all landfills, landfill gas levels will be monitored quarterly. If a concentration of methane is detected in excess of 25 percent of the lower explosive limit (LEL) in a landfill building, 100 percent LEL at the property boundary, or over 100 parts per million in an off-site building, the following procedure will be followed:

- Landfill operations will cease immediately. The landfill will be evacuated if personnel or buildings may be threatened.
- If gas is detected in a building, the doors and windows will be opened to allow the gas to escape.

- If off-site buildings or structures appear to be threatened, the Logan Fire Department will be called, the property evacuated, and the surrounding property owners notified.
- The Manager and Director will be notified as soon as possible. The release will be monitored, and a temporary corrective action implemented as soon as possible. A permanent corrective action will be completed as soon as practicable with details acceptable to the DWMRC.

The DWMRC will be notified immediately, and a written report submitted within 14 days of detecting the release. The gas levels detected, and a description of the steps taken to protect human health will be placed in the operating record within seven days of detection. A remediation plan for the methane gas release will be placed in the operating record within 60 days of detection and the DWMRC Director will be notified that the plan has been implemented.

### **3.5.3 Explosion**

If an explosion occurs or seems eminent, all personnel and site visitors (if persons other than Logan City personnel are on site) will be accounted for and the landfill evacuated. A corrective action plan will be immediately formulated and implemented as soon as practicable.

The Manager and Director will be notified immediately, and the Logan Fire Department will be called. The DWMRC Director will be notified immediately.

If the explosion is the result of methane gas, the gas levels detected, and a description of the steps taken to protect human health will be placed in the operating record within seven days of detection. A remediation plan for the methane gas release will be placed in the operating record within 60 days of detection and the DWMRC Director will be notified that the plan has been implemented.

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

The purpose of the run-on/run-off control systems is to manage the storm water falling in or near the landfill. Run-on water is water running toward the landfill that will be diverted away from landfill operations using a series of ditches, berms, and a perimeter road. These structures will be inspected on a regular basis and repaired as needed. All storm waters falling or flowing near the active landfill cell will be prevented from flowing into the active area by diversion berms and ditches.

If the run-on system fails, temporary measures such as temporary berms, ditches, sumps and pumps or other methods will be used to divert water from the active landfill cell.

Run-off waters are waters falling within the landfill footprint that has not fallen on waste. Run-off waters will be collected via diversion ditches and berms and directed to a run-off pond located down-hill from the landfill. If a run-off ditch or berm fails, temporary berms or ditches will be constructed until a permanent run-off structure can be constructed.

Any temporary berms or other structures will be checked twice a day until permanent repairs can be made. Permanent improvements or repairs will be made as soon as practicable.

The Manager and Director will be notified immediately if a failure of either of the run-on or run-off systems is discovered. The event will be fully documented in the operating record, including corrective action within 14 days.

#### **3.5.5 Ground water Contamination**

The NVL has utilized a series of upgradient and downgradient monitor wells to establish background water quality for the NVL site. If, during routine ground water sampling, any chemical constituent is detected above established background water quality levels Logan City personnel will utilize a statistical data analysis method to determine if the change in water quality is statistically significant.

If the change in ground water quality is statistically significant and the source of the contamination cannot be demonstrated to be something other than the waste in the landfill, the NVL will initiate assessment monitoring. All ground water monitoring will be conducted in accordance with R315-308. The ground water monitoring program may be updated, and corrective action taken as deemed necessary, with the approval of the DWMRC Director.

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

The most probable reason for a disruption in the waste handling procedures at the NVL 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 NVL may also close for other reasons like fire, natural disaster, etc. In general, the NVL will minimize the possibility of disruption of waste disposal services from an operational standpoint by minimizing the possibility of fire, maintaining run-off and run-on control structures and by conducting daily site inspections.

In case of equipment failure other Logan City departments will provide the necessary equipment to continue operations while repairs are being made to the NVL equipment. If necessary, and substitute equipment is not available through other city departments, replacement equipment will be rented via commercial vendors. If the NVL landfill is not operational for any reasons, the Director will be notified.

Logan City has retained disposal capacity at the Logan Landfill in case of a disruption of service at NVL, however, Logan City also has a reciprocal agreement with Box Elder County Landfill to provide an alternative site for temporary disposal of municipal solid waste should the need arise. A copy of this agreement has been included in Appendix I.

### **3.7 MAINTENANCE PLAN**

#### **3.7.1 Groundwater Monitoring Wells and Leachate System**

The NVL personnel or qualified consultant conducts quarterly inspection of all ground water monitoring wells and LCRS components.

#### **3.7.2 Gas Monitoring System**

The NVL will be equipped with a landfill gas recovery and management system. This system will be installed in conjunction with the final cover construction. Quarterly gas monitoring will be conducted using a handheld meter.

### **3.8 VECTOR, DUST, LITTER, AND WEED CONTROL**

The vectors anticipated to be encountered at the NVL are flies, birds, mosquitoes, rodents, skunks, and snakes. The program for controlling these vectors is as follows:

#### **3.8.1 Insects**

Eliminating breeding areas is essential in the control of insects. NVL minimizes the breeding areas by covering the waste daily and maintaining landfill surfaces to reduce ponded water. The Logan City mosquito abatement program personnel will assist the landfill as necessary.

#### **3.8.2 Rodents**

Reducing potential food sources minimizes rodent populations at landfills. The NVL personnel reduces the potential food sources by properly applying daily cover over all waste.

In the event of a significant increase in the number of rodents at the landfill, 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.

### **3.8.3 Birds**

NVL occasionally has birds (seagulls) at the landfill. Good landfilling practices of waste compaction, daily covering of active working face, and the minimization of ponded water alleviates most of the bird problems. In the event that daily covering of waste and minimizing ponded water is not sufficient, additional efforts will be utilized to minimize bird congestion. Methods will include using cracker and whistler shells, propane cannons, bird netting, or air treatment systems.

### **3.8.4 Fugitive Dust**

The roads leading to the NVL site are paved and site access is via maintained gravel access road. Some construction activities and daily truck traffic will produce a certain amount of dust. Dust generated by landfill activities is compounded by the occasional high wind to present a periodic fugitive dust problem. If the dust problem elevates above the “minimum avoidable dust level,” the landfill personnel will apply water to problem areas.

The landfill has a water truck on site and NVL has access to additional Logan City water trucks as needed to suppress the dust. Water is applied to the gravel roads leading to all landfill facilities and to the tipping face. The water is applied as often as needed to control the dust. A copy of the NVL Fugitive Dust Plan is included in Appendix J.

### **3.8.5 Litter Control**

Due to the nature of landfilling operations, litter control is an ongoing challenge. Landfill personnel perform routine litter cleanup to keep the landfill and surrounding properties clear of windblown debris.

Whenever possible, the working face is placed downwind so that blowing litter is worked into the landfill face. Based on available wind measurements for the Logan Airport, wind will generally originate from the north. The landfill uses litter fencing to catch any litter blown during landfill operation. During windy conditions, landfill personnel minimize the spreading

of the waste to reduce the amount of windblown debris. Application of daily cover over the waste also helps to minimize windblown debris. The location and operation of the landfill working face will be modified to account for variations in the wind direction and velocity with the portable litter fencing being repositioned as needed to capture the wind blown litter.

### **3.8.6 Weed Control**

NVL staff recognize that weed control may be necessary as part of the operations at the landfill. Logan City has developed a weed control plan in case weeds become a problem at the NVL. A copy of the NVL weed control plan is included as Appendix K.

## **3.9 RECYCLING**

The transfer station provides areas for the recycling of cardboard, newspaper, magazines, carpet padding and scrap metal. The Logan City Environmental Department will continue to implement the county-wide single stream residential recycling program to provide additional recycling opportunities to County residents.

Logan City will continue to divert as much green waste as possible from the MSW waste stream to the composting facility that operates immediately east of the existing Logan Landfill and is managed by the Environmental Department. The City operates a composting facility that accepts manure, hay, yard wastes, trees, tree limbs and some untreated lumber. These materials are composted or ground and processed to produce various landscaping products that are sold to the public. Logs and tree limbs brought to the facility that are too large to feasibly process into landscaping materials are stockpiled and sold as firewood. The existing compost facility will continue to be operational in support of the transfer station and NVL operations.

The Logan City Environmental Department operates and services several green waste recycling drop sites in the county outside of Logan City and they provide an optional drop site green waste recycling service to county residents.

### **3.10 TRAINING PROGRAM**

As part of the initial training of new employees, the NVL employees are required to read the NVL permit. The Manager conducts annual training with all landfill personnel that includes a review of the landfill permit, specifically the provisions of the Plan of Operation.

All personnel associated with the operation of the NVL receive annual training in the operational aspects of landfills. The "Landfill Operations Basics Course" offered by the Solid Waste Association of North America (SWANA) will be required by all employees within 1 year of hire date. Certificates of Completion will be kept in personnel files. 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.

The NVL Manager will maintain a current SWANA "Manager of Landfill Operations" (MOLO) certification.

### **3.11 RECORDKEEPING**

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

- Number of loads entering the landfill and types of wastes received
- Deviations from the approved Plan of Operation
- Number of waste inspections conducted
- Percentage of loads inspected
- Amount and type of cover material used
- Asbestos cell monitoring (when operational)
- Dust control record keeping



- Personnel training and notification procedures
- Landfill gas-monitoring results

### **3.12 SUBMITTAL OF ANNUAL REPORT**

The Logan City Environmental Department will submit a copy of its solid waste facility annual report to the DWMRC 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
- Facility type and status
- Annual quantity, in tons or volume, in cubic yards of solid waste handled for each disposal facility
- Annual update of required financial assurances mechanism pursuant to Utah Administrative Code R315-309
- Ground water monitoring results
- Explosive gas monitoring results
- Annual training documentation

A copy of the most recent annual report is presented in Appendix C.

### **3.13 INSPECTIONS**

The Manager, or his/her designee, inspects the facility to minimize the likelihood of malfunctions, 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. An inspection log is kept as part of the operating record. This log includes 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 DWMRC 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 Cache 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 NVL will continue to comply with all applicable state and local requirements including zoning, fire protection, water pollution prevention, air pollution prevention, and nuisance control. NVL operations was granted a Conditional Use Permit (CUP) by Cache County, a copy of the CUP is included as Appendix L. NVL operations continues to abide by the requirements set for in the Cache County CUP.

### **3.16 SAFETY**

Landfill 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 landfill personnel about safe work practices.

The NVL personnel are trained in First Aid, CPR, accident investigation, drug and alcohol policies, confined space entry, blood born pathogen, hazard communication, defensive driving, spill prevention control and counter measure, hazardous waste, and commercial driving license requirements. Some personnel will also be trained in storm water management, leachate monitoring, and landfill gas monitoring.

**3.17 EMERGENCY PROCEDURES**

In the event of an accident or any other emergency situation, the Operator (Attendant) will notify the Manager and proceed as directed. If the Manager is not available, the Operator (Attendant) will call the Director, Landfill Manager or 911. Emergency telephone numbers are:

- Cache County Central Dispatch..... 911
- Tyler Richards, Landfill Manager..... (435) 716-9756
- Issa Hamud, Environmental Dept. Director ..... (435) 716-9752 or (435) 881-5339

## **EXPLANATION and INSTRUCTIONS**

The intent of this workbook is to provide a means for creating the Logan City Solid Waste Daily Operating Record.

### **Landfill Inspector**

- 1) In this workbook, under the "Logan\_Landfill" worksheet tab, complete **ONLY** the sections marked **BLUE**.  
Those sections are listed below:
  - Waste Inspections
  - Cover
  - Dust Control
  - Notes and/or Deviations Regarding Other Daily Logan Landfill Operations
  - Mark each check box of the employee's names that were in attendance at the Logan Landfill for the day. There will be some blank check boxes for any names that need to be added. Type any notes regarding attendance below the check boxes.
- 2) Under the "NV\_Landfill" worksheet tab, complete **ONLY** the sections marked **BLUE**.  
Those sections are listed below:
  - Cover
  - Dust Control
  - Notes and/or Deviations Regarding Other Daily North Valley Landfill Operations
  - Mark each check box of the employee's names that were in attendance at the North Valley Landfill for the day. There will be some blank check boxes for any names that need to be added. Type any notes regarding attendance below the check boxes.
- 3) Under the "Transfer\_Station" worksheet tab, complete **ONLY** the sections marked **BLUE**.  
Those sections are listed below:
  - Waste Inspections
  - Notes and/or Deviations Regarding Other Daily Transfer Station Operations
  - Mark each check box of the employee's names that were in attendance at the Transfer Station for the day. There will be some blank check boxes for any names that need to be added. Type any notes regarding attendance below the check boxes.

### **Green Waste Facility**

- 1) In this workbook, under the "Green\_Waste" worksheet tab, complete **ONLY** the sections marked **GREEN**:  
Those sections are listed below:
  - Windrow Monitoring
  - Screening
  - Grinding
  - Notes and/or Deviations Regarding Other Daily Green Waste Facility Operations

### **Scale House**

The daily Scale House Inspection sheets can be found in the G drive at the following location:

**G:\Environmental\LANDFILL DIVISION\SCALE HOUSE\Waste Inspections**

This is the **ONLY** sheet the Scale House needs to fill out for the DOR. Do not fill in any information on this workbook.

### **Landfill Manager / Compiler of report**

- 1) Copy the material summary and location summary reports downloaded from the scalehouse SMS software into the respective "Materialsummary.rpt" and "Locationsummary.rpt" worksheets. The data will automatically be sorted on the worksheet called, "All\_codes."
- 2) On the "All\_codes" worksheet, fill in the **GREEN** cell with the current date.
- 3) Open the the daily Scale House Inspection sheet found in the G drive location:

**G:\Environmental\LANDFILL DIVISION\SCALE HOUSE\Waste Inspections**

- Right click on the worksheet tab for the inspection sheet.
  - Select "Move or Copy..."
  - Under the "To book.." option, select the name of the current DOR Excel file
  - Under the "Before sheet.." option, select "Logan\_Landfill"
  - Check the "Create copy" button and hit "OK"
  - The daily Scale House Inspection sheet should now be in the corresponding Daily Operating Report.
  - Check to make sure the date on the Inspection Sheet is correct.
- 4) Review each of the following worksheets and record any necessary information in the "Notes and/or Deviations Regarding Loads and Quantities" sections (These are the **GRAY** tabs):
- "Print\_Loads" worksheet
  - "Logan\_Landfill" worksheet
  - "NV\_Landfill" worksheet
  - "Green\_Waste" worksheet
  - "Transfer\_Station" worksheet
- 5) The rest of the information on the worksheets should have been filled out by the Landfill Inspector and the Green Waste facility. Ensure that everything is filled out and that the printing preview shows a title, date, and page number section at the top of each page. Make any necessary adjustments to the printing area. Print the following sheets:
- "Print\_Loads" worksheet
  - "Scale\_House\_Inspections" worksheet
  - "Logan\_Landfill" worksheet
  - "NV\_Landfill" worksheet
  - "Green\_Waste" worksheet
  - "Transfer\_Station" worksheet
- 6) Fill out the page numbers on the top of each sheet.
- 7) The Landfill Manager signs under each attendance box (there are four).



# Scale House Daily Operating Record

Saturday, January 0, 1900

## Materials Loads and Quantities Summary

### Municipal Solid Waste

Waste Code	Waste Description	Loads	Tons
AB	ANIMAL BYPRODUCT	0	0
CCD	CONTAMINATED C AND D	0	0
COW	COWS THAT BYPRODUCTS BRING IN	0	0
CRC	CONTAMINATED CURB RECYCLING	0	0
CW	COMMERCIAL WASTE	0	0
CWC	COMMERCIAL WASTE(CITY)	0	0
CWS	COMMERCIAL WASTE	0	0
DAF	DEAD ANIMALS (PER TON)	0	0
DAS	DEAD ANIMAL SMALL (NO CHARGE)	0	0
HW	HOUSEHOLD WASTE	0	0
HWC	HOUSEHOLD WASTE NO CHARGE	0	0
HWS	HOUSEHOLD WASTE	0	0
IW1	INFECTIOUS WASTE UNDER 1/2 YAR	0	0
IW2	INFECTIOUS WASTE OVER 1/2 YARD	0	0
<b>Total:</b>		<b>0</b>	<b>0</b>

### Construction and Demolition Waste

Waste Code	Waste Description	Loads	Tons
CC	COMMUNITY CLEAN UP(PER TON)	0	0
CCS	COMUNITY CLEAN UP	0	0
CD	CONSTRUCTION DEBRIS	0	0
CDC	CONSTRUCTION DEBRIS(CITY)	0	0
CDS	CONSTRUCTION DEBRIS	0	0
CGW	CONTAMINATED GREENWASTE	0	0
CN	CONCRETE	0	0
CNC	CONCRETE(CTIY)	0	0
CNS	CONCRETE	0	0
GL	GLASS drop-off Recycling	0	0
GWH	GW HSHLD GARB. **ADD CONTAINER#	0	0
SCU	SPRING CLEAN-UP	0	0
ST	STUMPS AND ROOT BALLS	0	0
STC	STUMPS AND ROOT BALLS FROM CITY	0	0
<b>Total:</b>		<b>0</b>	<b>0</b>

### Cover Material

Waste Code	Waste Description	Loads	Tons
CF	CLEAN FILL	0	0
CM	COVER MATERIAL	0	0
CMC	COVER MATERIAL(CITY)	0	0
CMS	COVER MATERIAL	0	0
CS	CONTAMINATED SOIL	0	0
<b>Total:</b>		<b>0</b>	<b>0</b>

### Road Building Material

Waste Code	Waste Description	Loads	Tons
AS	ASPHALT	0	0
ASC	ASPHALT(CITY)	0	0
<b>Total:</b>		<b>0</b>	<b>0</b>

### Asbestos Cell

Waste Code	Waste Description	Loads	Tons
AA	ASBESTOS	0	0
<b>Total:</b>		<b>0</b>	<b>0</b>

Saturday, January 0, 1900

**Materials Loads and Quantities Summary - Continued****Green Waste (Receiving)**

Waste Code	Waste Description	Loads	Tons
CBS	GREEN WASTE (CURBSIDE PICKUP)	0	0
GW	GREEN WASTE	0	0
GWC	GREEN WASTE CITY (TON)	0	0
GWF	GREEN WASTE FIRE WOOD	0	0
GWS	GREEN WASTE	0	0
LOG	FIREWOOD DROPPED OFF (PER TON)	0	0
PA	PALLETS	0	0
PAS	PALLETS	0	0
XTC	CHRISTMAS TREES (CITY)	0	0
XTD	EVERGREEN CHIPS DONATION	0	0
<b>Total:</b>		<b>0</b>	<b>0</b>

**Green Waste (Departing)**

Waste Code	Waste Description	Loads	Yards
BCP	BAGGED COMPOST	0	0
CP	COMPOST	0	0
CPC	COMPOST FOR CITY	0	0
CPD	COMPOST, DONATION	0	0
FPD	PALLET CHIPS, DONATION	0	0
FPL	FINE PALLET CHIPS	0	0
MD	MEDIUM WOOD CHIPS	0	0
MDC	MEDIUM WOOD CHIPS FOR CITY	0	0
MDD	MEDIUM WOOD CHIPS, DONATION	0	0
PM	PREMIUM (MULCH)	0	0
PMC	PREMIUM MULCH FOR CITY	0	0
PMD	PREMIUM WOOD CHIPS, DONATION	0	0
PP	PALLET PICK-UP	0	0
SHD	SHREDDED TREE DONATION	0	0
SHT	COARSE SHREDDED TREES	0	0
XT	CHRISTMAS TREE CHIPS	0	0
XTD	EVERGREEN CHIP DONATION	0	0
<b>Total:</b>		<b>0</b>	<b>0</b>
Waste Code	Waste Description	Loads	Cords
FW	FIREWOOD	0	0
PP	PALLET PICK-UP	0	0
<b>Total:</b>		<b>0</b>	<b>0</b>

**Location Loads and Quantities Summary**

Location Code	Location Description	Loads	Tons
NVD	NORTH VALLEY DIRECT	0	0
NVT	NORTH VALLEY TRANSFERRED	0	0
LD	LOGAN DIRECT	0	0
LT	LOGAN TRANSFERRED	0	0
TS	TRANSFER STATION	0	0
HHW	HOUSEHOLD HAZARDOUS WASTE	0	0
VM	VALLEY METALS	0	0
REV	REVOLVE RECYCLING	0	0
MF	MOUNTAIN FIBER	0	0
RE	RECYCLE	0	0
NA	WEIGH ONLY TICKETS	0	0
<b>Total:</b>		<b>0</b>	<b>0</b>

Saturday, January 0, 1900

**Notes and/or Deviations Regarding Loads and Quantities**

**No deviations**

**Tyler Richards  
Landfill Manager**

**Attachments**

Results of other inspections and monitoring required for landfill operation and compliance will be attached after this page.  
This might include quarterly landfill inspections, air quality monitoring, water quality monitoring, etc.





# Logan City Landfill Daily Operating Record

Saturday, January 0, 1900

Page \_\_\_ of \_\_\_

## Logan Landfill Load and Quantity Summary

Location code	Location Description	Loads	Tons
LD	LOGAN DIRECT	0	0
LT	LOGAN TRANSFERRED	0	0
<b>Total:</b>		0	0

## Notes and/or Deviations Regarding Logan Landfill Loads and Quantities

No deviations

Tyler Richards  
Landfill Manager

## Waste Inspections

### Construction and Demolition Waste

\*\*Number of Inspections Conducted: 1

* Field Note Reference No.	Problems (Yes/No)	Corrective Actions Taken	Inspector

\*\* All other inspections conducted at the transfer station. See Transfer Station DOR for Inspection Notes.

\* Complete Field Inspection Notes can be found on file at the landfill. They can be referenced by the date and the Field Note Reference Number.

## Cover

### Logan City Class IVb Landfill (Municipal Solid Waste)

Cover Type	Amount	Who Covered
Soil (yds <sup>3</sup> )	0	
Alternate (yds <sup>3</sup> )	0	NA
Spray (bags)	0	NA

### Construction and Demolition Waste

Cover Type	Amount	Who Covered
Soil (yds <sup>3</sup> )	0	

Days since last covering: 0

### Asbestos Cell

Was asbestos disposed today?	No	(yes/no)
Depth of cover applied to asbestos if disposed today:	NA	(inches)
Was Asbestos Cell Checked for proper cover today?	Yes	(yes/no)
Condition:	Undisturbed	
Checked by:	Mike Winward	
Time:		

**Dust Control**

Were any dust control measures needed today?	Yes	(yes/no)
If yes, what methods were used?		

**Notes and/or Deviations Regarding Other Daily Logan Landfill Operations**

Large empty yellow box for notes and/or deviations regarding other daily landfill operations.

**Attachments**

Results of other inspections and monitoring required for landfill operation and compliance will be attached after this page. This might include quarterly landfill inspections, air quality monitoring, water quality monitoring, etc.

**Summary**

Those in attendance today:

- David Andreasen
- Mel Leishman
- Casey Bair
- Lynette Walker
- Tina Wright
- Tasha Thornton
- Mandy Kent
- Kevin Blatter
- Kent Stevens
- Brian Yocom
- Blaine Wright
- Cristal Gonzalez
- NEW HIRE
- 
- 

Signature: \_\_\_\_\_  
Landfill Inspector, Landfill Crew Chief, Landfill Foreman

Signature: \_\_\_\_\_  
Landfill Manager



# North Valley Landfill Daily Operating Record

Saturday, January 0, 1900

Page \_\_\_ of \_\_\_

## North Valley Landfill Load and Quantity Summary

Location code	Location Description	Loads	Tons
NVD	NORTH VALLEY DIRECT	0	0
NVT	NORTH VALLEY TRANSFERRED	0	0
<b>Total:</b>		0	0

## Notes and/or Deviations Regarding North Valley Loads and Quantities

No deviations

**Tyler Richards**  
Landfill Manager

## Waste Inspections

\* All inspections conducted at the transfer station. See Transfer Station DOR for Inspection Notes.

\* Complete Field Inspection Notes can be found on file at the landfill. They can be referenced by the date and the Field Note Reference Number.

## GPS Coordinates

### North Valley Class I Landfill (Cell Location)

North Reading	
West Reading	
Elevation	

## Cover

### Municipal Solid Waste

Cover Type	Amount	Who Covered
Soil (yds <sup>3</sup> )	0	
Alternate (yds <sup>3</sup> )	0	NA
Spray (bags)	0	NA

### North Valley Class I Landfill (Construction and Demolition Waste)

Cover Type	Amount	Who Covered
Soil (yds <sup>3</sup> )	0	

### North Valley Class I Landfill (Liner Cover)

Cover Type	Amount	Who Covered
Soil (yds <sup>3</sup> )	0	

Days since last covering:	0
---------------------------	---

## Attachments

Results of other inspections and monitoring required for landfill operation and compliance will be attached after this page. This might include quarterly landfill inspections, air quality monitoring, water quality monitoring, etc.

**Dust Control**

Were any dust control measures needed today?	Yes	(yes/no)
If yes, what methods were used?		

**Notes and/or Deviations Regarding Other Daily North Valley Landfill Operations**

**Summary**

Those in attendance today:

- Warren Hullinger
- Lance Johnson
- Matt Wallace
- John Simmonds
- Ryan Rohleder
- Mike Christensen
- 

Signature: \_\_\_\_\_  
Landfill Inspector, Landfill Crew Chief, Landfill Foreman

Signature: \_\_\_\_\_  
Landfill Manager



# Green Waste Facility Daily Operating Record

Saturday, January 0, 1900

Page \_\_\_ of \_\_\_

## Logan Landfill Load and Quantity Summary

GREEN WASTE (RECEIVING)	Loads	Tons
Total:	0	0

GREEN WASTE (DEPARTING)	Loads	Yards	Cords
Total:	0	0	0

## Notes and/or Deviations Regarding Green Waste Facility Loads and Quantities

No deviations

Tyler Richards  
Landfill Manager

## Windrow Monitoring

Outside Temperature (°F)

Windrow ID#	N/S	Temperature (°F)					Turned? (Yes/No)
		West End	W. Middle	Middle	E. Middle	East End	

## Created Windrows

Were any windrows created today? (Yes/No)		
Created Windrow ID#	Source of created windrow (new OR split from an existing windrow?)	ID# of split windrow

## Combined Windrows

Were any windrows combined today? (Yes/No)		
ID#s of windrows combined	Resulting windrow ID#	
	&	
	&	
	&	

## Attachments

Results of other inspections and monitoring required for landfill operation and compliance will be attached after this page. This might include quarterly landfill inspections, air quality monitoring, water quality monitoring, etc.

**Green Waste Facility Daily Operating Record**

Saturday, January 0, 1900

Page \_\_\_ of \_\_\_

**Screening**

Material screened	Coloring? (Yes/No)	Color used

**Grinding**

Material ground	Amount (yd <sup>3</sup> )	Product
Mixed		Compost base
Branches		Shredded bark
Tree trims		Premium
Evergreens		Evergreen shred
Shredded bark		Medium chips
Other(specify):		
Other(specify):		

**Notes and/or Deviations Regarding Other Daily Green Waste Facility Operations**

**Summary**

Attendance for Green Waste is included in the Logan Landfill DOR.

**Signature:** \_\_\_\_\_  
 Landfill Inspector, Landfill Crew Chief, Landfill Foreman

**Signature:** \_\_\_\_\_  
 Landfill Manager



Saturday, January 0, 1900

**Notes and/or Deviations Regarding Other Transfer Station Operations**

[Empty yellow box for notes and/or deviations regarding other transfer station operations]

**Summary**

Those in attendance today:

- Markus McChesney
- Eric Birch
- Tom Karren
- Corbin Christensen
- Tony Rodriguez
- Tony Douglas
- Doug Wright
- Brett Hansen
- 
- 

Signature:

\_\_\_\_\_  
Landfill Inspector, Landfill Crew Chief, Landfill Foreman

Signature:

\_\_\_\_\_  
Landfill Manager





# North Valley Landfill Class I

## Landfill Quarterly Inspection Form

Record ID: \_\_\_\_\_

Inspector: \_\_\_\_\_

Date: \_\_\_\_\_ Start Time: \_\_\_\_\_

Quarter: \_\_\_\_\_ Temp: \_\_\_\_\_ Wind Dir: \_\_\_\_\_

### Inspection Checklist:

#### 1. Tipping Face/Waste Placement:

Daily Cover Type: \_\_\_\_\_ Depth of Daily Cover: \_\_\_\_\_

Traffic control:  POOR  FAIR  GOOD  EXCELLENT

Litter fence condition:  POOR  FAIR  GOOD  EXCELLENT

Overall litter condition:  POOR  FAIR  GOOD  EXCELLENT

Working conditions:  SUNNY  DUSTY  WET  RAIN  SNOW  MUDDY

Describe problems if any and locations: \_\_\_\_\_

#### 2. Compaction:

Industry standards for daily operations (as per SWANA, 1350 lbs/cubic yard):

POOR  FAIR  GOOD  EXCELLENT

#### 3. Cover:

Erosion of top cover and side slopes on landfill: \_\_\_\_\_

Depth: \_\_\_\_\_

Daily:  POOR  FAIR  GOOD  EXCELLENT

Overall conditions of cover:  POOR  FAIR  GOOD  EXCELLENT

Describe problems if any and locations: \_\_\_\_\_

4. Cell Liner:  POOR  FAIR  GOOD  EXCELLENT

#### 5. Perimeter Fence and Access Controls:

Broken fence or unusual conditions: \_\_\_\_\_

Access gates:  LOCKED  UNLOCKED/IN USE

Gate condition:  POOR  FAIR  GOOD  EXCELLENT

Overall access:  POOR  FAIR  GOOD  EXCELLENT

Describe problems if any and locations: \_\_\_\_\_



# North Valley Landfill Class I

## Landfill Quarterly Inspection Form

### Inspection Checklist continued:

#### 6. Roads:

Condition of roadways:  POOR  FAIR  GOOD  EXCELLENT  
 Dust control conditions:  POOR  FAIR  GOOD  EXCELLENT  
 Sign conditions:  POOR  FAIR  GOOD  EXCELLENT

Describe problems if any and locations:

#### 7. Run-off / Run-on System:

Plugged canals, streams, or high water:  POOR  FAIR  GOOD  EXCELLENT  
 Stormwater detention:  POOR  FAIR  GOOD  EXCELLENT  
 Retention sites:  POOR  FAIR  GOOD  EXCELLENT  
 Ditches:  POOR  FAIR  GOOD  EXCELLENT  
 Slopes/Erosion:  POOR  FAIR  GOOD  EXCELLENT

Other comments:

#### 8. Ground Water Monitoring Wells:

Check well locks?  NV4  NV10  NV9  NV8

Soil around wells heads stable?  YES  NO

Describe problems if any and locations:

#### 9. Final and Intermediate Cover:

Final Cover:  POOR  FAIR  GOOD  EXCELLENT  N/A

Intermediate Cover:  POOR  FAIR  GOOD  EXCELLENT

Depth: \_\_\_\_\_

Describe problems if any and locations:

#### 10. Litter Controls:

Litter Fences:  POOR  FAIR  GOOD  EXCELLENT

Overall Litter Condition:  POOR  FAIR  GOOD  EXCELLENT

Describe problems if any and locations:



# North Valley Landfill Class I

## Landfill Quarterly Inspection Form

### Inspection Checklist continued:

#### 11. Disease Vectors:

Seagull population:     FAIR                       HIGH                       ACCEPTABLE                       NONE  
 Rock Chuck population:  FAIR                       HIGH                       ACCEPTABLE                       NONE  
 Raven/Crow population:  FAIR                       HIGH                       ACCEPTABLE                       NONE

Describe problems, if any:

#### 12. Records:

	<u>On-Site?</u>		<u>Complete?</u>			<u>On-Site?</u>		<u>Complete?</u>	
	<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO		<input type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Landfill Permit:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SWPP:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Landfill Operation Plan:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Daily Reports:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leachate Management:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Air Quality Permit:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Describe problems, if any:

#### 13. Scale:

General Operating Condition:     POOR                       FAIR                       GOOD                       EXCELLENT  
 Scale certification:     YES  NO  
 Scale programs:     YES  NO

Describe problems, if any:

#### 14. Buildings:

General Operating Conditions:     POOR                       FAIR                       GOOD                       EXCELLENT  
 Equipment Warehouse:     POOR                       FAIR                       GOOD                       EXCELLENT

Describe problems if any and locations:

#### 15. Landfill Equipment:

	<input type="checkbox"/> POOR	<input type="checkbox"/> FAIR	<input type="checkbox"/> GOOD	<input type="checkbox"/> EXCELLENT	<u>Complete?</u>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> YES	<input type="checkbox"/> NO
Maintenance records:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Equipment condition:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Describe problems if any and locations:



# North Valley Landfill Class I

## Landfill Quarterly Inspection Form

### Inspection Checklist continued:

#### 16. Overview:

General litter conditions:     POOR                       FAIR                       GOOD                       EXCELLENT

General landfill condition:     POOR                       FAIR                       GOOD                       EXCELLENT

Describe problems if any and locations:

### Additional Notes or Comments:

\_\_\_\_\_

Inspector Signature

\_\_\_\_\_

Manager Signature

\_\_\_\_\_

Date

\_\_\_\_\_

Date





# North Valley Landfill Opacity Readings

Quarter:

Date:

Year:

Time:

Location	Dust (Yes/No)	% Opacity (within 24 hours of initial survey)
Road to Class I Face		
Class I Working Face		
Road to C&D		
Paved Road to Landfill		

Site Conditions and Comments (Weather Conditions, etc.) :

Signature:   
 Landfill Inspector

## EPA METHOD 9 (40 CFR - Appendix A) VISIBLE EMISSION OBSERVATION FORM

COMPANY NAME: Logan City Environmental Department		
LOCATION: North Valley Landfill		
LOCATION:		
CITY: Clarkston	STATE: Utah	ZIP: 84305
PROCESS EQUIPMENT:		OPERATING MODE:
CONTROL EQUIPMENT:		OPERATING MODE:
DESCRIBE EMISSION POINT:		
HEIGHT OF EMISSION POINT:	HEIGHT OF EMISSION PT. REL. TO OBSERVER: START:                      END:	
DISTANCE TO EMISSION POINT: START:                      END:	DIRECTION TO EMISSION POINT (DEGREES): START:                      END:	
VERTICAL ANGLE TO OBSERVATION POINT: START:                      END:	DIRECTION TO OBSERVATION PT. (DEGREES): START:                      END:	
DISTANCE & DIRECTION TO OBSERVATION POINT FROM EMISSION POINT: START:                      END:		
DESCRIBE EMISSIONS: START:                      END:		
EMISSION COLOR: START:                      END:	WATER DROPLET PLUME <input type="checkbox"/> ATTACHED <input type="checkbox"/> DETACHED <input type="checkbox"/> NONE	
DESCRIBE PLUME BACKGROUND: START:                      END:		
BACKGROUND COLOR: START:                      END:	SKY CONDITIONS: START:                      END:	
WIND SPEED: START:                      END:	WIND DIRECTION: START:                      END:	
AMBIENT TEMPERATURE: START:                      END:	WET BULB TEMP:	RH PERCENT
<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;">Source Layout Sketch</p> <div style="display: flex; justify-content: space-between;"> <div style="text-align: center;"> <p>Observer's Position</p> <p>Observation Point</p> <p>Sun Location Line</p> <p>140°</p> </div> <div style="text-align: center;"> <p>Draw North Arrow</p> <input type="checkbox"/> TN <input type="checkbox"/> MN               </div> </div> <div style="margin-top: 10px;"> <p>FEET</p> <p>FEET</p> <p>Side View</p> <p>Stack With Plume</p> <p>Sun</p> <p>Wind</p> </div> </div>		
ADDITIONAL INFORMATION:		

OBSERVATION DATE:	START TIME:	END TIME:
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SEC MIN	0	15	30	45	COMMENTS
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OBSERVER'S NAME:	
OBSERVER'S SIGNATURE:	DATE:
ORGANIZATION:	
CERTIFIED BY:	DATE:

## EPA METHOD 9 (40 CFR - Appendix A) VISIBLE EMISSION OBSERVATION FORM

COMPANY NAME: Logan City Environmental Department		
LOCATION: North Valley Landfill		
LOCATION:		
CITY: Clarkston	STATE: Utah	ZIP: 84305
PROCESS EQUIPMENT:		OPERATING MODE:
CONTROL EQUIPMENT:		OPERATING MODE:
DESCRIBE EMISSION POINT:		
HEIGHT OF EMISSION POINT:	HEIGHT OF EMISSION PT. REL. TO OBSERVER: START:                      END:	
DISTANCE TO EMISSION POINT: START:                      END:	DIRECTION TO EMISSION POINT (DEGREES): START:                      END:	
VERTICAL ANGLE TO OBSERVATION POINT: START:                      END:	DIRECTION TO OBSERVATION PT. (DEGREES): START:                      END:	
DISTANCE & DIRECTION TO OBSERVATION POINT FROM EMISSION POINT: START:                      END:		
DESCRIBE EMISSIONS: START:                      END:		
EMISSION COLOR: START:                      END:	WATER DROPLET PLUME <input type="checkbox"/> ATTACHED <input type="checkbox"/> DETACHED <input type="checkbox"/> NONE	
DESCRIBE PLUME BACKGROUND: START:                      END:		
BACKGROUND COLOR: START:                      END:	SKY CONDITIONS: START:                      END:	
WIND SPEED: START:                      END:	WIND DIRECTION: START:                      END:	
AMBIENT TEMPERATURE: START:                      END:	WET BULB TEMP:	RH PERCENT
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ADDITIONAL INFORMATION:		

OBSERVATION DATE:	START TIME:	END TIME:
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OBSERVER'S NAME:	
OBSERVER'S SIGNATURE:	DATE:
ORGANIZATION:	
CERTIFIED BY:	DATE:



## EPA METHOD 9 (40 CFR - Appendix A) VISIBLE EMISSION OBSERVATION FORM

COMPANY NAME: Logan City Environmental Department		
LOCATION: North Valley Landfill		
LOCATION:		
CITY: Clarkston	STATE: Utah	ZIP: 84305
PROCESS EQUIPMENT:		OPERATING MODE:
CONTROL EQUIPMENT:		OPERATING MODE:
DESCRIBE EMISSION POINT:		
HEIGHT OF EMISSION POINT:	HEIGHT OF EMISSION PT. REL. TO OBSERVER: START:                      END:	
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BACKGROUND COLOR: START:                      END:	SKY CONDITIONS: START:                      END:	
WIND SPEED: START:                      END:	WIND DIRECTION: START:                      END:	
AMBIENT TEMPERATURE: START:                      END:	WET BULB TEMP:	RH PERCENT
<div style="border: 1px solid black; padding: 5px;"> <p style="text-align: center;">Source Layout Sketch</p> <p style="text-align: right;">Draw North Arrow <input type="checkbox"/> TN <input type="checkbox"/> MN</p> <p style="text-align: center;">Observer's Position</p> <p style="text-align: center;">Observation Point</p> <p style="text-align: center;">Sun Location Line</p> <p style="text-align: center;">140°</p> <p style="text-align: center;">FEET</p> <p style="text-align: center;">FEET</p> <p style="text-align: center;">Side View</p> <p style="text-align: center;">Stack With Plume</p> <p style="text-align: center;">Sun</p> <p style="text-align: center;">Wind</p> </div>		
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OBSERVATION DATE:	START TIME:	END TIME:
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OBSERVER'S SIGNATURE:	DATE:
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CERTIFIED BY:	DATE: