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OCT 21 2008

UTAH DIVISION OF  
SOLID & HAZARDOUS WASTE  
2008.03321

October 16, 2008

State of Utah  
Department of Environmental Quality  
Division of Solid and Hazardous Waste  
P.O. Box 144880  
Salt Lake City, UT 84114-4880  
Attn: Dennis R. Downs

Re: Santaquin City Class IVb Landfill Renewal Application

Dear Mr. Downs:

Please find enclosed two hard copies and a one electronic copy of the Class IVb Landfill renewal application for 2008. New surveying information, maps and closure cost estimates were prepared and are included in the application.

I apologize for the delay and any inconvenience that it may have caused. If you have any questions you may contact me at 801-754-3211 ext.21 or JUB Engineering at 801-226-0393.

Sincerely,

Shannon Hoffman  
Administrative Services

[www.santaquin.org](http://www.santaquin.org)

OFFICE (801) 754-3211 • FAX (801) 754-3526 • 45 West 100 South • Santaquin, UT 84655

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UTAH DIVISION OF  
SOLID & HAZARDOUS WASTE  
2008.03321



2008  
CLASS IVb LANDFILL  
PERMIT APPLICATION

SANTAQUIN CITY CORPORATION  
45 West 100 South  
Santaquin, UT 84655  
Contact: Dennis Barnes, Public Works  
(801) 754-3211

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**OCT 21 2008**

**UTAH DIVISION OF  
SOLID & HAZARDOUS WASTE**

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## **PART I - GENERAL DATA**

**See attached Renewal Application Form**

## **PART II - GENERAL INFORMATION**

### **2.1 GENERAL DESCRIPTION**

The following is a general description of the Class IVb Landfill operated by Santaquin City.

Santaquin City is currently operating a Class IVb facility for exclusive use of the City and its residents. The facility is open one day a week and accepts approximately 2 tons per week.

The City owns 25 acres which have been zoned industrial for use as a landfill. This property is located approximately one-half mile west of Santaquin between Highway 6 and 200 North to the west of the Union Pacific railroad. Approximately 12 of those acres make up the active portion of the Class IVb facility. The active portion of the facility is located within the confines of a gully with 10 to 15 foot vertical walls on the northern and southern edges. The remaining acreage is used as a buffer zone and the entire property is fenced. Two gated access roads lead to the landfill. The northwest entrance is typically used to gain access to the facility.

The City has modified the list of items that will be accepted at the facility. These items include yard waste (brush, branches, grass clippings, leaves, rocks and dirt), construction waste (concrete, shingle, sheetrock, and asphalt ONLY), and dead animals. Scrap metal, large plastic items, cardboard boxes and furniture items, including appliances with no Freon may be accepted for a charge. Metal items are placed in a recycling bin until they can be taken to the proper recycling facility. Other items listed are placed in a separate roll off garbage bin and disposed of, by a contracted garbage company, once a month. Items that are strictly prohibited include household garbage, paper, toxic items, hazardous waste, tires, electronics, treated lumber, railroad ties, tires and any other items the attendant feels are inappropriate. These items will not be accepted into the landfill or allowed to be disposed of in the metal recycle bin or garbage bin.

All vehicles will be stopped at the gate before entering the landfill for an inspection of their waste. If prohibited wastes and wastes that cannot be disposed of in the onsite recycle or garbage bin have not be segregated and/or removed, the ENTIRE load will be rejected.

The responsible party for overseeing the operation of the facility is Santaquin City Corporation. The management of the facility is overseen by Dennis Barnes, Public Works Director, and will be operated by a staff of two on the designated operating day.

### **2.2 RELATIONSHIP TO THE SOLID WASTE MANAGEMENT PLAN**

Santaquin stopped accepting municipal solid waste at its landfill in July 1995. Currently, the municipal waste is collected and hauled to the Bayview Landfill, in Elberta, by a contracted company. The former site of the municipal solid waste facility has been converted to a Class IVb facility. Incoming waste and cover was used to fill several large depressions as part of the old facility's closure operation.

Santaquin City has determined that this facility is a great asset to the community. It has provided a facility for the disposal of bulky waste, which has prevented illegal dumping in local orchards, canyons and other agricultural lands.

A \$1.00 surcharge has been added to each utility bill to fund operation of the landfill.

## **2.3 LEGAL DESCRIPTION**

Santaquin owns four parcels of land for use as the current landfill. Below are the legal descriptions and parcel numbers for each parcel of land.

**Parcel # 29:036:0025**

COM SE COR OF SEC 34, T9S, R1E, SLB&M; THENCE N 1.35 CHS; N 46 1/4 DEG W 7.83 CHS; N 61 1/4 DEG W 14.66 CHS; S 7.75 CHS; S 56 DEG E 11.0 CHS; E 9.35 CHS TO BEGINNING; CONTAINING 12.70 ACRES.

**Parcel #32:009:0021**

LOT 1, LOCATED IN NE COR SEC 3, T10S, R1E, SLM, S 331 FT TO THE NORTHERLY RIGHT OF WAY OF STATE HIGHWAY; N 57 DEG 42' W ALONG SAID RIGHT OF WAY 605.5 FT; E 507 FT TO BEGINNING, CONTAINING 4.45 ACRES.

**Parcel # 29:037:0010**

COM SW COR SEC 35, T9S, R1E, SLM; N 35'25"W 119.64 FT; S 52 DEG 28'13"E 131.04 FT; S 63 DEG 41'16"E 80.14 FT; S 88 DEG 35'33"W 174.58 FT TO BEG. AREA .21 ACRES.

**Parcel # 29:036:0021**

COM N 1004.98 FT & W 1235.65 FT FR SE COR OF SEC 34, T9S, R13, SLB&M; THENCE N 83 DEG 36'W 851.9 FT; S 16 DEG 03'W 30.7 FT; S 63 DEG 48'E 295 FT; S 58 DEG 43'E...CONTAINING 5.00 ACRES.

See Appendix A for proof of ownership documents.

## **2.4 PLAN OF OPERATION**

In Accordance UAC, copies of this Plan of Operation are kept on file at the City Shop located at 400 West 200 South, Santaquin, UT, and at the Santaquin City Office located at 45 West 100 South, Santaquin, UT.

### **2.4.1 Schedule of Construction**

The Class IVb facility was constructed in 1995-1996 from the old Santaquin Municipal Landfill. No additional infrastructure has been necessary. The facility uses existing access roads and the property is fenced and gated.

## 2.4.2 Solid Waste Handling Procedures

The facility will be open on Saturdays from March to October from 8:00 a.m. until 4:00 p.m., during the off season by appointment, or when weather permits.

Equipment to operate the facility is made available through Santaquin City's Public Works Department. This equipment is on site each day the facility is open. Equipment currently being used on site consists of one backhoe.

The facility accepts yard waste (brush, branches, grass clippings, leaves, rocks and dirt), construction waste (concrete, shingle, sheet rock, and asphalt ONLY), and dead animals. Scrap metal, cardboard, large plastic items and furniture items including appliances with no Freon may be accepted for a charge. These items are separated and stored until such time as they can be properly disposed of by a contract salvage or garbage company.

The following is a description of on-site solid waste procedures:

1. All incoming vehicles are stopped at the gate by the landfill operator. A description of the vehicle and its load contents are recorded in the Daily Log, including the vehicle's license plate number, a description of the waste, and the approximate weights and volumes. See Appendix B for a sample of the Daily Log currently being used.
2. All materials brought into the site are placed in the designated areas.
3. Dead animals are buried in the dead animal pit. The pit is covered with at least six inches of soil by the end of the working day.
4. Appliances
  - i. Santaquin Class IVb Landfill facility will not accept appliances containing Freon. A sticker stating that the Freon has been removed must accompany each appliance.
  - ii. Appliances are recycled by a contract salvage company. If for some reason removal for recycling is impossible by September of each year, the appliances are transported to a Class I or II landfill located in Utah County, crushed and placed in the working cell. A notation will be made in the log books of both facilities. A small fee will be charged to cover the cost for the disposal of these items.
6. Scrap Metal

Scrap Metal is accepted and stored in a recycling bin. Periodically, a contract

salvage company picks up and disposes of the material. A small fee will be charged to cover the costs for the disposal of these items.

7. Construction Debris

All construction waste which is accepted at the facility is placed in an active disposal cell. Soils and other materials suitable for use as cover or fill material are stockpiled. Structures being torn down and disposed of at the Class IVb Landfill must show proof application of a demolition permit issued by Santaquin City, which includes results of asbestos testing and/or asbestos removal.

8. Yard Waste

Yard Waste is buried on an active disposal cell and covered with six inches of soil as needed to prevent a fire hazard.

9. Furniture items, cardboard, and large plastic items

These items may be accepted at the discretion of the Landfill Attendant. Items will be placed in a large roll of garbage container and the container will be emptied once a month by a private contractor. A fee will be charged to dispose of these items.

10. Household Garbage, paper, tires, toxic and hazardous waste, septage, medical wastes, electronics, asbestos contaminated materials, etc. will not be allowed or accepted at the landfill.

**2.4.3 Contingency Plan in the Event of a Fire**

Information in this section has not changed except for the emergency phone numbers. Listed below is a current list of emergency phone numbers.

Emergency Phone Numbers

EMERGENCY FIRE AND RESCUE .....	911
Stefan Chatwin (City Manager) .....	754-3211
Dennis Barnes(Public Works Department).....	420-3005
Santaquin Fire Department (Dispatch) .....	375-3601
Santaquin Police Department (Dispatch).....	375-3601
Utah County Sheriff's Department .....	851-4100
Highway Patrol .....	801-234-8285
Mountain View Hospital, 1000 East Hwy 6, Payson.....	801-465-7000
Department of Environmental Quality.....	801-538-6170
Utah County Health Department.....	801-851-7000

#### **2.4.4 Alternative Waste Handling and Disposal**

During periods when the facility is not able to accept and dispose of waste (in case of equipment breakdown or other unforeseen events), Class IVb waste materials have been stockpiled on site. If required by regulation, waste can be transported to the Payson City facility.

Dead animals can be refused by the facility operator when unforeseen conditions require such refusal. If the operator refuses to accept dead animals, owners of dead animals can dispose of them on agricultural lands with permission of the land owner.

#### **2.4.5 Procedure for Excluding Prohibited Waste and PCBs**

The Santaquin City Class IVb Landfill only accepts inert waste, construction materials, yard waste, and dead animals. The facility temporarily stores appliances, metal, and furniture items, outside the active cell boundaries.

Waste is only accepted when an operator is on duty. The landfill operator meets all vehicles at the gate and each load is visually inspected. The facility is fenced and locked to deny access whenever the operator is not on site.

##### 2.4.5.1 Waste Screening

The Santaquin Landfill accepts, on average, 15 pick-up truck loads of waste each Saturday. Random inspections of incoming loads are conducted on one load per week. A Random Waste Screening form is filled out and kept on file. The load will be refused if any prohibited or suspicious wastes are found. The operator screens for the following materials:

- Household garbage
- asbestos or asbestos contaminated materials
- contaminated soils or tanks resulting from clean up of spills
- paint, solvents, sealers, adhesives or similarly hazardous or potentially hazardous materials
- liquids or containers (including drums) that previously contained liquids
- stickers, signs, or other marking indicating hazardous materials or radioactivity
- sludges and septage
- medical wastes; and
- wastes that may be contaminated with PCB's including electric transformers and lubricating oils.

##### 2.4.5.2 Waste Screening Procedure

Waste screening is conducted as follows:

1. The driver is directed to the waste screening area near the active cell. Unauthorized personnel are not allowed to enter the area.
2. The waste screening form is completed.
3. Protective gear is worn.

4. The waste material is spread with the dozer/backhoe or with hand tools and examined visually. Suspicious markings or materials, like the ones listed above, are carefully investigated further.

When the waste is deemed acceptable for either the Landfill or temporary storage, the waste is transported to the appropriate area.

If the load was paid for, a receipt is given to the driver before leaving the site.

See Appendix B for the Random Load Inspection Form currently being used.

#### 2.4.5.3 Procedures for Refusing and Removing Wastes

Should non-hazardous prohibited waste or other wastes unacceptable for dumping at the Class IVb facility (such as household garbage), be discovered either during a random waste screening or during placement in the landfill, the following options will be utilized to remove these wastes from the landfill:

1. Wastes are loaded back into the hauler's vehicle. The hauler is informed of the proper disposal options.
2. If the hauler is no longer on site and is known, they are asked to retrieve the inappropriate waste and given information on proper disposal, or

If the operator feels that the load contains hazardous waste or PCB's, he will notify the proper authorities (City Police Department, County Health Department, UDEQ, and Highway Patrol).

The operator will make a notation in the waste screening form and logbook of all loads turned away and why they were turned away. The operator will also notify the Director of Public Works, when a situation listed above has occurred.

#### 2.4.5.4 Hazardous Wastes Discovered After the Fact

If hazardous wastes or wastes containing PCB's that have been inadvertently accepted are discovered (i.e., once the hauler has left the site) the procedure below is followed:

1. Access to the affected area is restricted.
2. The situation is assessed. The Highway Patrol is called if unstable wastes that cannot be handled safely or radioactive wastes are discovered or suspected. Notifications will be made as outlined in the section for refusing waste, if hazardous wastes are discovered.
3. If the waste can be safely moved, the equipment operator will transport it to a secure zone.
4. The Director of Public Works will be contacted for further disposition of the waste.
5. The hauler if known will be notified within 24 hours of the discovery. The generator is responsible for proper clean up, transport, and disposal of waste.

6. In the event this occurs, a record will be made of the discovery, handling, and disposition of any hazardous wastes, including notification of the authorities and the hauler. A copy of this record will be sent to UDEQ within 14 days of the incident.

#### **2.4.6 Vector Control Program**

A Class IVb facility provides little in the way of food sources and there is no water at the facility. However, bulky items may provide a habitat for rodents. All recyclable materials are removed from the site at least once per year. If a vector population problem arises, the operator will call a professional exterminator and make the necessary arrangements for moving the offending material. If the materials cannot be removed from the landfill, they are moved to the active cell and covered.

#### **2.4.7 Safety Program**

##### 2.4.7.1 Fire Prevention

Any combustible materials will be covered as needed to avoid a fire hazard

##### 2.4.7.2 Operator Training

Refresher training will be provided as needed to ensure continued compliance within the approved "plan of operation" and "permit." Dates of completion of such training will be kept on file with the employees personnel records. All employees and managers of the landfill will be required to read the initial application and any updates to the documents prior to beginning work at the facility.

#### **2.4.8 Fugitive Dust Control**

Fugitive dust has been controlled by minimizing excavation of natural vegetation. If dust does become a problem, the landfill operator will request the use of a city, county, or private water truck in order to dampen the ground with water.

#### **2.4.9 Litter Control**

Since the facility does not accept household waste and because the type of waste allowed does not contain a lot of litter, there has not been a concern about litter on the site. When litter is encountered on site, it is collected and covered with soil to keep it from being scattered.

### **2.5 INSPECTION AND RECORD KEEPING**

#### **2.5.1 Inspections**

Routine inspections are performed weekly and quarterly to prevent malfunctions and deterioration, operator errors, and discharge which may cause or lead to the release of wastes to

the environment or threaten human health. Described below are the procedures for these inspections:

1. A walk through inspection is done on a weekly basis by the landfill operator. The inspection form is dated and signed by the operator and includes notations of observations made and the date and nature of any repairs or corrective action.
2. A complete inspection is done quarterly by the Director of Public Works. Anything not meeting with the inspector's approval is put in writing and is given to the operator to correct.

See Appendix B for Weekly and Quarterly Inspection Forms currently being used.

### **2.5.2 Records**

The daily log, random inspection forms and inspection records will be maintained at the City Shop located at 400 West 200 South in Santaquin, Utah. The permanent location of the records will be at the city offices located at 45 West 100 South in Santaquin, Utah. The City will retain the daily logs, inspection records and receipts or bills of lading for recycling for a period of three years.

### **2.5.3 Reporting**

Santaquin City Corporation, as the owner operator of the facility, will be required to submit an annual report to the Executive Secretary by March 1 of each year for the most recent calendar year of operation. The annual report must include the following information.

1. Name and address of the facility
2. Calendar year covered by the report
3. Annual quantity, in tons or volume, in cubic yards, and estimated in place density in pounds per cubic yard of solid waste handled, including recycling of appliances and car bodies
4. the annual update of the required financial assurance mechanism
5. training programs or procedures completed

The Annual Report Form to be used can be found at the following web address as provided by the Utah Department of Environmental Quality:  
[http://www.hazardouswaste.utah.gov/Adobe/SolidWaste/2008\\_incinerator\\_annual\\_report\\_form.pdf](http://www.hazardouswaste.utah.gov/Adobe/SolidWaste/2008_incinerator_annual_report_form.pdf)

## **2.6 CLOSURE PLAN**

### **2.6.1 Closure Schedule**

Each landfill area will be covered and closed as soon as the next area has been prepared for use. Only one unit, approximately one acre in size, will need to be covered and closed at the end of the landfill's life.

### **2.6.2. Final Inspection**

In accordance with UAC R315-302-3 (4)(a) and (b) the owner and operator will notify the Executive Secretary of the intent to implement the closure plan in whole or part, 60 days prior to the projected final receipt of waste at the facility. Final closure activities will begin within 30 days after receipt of the final volume of waste and will be completed within 180 days from their starting time.

When the facility closure is completed, each owner or operator shall, within 90 days, submit to the Executive Secretary the following:

1. A facility closure plan signed by a professional engineer registered in the State of Utah with any modifications as necessary to represent as-built changes to final closure construction are required to be presented to the Executive Secretary; and
2. A certification by the owner and a professional engineer registered in the State of Utah, that the site has been closed in accordance with the approved closure plan.

### **2.6.3. Record of Title, Land Use, and Zoning Restrictions**

The closed landfill will be rezoned, if necessary, to conform to local regulations after closure. A description of the landfill history and filled areas will be permanently appended to the record of title no later than 60 days after certification of closure. Land use restrictions will be assigned that conform to existing regulations for closed landfills at the time of closure.

## **2.7 POST-CLOSURE PLAN**

Santaquin City understands that post-closure care is required for a period of 30 years or as long as the Executive Secretary determines is necessary for the facility to become stabilized and to protect the human health and the environment. When post-closure activities are complete, as determined by the Executive Secretary, Santaquin City will submit a certification to the Executive Secretary, signed by the owner and a professional engineer registered in the state of Utah stating why post-closure activities are no longer necessary (i.e., little or no settlement, gas production, or leachate generation).

Because Class IVb landfills are exempt for ground water, leachate, and gas monitoring requirements, post-closure care will primarily consist of annual inspection to insure cover

integrity and the security of the facility.

Santaquin City Corporation will serve as the point of contact during the post-closure period. Contact can be made with Santaquin City at 45 West 100 South, Santaquin, Ut 84655, or by phone at (801) 754-3211.

## **2.8 COST ESTIMATES AND FINANCIAL ASSURANCE**

### **2.8.1 Closure Costs**

The cost estimates for closure are based on a third party performing the required closure activities. Estimated costs are based on the cost to close the largest area of the facility. The areas requiring final cover will be one dead animal pit and one landfill unit. The covered areas will then be re-seeded with natural vegetation.

Closure costs are estimated to be \$89,430.00. Detailed closure costs are shown in Table 1.

**TABLE I**  
**ESTIMATED CLOSURE COSTS**

ITEM	UNIT/MEASURE	COST/UNIT	# UNITS	TOTAL COST
<b>1.0 Engineering</b>				
1.1 Topographic Survey	Hours	\$200.00	35	\$7,000.00
1.2 Boundary Survey for Affidavit	Hours	\$200.00	20	\$4,000.00
1.3 Site Evaluation	Hours	\$95.00	8	\$760.00
1.4 Development of Plans	Hours	\$95.00	32	\$3,040.00
1.5 Contract Administration, Bidding and Awards	Hours	\$95.00	8	\$760.00
1.6 Administration Cost for the Certification of Final Cover and Affidavit to the Public	Hours	\$175.00	4	\$700.00
1.7 Project Construction Observation & Testing	Hours	\$80.00	16	\$1,280.00
<b>SUBTOTAL</b>				<b>\$17,540.00</b>
<b>10% CONTINGENCY</b>				<b>\$1,754.00</b>
<b>TOTAL</b>				<b>\$19,294.00</b>
<b>2.0 Construction</b>				
2.2.1 Soils Replacement	CU Yards	\$4.20	2,420	\$10,164.00
2.3 Erosion Layer Placement	CU Yards	\$15.00	806	\$12,090.00
2.4 Native Revegetation	SQ Feet	\$0.35	43,560	\$15,246.00
2.5 Site Grading	Lump Sum	\$10,000.00	1	\$10,000.00
<b>SUBTOTAL</b>				<b>\$47,500.00</b>
<b>10% CONTINGENCY</b>				<b>\$4,750.00</b>
<b>TOTAL</b>				<b>\$52,250.00</b>
<b>CLOSURE COST TOTAL COST</b>				
Engineering				\$19,294.00
Construction				\$52,250.00
<b>SUBTOTAL</b>				<b>\$71,544.00</b>
Legal Fees (25% of Subtotal)				\$17,886.00
<b>TOTAL CLOSURE COSTS</b>				<b>\$89,430.00</b>

\*Based on September 2008 cost estimate

### 2.8.2 Post-Closure Costs

The post-closure estimates cover a 30 year post-closure period. It is anticipated that minimal care requirements will be necessary as the site is to be re-seeded with native grasses that will not require irrigation or constant, routine maintenance. Anticipated tasks will include annual

inspections, record keeping, and maintaining cover integrity. Post-closure costs are estimated to be \$7,986.00. Detailed post closure costs are shown in Table 2.

**TABLE 2**  
**ESTIMATED POST CLOSURE COSTS**

ITEM	UNIT/MEASURE	COST/UNIT	# UNITS	TOTAL COST
1.0 City Operations				
1.1 Site Inspection and Record Keeping (2 hrs annually)	Hours	\$55.00	60	\$3,300.00
1.2 Correctional Plans and Specifications (4 hrs annually)	Hours	\$33.00	120	\$3,960.00
<b>SUBTOTAL</b>				<b>\$7,260.00</b>
10% CONTINGENCY				\$726.00
<b>TOTAL POST CLOSURE COSTS</b>				<b>\$7,986.00</b>

\*Based on September 2008 cost estimate

### 2.8.3 Financial Assurance Mechanism

The financial assurance plan is outlined below. The total estimated costs for closure and post-closure care are approximately \$97,416.00. The Total Financial Assurance costs are shown in Table 3.

**TABLE 3**  
**TOTAL ESTIMATED FINANCIAL ASSURANCE COSTS**

Closure Cost Total	<b>\$89,430.00</b>
Post Closure Cost Total	<b>\$7,986.00</b>
<b>TOTAL FINANCIAL ASSURANCE</b>	<b>\$97,416.00</b>

\*Based on September 2008 cost estimate

Santaquin has put a Trust Fund in place for the closure and post-closure costs. The balance of the Trust Fund as of September 2008 is \$46,859.05. The amount to be deposited into the Trust Fund this Fiscal year is \$2,100.00.

With the increase in the estimated closure and post-closure costs, the amount deposited into the Trust Fund will increase to reflect those estimated costs, as of next fiscal year. The Trust Fund will be fully funded by July 2014.

## **PART III - TECHNICAL DATA**

### **3.1 DESCRIPTION OF SITE VICINITY**

A copy of the U.S Geological Survey (USGS) topographic survey of the site area has been included in this report (See Appendix C). This map shows the facility boundary, the property boundary, the latitude and longitude coordinates of the front gate, the land use and zoning of the surrounding areas, any existing utilities and structures within one-fourth mile of the site, surface drainage channels, and the directions of the prevailing winds.

As noted in the initial application there are still only two homes, two power lines, one well, and sewage ponds within one-fourth mile of the site boundaries. Santaquin City is in the process of constructing a winter water storage pond adjacent to our current sewer lagoons. The surrounding property is zoned agricultural and contains orchards.

### **3.2 ENGINEERING CONSIDERATIONS**

#### **3.2.1 Foundation of the Facility**

Before the current facility was opened for operation, the old municipal landfill was covered with one foot of cover. Two small depressions that existed at that time have now been filled and covered to allow for future placement of inert waste.

#### **3.2.2 Operation of the Facility**

The operating plan for this facility is to fill each of 10 individual areas or cells sequentially. As each of these areas is filled, closure would consist of filling any voids and covering the surface with two feet of soil, including six inches of top soil. The cover would then be seeded with native grasses that will require little water or maintenance. Borrow materials will be obtained from the walls of the embankments surrounding the landfill or from soils that were stockpiled during the operations.

At the present time the first area is nearing capacity and will be covered with two feet of soil and will be seeded. The second area has been opened and fill is being placed in the northwest end of that area. As each area is filled to capacity it will be covered with two feet of soil and seeded. The active fill area will then continue to move towards the southeast.

#### **3.2.3 Landfill Capacity and Facility Life**

In order to determine the remaining capacity of the landfill a topographical survey was performed by J-U-B Engineers in September of 2008. According to the topographical data there are still approximately 9-1/2 acres that have yet to be utilized. In this area the walls that border the landfill on the north and south are between 6 feet and 15 feet high. The remaining volume of the

entire landfill is approximately 168,791 cubic yards. The total capacity has been reduced by 10% for occasional placement of cover soil. The topographical map and cross sections are included in Appendix D.

The facility design allows for 15 tons of waste per week. Using an average weight of debris of 1,000 pounds per cubic yard, results in the equivalent of 1,560 cubic yards per year. This is equivalent to 30 cubic yards per operating day during the year.

Based on the design volume listed above and the topographical data, disposal capacity and service life of the facility is calculated at 120 years, 9-1/2 acres and approximately 93,773 tons. Table 4 shows the remaining capacity by station as well as the expected year of closure.

**Table 4**  
**Landfill Area Closure Schedule**

Landfill Area	Capacity (CY)	Capacity (Tons)	Remaining Life (YRS)	Year of Closure
Sta 0+00 to 1+00	0	0	0	Closed
Sta 1+00 to 2+00	0	0	0	Closed
Sta 2+00 to 3+00	1624	902	1	2009
Sta 3+00 to 4+00	3786	2104	3	2012
Sta 4+00 to 5+00	4476	2487	3	2015
Sta 5+00 to 6+00	5668	3149	4	2019
Sta 6+00 to 7+00	6443	3579	5	2024
Sta 7+00 to 8+00	5819	3233	4	2028
Sta 8+00 to 9+00	5020	2789	4	2031
Sta 9+00 to 10+00	6840	3800	5	2036
Sta 10+00 to 11+00	9647	5359	7	2043
Sta 11+00 to 12+00	12069	6705	9	2052
Sta 12+00 to 13+00	12026	6681	9	2060
Sta 13+00 to 14+00	13469	7483	10	2070
Sta 14+00 to 15+00	14887	8270	11	2080
Sta 15+00 to 16+00	10587	5882	8	2088
Sta 16+00 to 17+00	4994	2774	4	2091
Sta 17+00 to 18+00	3711	2062	3	2094
Sta 18+00 to 19+00	3197	1776	2	2096
Sta 19+00 to 20+00	3849	2138	3	2099
Sta 20+00 to 21+00	5255	2920	4	2103
Sta 21+00 to 22+00	10119	5622	7	2110
Sta 22+00 to 23+00	12061	6701	9	2119
Sta 23+00 to 24+00	10198	5665	7	2126
Sta 24+00 to 24+63	3043	1691	2	2128
<b>Total Capacity</b>	168791	93773	120	----

### **3.2.4 Run-On/Run-Off Protection**

#### **3.2.4.1 Run-On Protection**

The current landfill facility is naturally protected from run-on in two ways:

1. The closed municipal landfill and the current Class IVb landfill are located in a gully that originally sloped to the northwest. However, the naturally occurring slopes have been altered by placement of municipal waste, during the operation of the municipal landfill. Bordering the southeastern end of the facility is a large depression that slopes away from the proposed Class IVb landfill to the southeast and prevents run-on from reaching the active portions of the facility.
2. Run-on is not possible from the sides of the proposed landfill as the natural topography of the surrounding land surface on both sides of the gully slopes away from the proposed landfill.

#### **3.2.4.2 Run-Off Protection**

Since no water will be able to run-on to the landfill, a run-off system preventing water from leaving the site need only address precipitation that falls within the current facility.

Santaquin City has put a negative fill on the east side of the current landfill to assure precipitation from any rain or snow run-off remains on the landfill property and will not run onto the adjacent properties. This was completed by creating a 2 foot berm using material (dirt and fill) from the landfill site, and some outside materials.

# **APPENDIX A**

## **PROOF OF OWNERSHIP**

271

Recorded at Request of \_\_\_\_\_  
at \_\_\_\_\_ M. Fee Paid \$ \_\_\_\_\_  
by \_\_\_\_\_ Dep. Book \_\_\_\_\_ Page \_\_\_\_\_ Ref. \_\_\_\_\_  
Mail tax notice to \_\_\_\_\_ Address \_\_\_\_\_

# QUIT-CLAIM DEED

Melba Jones  
of Payson \_\_\_\_\_, County of Utah \_\_\_\_\_, State of Utah, hereby  
QUIT-CLAIM to Santaquin City

of Santaquin, Utah  
One dollar and other good and valuable considerations  
the following described tract of land in Utah  
State of Utah: grantee  
for the sum of  
DOLLARS  
County,

SE 1/4 SE 1/4  
34-53

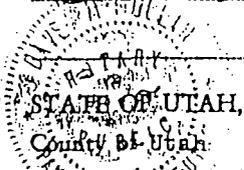
Commencing at the S.E. corner of section 34 T9SR1E  
S.L.B.& M.; thence N 1.35 chains; thence N.  $46\frac{1}{4}^{\circ}$   
W. 7.83 chains; thence N.  $61\frac{1}{4}^{\circ}$  W. 14.66 chains; thence  
S. 7.75 chains to R/W Highway No. 6; thence S.  $56^{\circ}$   
E. along highway No. 6 R/W 11.0 chains; thence E.  
9.35 chains to point of beginning; containing 12.7  
acres more or less.

WITNESS the hand of said grantor, this twenty fifth day of  
April \_\_\_\_\_, A. D. one thousand nine hundred and fifty three

Signed in the presence of

*[Signature]*

*[Signature]*



} ss.

On the twenty fifth day of April A. D. one  
thousand nine hundred and fifty three personally appeared before me  
Melba Jones

the signer of the foregoing instrument, who duly acknowledge to me that he executed the  
same.

*[Signature]*

My commission expires 1/1/57 Address: Payson, Utah  
Notary Public.

Recorded at Request of \_\_\_\_\_  
at \_\_\_\_\_ M. Fee Paid \$ \_\_\_\_\_  
by \_\_\_\_\_ Dep. Book \_\_\_\_\_ Page \_\_\_\_\_ Ref.: \_\_\_\_\_  
Mail tax notice to \_\_\_\_\_ Address \_\_\_\_\_

# WARRANTY DEED

(Special)

NATIONAL HOUSING & FINANCE SYNDICATE, a corporation organized and existing under the laws of the State of Utah, with its principal office at Salt Lake City, of County of Salt Lake, State of Utah, grantor, hereby CONVEYS AND WARRANTS against all claiming by, through or under it, to SANTAQUIN CITY

of Santaquin City, County of Utah, State of Utah, grantee  
One Hundred and Twenty Five and No/100 (\$125.00) for the sum of DOLLARS,  
the following described tract of land in Utah County,  
State of Utah:

MM/4 of MM/4  
6947-47

Commencing at the Northwest corner of Section 2, Township 10 South, Range 1 East, Salt Lake Meridian; and running thence East 6.15 chains; thence South 17° West 12.30 chains; thence West 2.48 chains; thence North 12.54 chains; to beginning. Less sold Utah County. Less sold for road way. Area 4.20 ac.



*Part of Stamp*

The officers who sign this deed and the transfer represented thereby was duly authorized under a resolution duly adopted by the board of directors of the grantor at a lawful meeting duly held and attended by a quorum.

In witness whereof, the grantor has caused its corporate name and seal to be hereunto affixed by its duly authorized officers this 6th day of April, A. D. 19 53

Attest: *[Signature]* NATIONAL HOUSING & FINANCE SYNDICATE Company.  
Secretary. *[Signature]* President.



351-

15382

From 11589

15

Recorded at Request of \_\_\_\_\_  
at \_\_\_\_\_ M. Fee Paid \$ \_\_\_\_\_  
by \_\_\_\_\_ Dep. Book \_\_\_\_\_ Page \_\_\_\_\_ Ref.: \_\_\_\_\_  
Mail tax notice to \_\_\_\_\_ Address \_\_\_\_\_

### WARRANTY DEED

*Floyd Kay and Vera Kay, Husband and Wife* grantor  
of *Santaquin*, County of *Utah*, State of Utah, hereby  
CONVEY and WARRANT to *City of Santaquin*

of *Santaquin, Utah* grantee  
*One Hundred and Twenty Five, (125.00)* DOLLARS,  
for the sum of  
the following described tract of land in *Utah* County,  
State of Utah:

N57°42'W  
4365-7

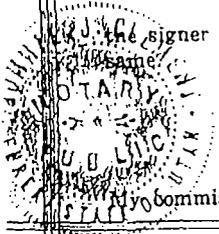
Commencing at the North East Corner of  
Section 3, Township 10 South, Range 1 East,  
Salt Lake Meridian; thence South 331 feet  
to the Northerly Right of Way of State Highway;  
thence N 57° 42' W along said Right of Way 605.5  
feet; thence East 507 feet to Beginning.  
Containing 3.85 acres

WITNESS, the hand of said grantor, this *29* day of  
*July*, A. D. 19*55*

Signed in the Presence of }  
*Jack K. Openshaw* } *Floyd Kay*  
*Oscar W. Robbins* } *Vera Kay*

STATE OF UTAH, }  
County of *Utah* } ss.  
On the *29* day of *July*, A. D. 19*55*  
personally appeared before me

The signer of the within instrument, who duly acknowledged to me that he executed the



*Bonnie J. Clement*  
Notary Public.  
My commission expires *9/22/55* Residing in *Santaquin, Utah*

594

16790

31

# WARRANTY DEED

MORRIS SMITH AND DAVIDA SMITH, his wife

Grantor..., of Santaquin, Utah  
hereby CONVEY... AND WARRANT... to SANTAQUIN CITY

Grantee..., of Santaquin Utah  
Street Address City County State

for the sum of One dollar and other valuable considerations **DOLLARS**  
the following described tract of land in Utah County,  
State of Utah, to-wit:

Beginning at a point in a fence line on the Southerly side of a county road which point is North along the section line 1004.98 feet and West perpendicular to said section line 1235.05 feet from the Southeast corner of section 34, T 9 S, R 1 E S1BM; thence continuing along said fence line on the Southerly side of a county road North 83° -36' West 851.9 feet to a fence line; thence South 16° -03' West along said fence line 30.7 feet to a fence line on the Northerly side of State Highway No. 6; thence South 63° -48' East along said fence line 295.0 feet thence continuing along said fence line South 58° 43' East 232 feet; thence continuing along said fence line South 55° 30' East 492.6 feet; thence North 1° 47' West 463.5 feet to the point of beginning.

WITNESS THE HAND... of said Grantor... this \_\_\_\_\_ day of  
November, A. D. 1961

Signed in the presence of

*Morris Smith*  
*David Smith*

STATE OF UTAH,  
County of Utah } ss.

On the \_\_\_\_\_ day of November, A. D. 1961, personally appeared  
before me, a Notary Public in and for the State of Utah, Morris Smith and Davida  
Smith

of the above instrument, who duly acknowledged to me that he executed the same.



*[Signature]*  
Notary Public  
Residing at Santaquin Utah

THELMA VECCHI CERTIFICATE  
16790  
Dec 15 10 21 AM '61  
BOOK 890  
ABS 88  
P. 1088  
LINE 10  
594  
34  
9  
10  
Santaquin City  
Standard Supply Co. - Provo, Utah

MAIL TAX NOTICE TO  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## **APPENDIX B**

### **RECORDING, INSPECTION & REPORTING FORMS**



# SANTAQUIN CITY CLASS IVb LANDFILL RANDOM LOAD INSPECTION RECORD

Date: \_\_\_\_\_

## INSPECTION INFORMATION

Inspector's Name:	
Date of Inspection:	
Time of Inspection:	

## TRANSPORTER INFORMATION

Company Name:	
Address:	
Phone Number:	

## VEHICLE INFORMATION

Driver's Name:	
Vehicle Type:	
Vehicle License Number:	
Description of Waste:	

## OBSERVATION AND ACTION TAKEN


\* Driver's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Inspector's Signature: \_\_\_\_\_

Date: \_\_\_\_\_

\* Driver's signature hereon denotes: His presence during the inspection and does not admit, confirm or identify liability.

# SANTAQUIN CITY CLASS IVb LANDFILL WEEKLY INSPECTION FORM

Date: \_\_\_\_\_

Performed By: \_\_\_\_\_

**Structure and Roads**

**Satisfactory**

**Needs Work**

- 1. Fences
- 2. Gates
- 3. Access Roads
- 4. Run-off Control System


List recommended repairs and/or action taken:


**Operations**

**Satisfactory**

**Needs Work**

- 1. Litter and weed control
- 2. Waste Piles/Depressions
- 3. Final Cover
- 4. Daily Cover (dead animal pit)
- 5. Furniture, Appliance and Metal storage area


List recommended repairs and/or action taken:


**Other Observations and/or corrective action taken:**


Signature: \_\_\_\_\_

# SANTAQUIN CITY CLASS IVb LANDFILL QUARTLEY INSPECTION FORM

Date: \_\_\_\_\_

Performed By: \_\_\_\_\_

**Structure and Roads**

**Satisfactory**

**Needs Work**

- 1. Fences
- 2. Gates
- 3. Access Roads
- 4. Run-off Control System


List recommended repairs and/or action taken:


**Operations**

**Satisfactory**

**Needs Work**

- 1. Litter and weed control
- 2. Waste Piles/Depressions
- 3. Final Cover
- 4. Daily Cover (dead animal pit)
- 5. Furniture, Appliance and Metal storage area

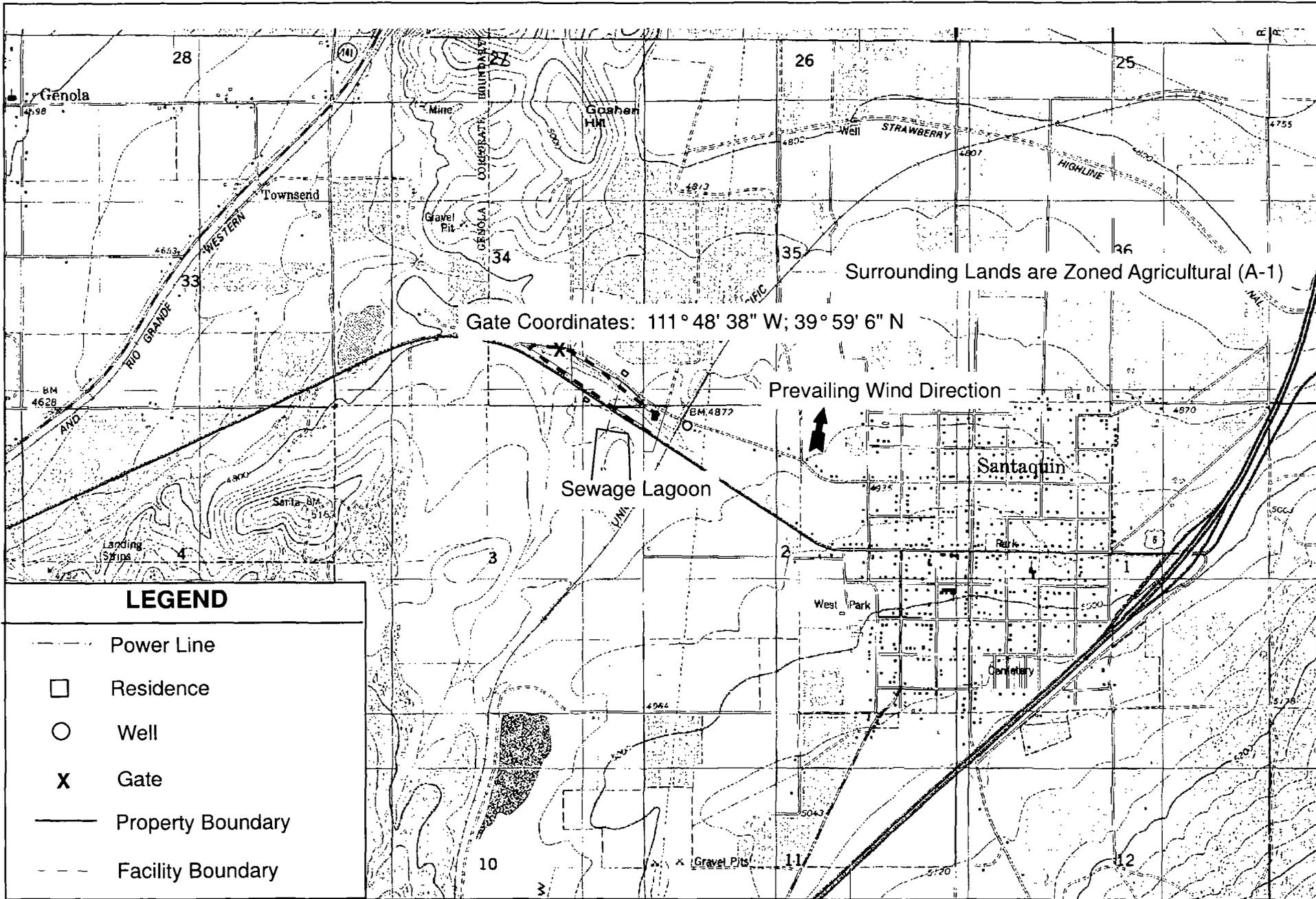

List recommended repairs and/or action taken:


**Other Observations and/or corrective action taken:**


Signature: \_\_\_\_\_

## **APPENDIX C**

**USGS MAP**

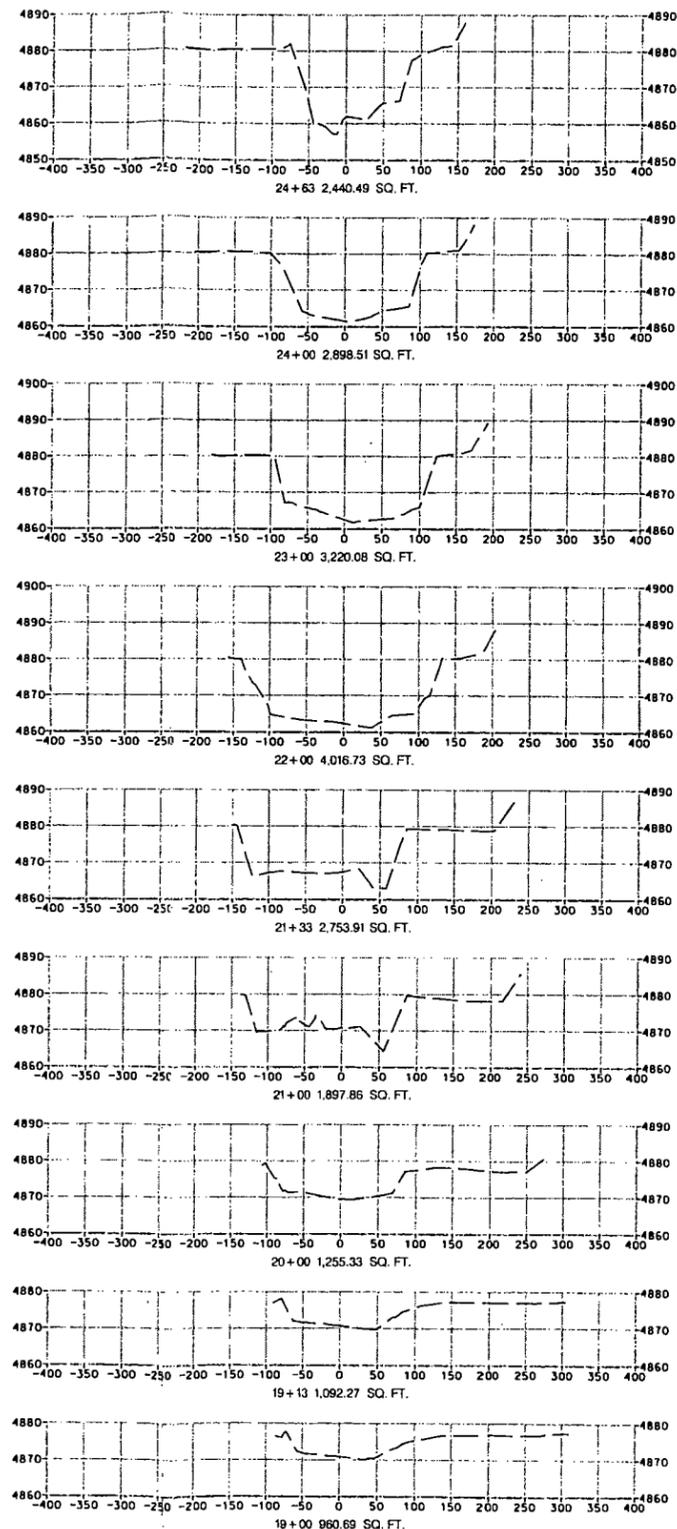
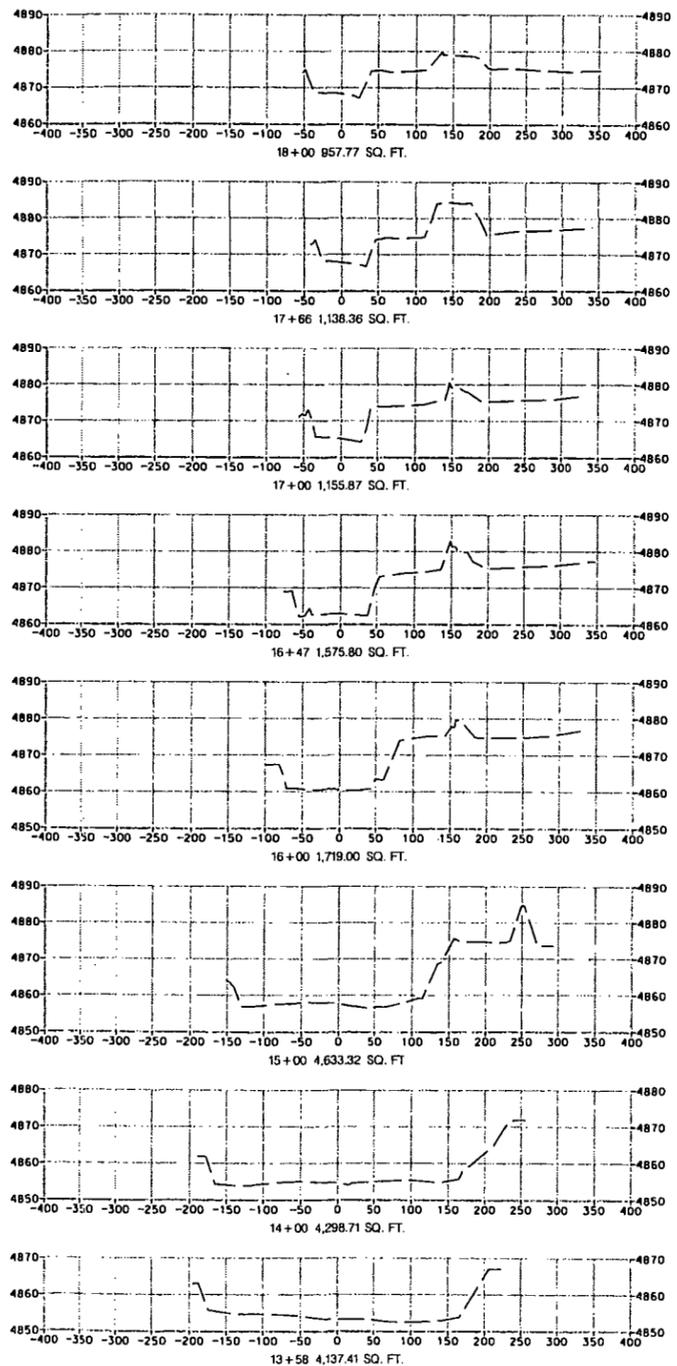
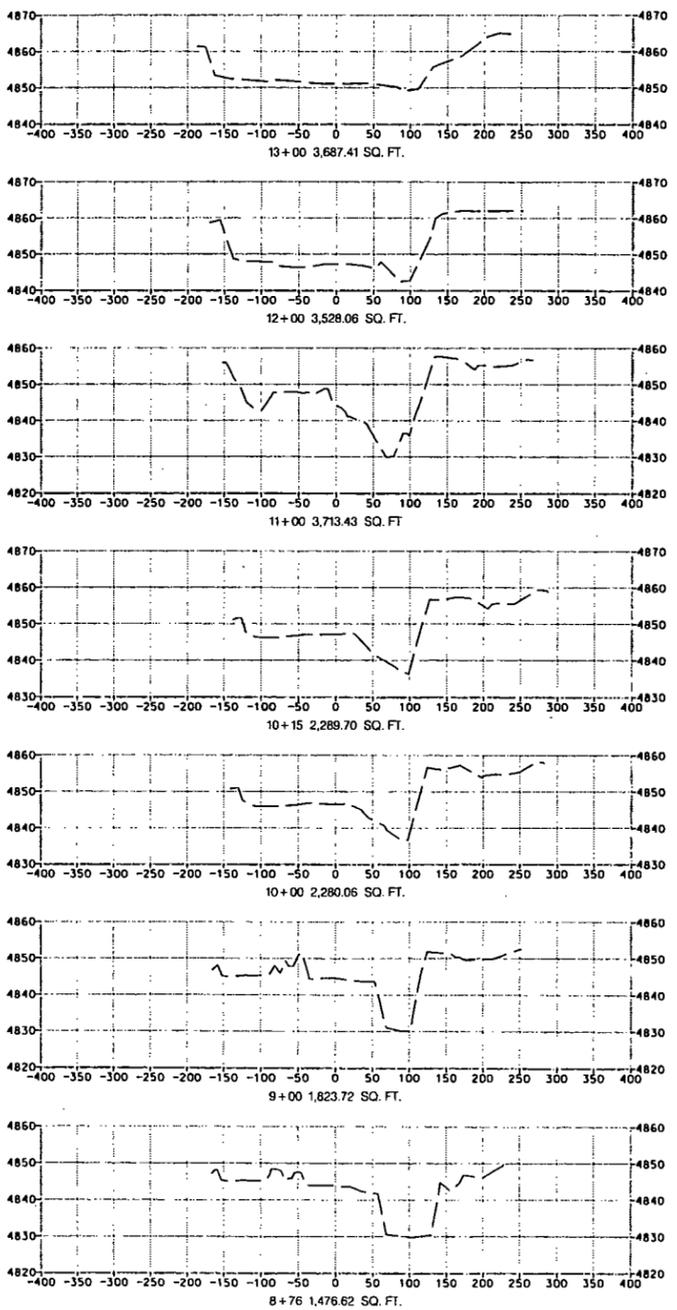
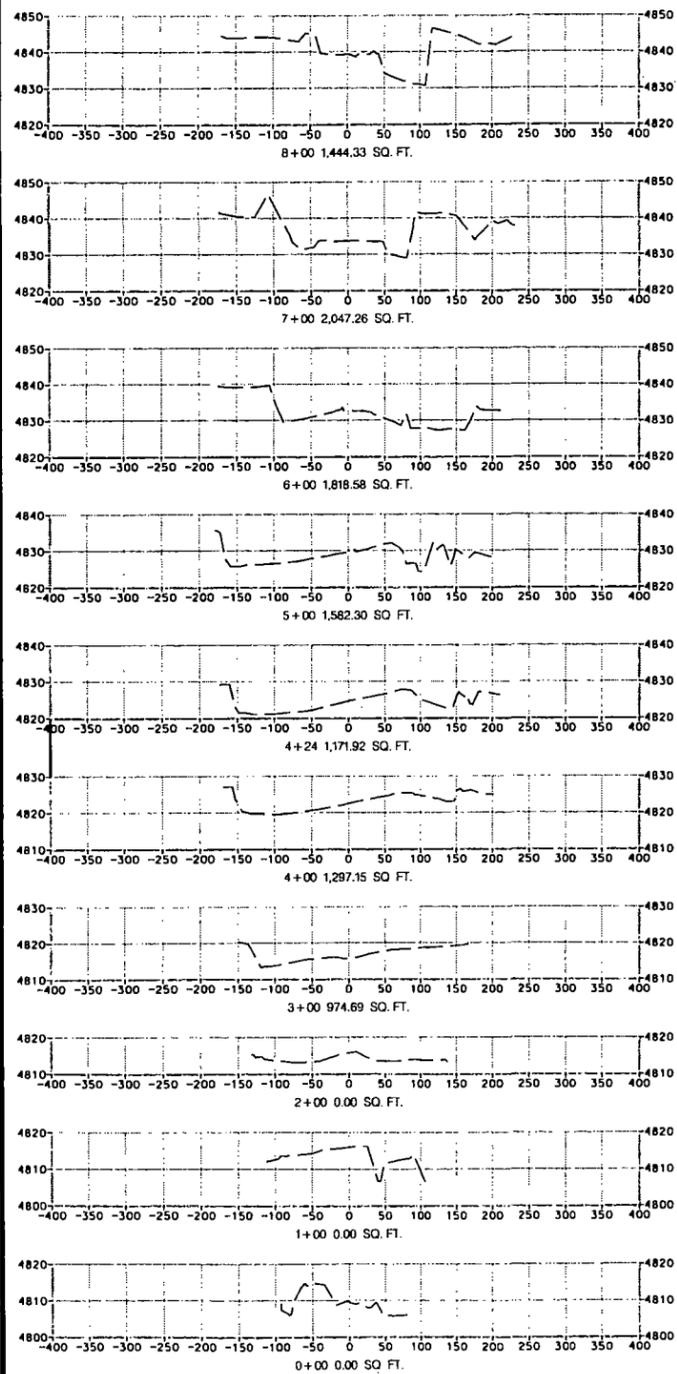


## **APPENDIX D**

### **FIGURES**



2008 PROFILE LINE CROSS SECTIONS



**JUB**  
 Engineers - Surveyors - Planners  
**J-U-B ENGINEERS, Inc.**  
 240 W. Center Street  
 Suite 200  
 Orem, Utah 84057  
 Phone: 801.226.0393  
 Fax: 801.226.0394  
 www.jub.com

**PRELIMINARY  
 PLANS**

**NOT FOR  
 CONSTRUCTION**

THIS DOCUMENT AND THE DESIGN INFORMATION CONTAINED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF JUB ENGINEERS, INC. AND IS NOT TO BE USED, IN WHOLE OR PART, FOR ANY OTHER PROJECT WITHOUT THE EXPRESS WRITTEN AUTHORIZATION OF JUB ENGINEERS, INC.

**CLASS IVB LANDFILL CROSS SECTIONS**

**SANTAQUIN CITY, UTAH**

CAD FILE: SFLAABBREV3  
 PROJ: \*50-08-032  
 DRAWING NO.:  
 DRAWN BY: JMW  
 DESIGN BY:  
 CHECKED BY: MEB  
 1/2" INCH  
 AT FULL SIZE, F NOT 1/2" SCALE ACCORDINGLY  
 SCALE OF SHEET  
 HOR SCALE: F - 250'  
 VER SCALE: F - 50'  
 LAST UPDATED DATE:  
 SHEET  
 2  
 OF 2

## Utah Class IV and VI Landfill Permit Application Form

<b>Part I General Information</b> APPLICANT: PLEASE COMPLETE ALL SECTIONS.				
1. Landfill Type	<input type="checkbox"/> Class IVa <input checked="" type="checkbox"/> Class IVb <input type="checkbox"/> Class VI	II. Application	<input type="checkbox"/> New Application <input checked="" type="checkbox"/> Renewal Application	<input type="checkbox"/> Facility Expansion <input type="checkbox"/> Modification
For Renewal Applications, Facility Expansion Applications and Modifications Enter Current Permit Number				
<b>III. Facility Name and Location</b>				
Legal Name of Facility <b>Santaquin City Solid Waste Landfill</b>				
Site Address (street or directions to site) <b>1/2 mile west of Santaquin City on Hwy 6</b>			County <b>Utah County</b>	
City <b>Santaquin City</b>		State <b>Utah</b>	Zip Code <b>84655</b>	Telephone <b>801-754-3211</b>
Township <b>9S</b>	Range <b>1E</b>	Section(s) <b>34 SLB&amp;M</b>	Quarter/Quarter Section <b>SE Corner</b>	Quarter Section <b>SE Corner</b>
Main Gate Latitude <b>111 degrees 48 minutes 38 seconds W</b>			Longitude <b>39 degrees 59 minutes 6 seconds N</b>	
<b>IV. Facility Owner(s) Information</b>				
Legal Name of Facility Owner <b>Santaquin City Corporation</b>				
Address (mailing) <b>45 West 100 South</b>				
City <b>Santaquin</b>		State <b>Utah</b>	Zip Code <b>84655</b>	Telephone <b>801-754-3211</b>
<b>V. Facility Operator(s) Information</b>				
Legal Name of Facility Operator <b>Santaquin City Corporation</b>				
Address (mailing) <b>45 West 100 South</b>				
City <b>Santaquin</b>		State <b>Utah</b>	Zip Code <b>84655</b>	Telephone <b>801-754-3211</b>
<b>VI. Property Owner(s) Information</b>				
Legal Name of Property Owner <b>Santaquin City Corporation</b>				
Address (mailing) <b>45 West 100 South</b>				
City <b>Santaquin</b>		State <b>Utah</b>	Zip Code <b>84655</b>	Telephone <b>801-754-3211</b>
<b>VII. Contact Information</b>				
Owner Contact <b>Dennis Barnes</b>			Title <b>Public Works Director</b>	
Address (mailing) <b>45 West 100 South</b>				
City <b>Santaquin</b>		State <b>Utah</b>	Zip Code <b>84655</b>	Telephone <b>801-754-3211</b>
Email Address			Alternative Telephone (cell or other)	<b>801-420-3005</b>
Operator Contact			Title	
Address (mailing)				
City		State	Zip Code	Telephone
Email Address			Alternative Telephone (cell or other)	
Property Owner Contact			Title	
Address (mailing)				
City		State	Zip Code	Telephone
Email Address			Alternative Telephone (cell or other)	

## Utah Class IV and VI Landfill Permit Application Form

<b>Part 1 General Information (Continued)</b>																							
<b>VIII. Waste Types</b> (check all that apply) <b>XX</b> Landfill will accept all wastes allowed in Class IVb landfill <b>Or</b> landfill will accept only the following wastes <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">Waste Type</td> <td style="width: 33%;">Combined Disposal Unit</td> <td style="width: 33%;">Monofill Unit</td> </tr> <tr> <td><input type="checkbox"/> Construction &amp; Demolition</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> Tires</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> Yard Waste</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> Animals</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> Contaminated Soil</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> Other _____</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table> <p>Note: Disposal of dead animals must be approved by the Executive Secretary</p>	Waste Type	Combined Disposal Unit	Monofill Unit	<input type="checkbox"/> Construction & Demolition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Tires	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Yard Waste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Animals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Contaminated Soil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/> Other _____	<input type="checkbox"/>	<input type="checkbox"/>	<b>IX. Facility Area</b> Facility Area ..... <u>25</u> acres Disposal Area ..... <u>12</u> acres Design Capacity Years ..... <u>120</u> Cubic Yards ..... <u>168,791</u> Tons ..... <u>93,773</u>	
Waste Type	Combined Disposal Unit	Monofill Unit																					
<input type="checkbox"/> Construction & Demolition	<input type="checkbox"/>	<input type="checkbox"/>																					
<input type="checkbox"/> Tires	<input type="checkbox"/>	<input type="checkbox"/>																					
<input type="checkbox"/> Yard Waste	<input type="checkbox"/>	<input type="checkbox"/>																					
<input type="checkbox"/> Animals	<input type="checkbox"/>	<input type="checkbox"/>																					
<input type="checkbox"/> Contaminated Soil	<input type="checkbox"/>	<input type="checkbox"/>																					
<input type="checkbox"/> Other _____	<input type="checkbox"/>	<input type="checkbox"/>																					
<b>X. Fee and Application Documents</b>																							
Indicate Documents Attached To This Application <input type="checkbox"/> Application Fee: Amount \$		Class VI Special Requirements <input type="checkbox"/> Documents required by UCA 19-6-108(9) and (10)																					
<input checked="" type="checkbox"/> Facility Map or Maps <input checked="" type="checkbox"/> Facility Legal Description <input checked="" type="checkbox"/> Plan of Operation <input checked="" type="checkbox"/> Waste Description <input type="checkbox"/> Ground Water Report <input checked="" type="checkbox"/> Closure Design <input checked="" type="checkbox"/> Cost Estimates <input type="checkbox"/> Financial Assurance																							
<b>I HEREBY CERTIFY THAT THIS INFORMATION AND ALL ATTACHED PAGES ARE CORRECT AND COMPLETE.</b>																							
Signature of Authorized Owner Representative Name typed or printed James DeGraffenried	Title    Mayor Address 45 West 100 South Santaquin, Utah 84655	Date																					
Signature of Authorized Land Owner Representative (if applicable)	Title Address	Date																					
Name typed or printed Signature of Authorized Operator Representative (if applicable)	Title Address	Date																					
Name typed or printed																							

**SCANNABLE  
MATERIALS**

associated with  
this document have  
been sent to be  
processed.