

## Johnson, Sabrina O

---

**From:** Wiesman, Ronald <WiesmanR@hillsboroughcounty.org>  
**Sent:** Wednesday, April 15, 2020 7:51 AM  
**To:** Morgan, Steve; SWD\_Waste  
**Cc:** Madden, Melissa; Cope, Ronald; Byer, Kimberly; Ruiz, Larry; O'Neill, Joseph; Spradlin, Kollan; Curtis, Bob  
**Subject:** WACS ID 41193 - Qtr. 1 2020 Water Balance & Waste Tire Report for Southeast County  
**Attachments:** 1Q2020 Water Balance Report.pdf; 1Q2020 Waste Tire Report.pdf

Mr. Morgan,

The Quarterly Water Balance and Waste Tire Report for the Southeast County Landfill are attached (WACS ID 41193).

Please advise should you have any questions concerning the information provided.

### Ron Wiesman II

#### Manager

Solid Waste Management Division  
Public Utilities Department

---

**P:** (813) 671-7707 VOIP 42801

**M:** (813) 455-2194

**E:** [wiesmanr@HCFLGov.net](mailto:wiesmanr@HCFLGov.net)

**W:** <http://HCFLGOV.net>

---

### Hillsborough County

15960 County Road 672 Lithia, FL 33547

---

[Facebook](#) | [Twitter](#) | [YouTube](#) | [LinkedIn](#) | [HCFL Stay Safe](#)

Please note: All correspondence to or from this office is subject to Florida's Public Records law.



# Hillsborough County Florida

## SOLID WASTE MANAGEMENT

PO Box 1110 Tampa, FL 33601-1110  
813-272-5680

April 15, 2020

Mr. Steve Morgan  
Solid Waste Section  
Florida Department of Environmental Protection  
Southwest District  
13051 N. Telecom Pkwy  
Temple Terrace, Florida 33637

RE: Waste Tire Facility Quarterly Report - Permit No. 126787-  
005-WT/02

Dear Mr. Morgan:

In accordance with Rule 62-711, F.A.C. and Permit No 126787-005-WT/02, the Solid Waste Management Division (SWMD) is submitting the Quarterly Report for the Waste Tire Facility for the period January 1, 2020 through March 31, 2020. The SWMD staff compiled the information from the site's daily reports for this Quarterly Report.

Should you have any questions or require additional information concerning this submittal, please contact me at (813) 671-7707.

Sincerely,

Larry E. Ruiz  
Manager Landfill Operations  
Solid Waste Management Division

LER/rw  
Attachments  
xc: Ron Cope, EPC  
Kimberly Byer, SWMD

## BOARD OF COUNTY COMMISSIONERS

Ken Hagan  
Pat Kemp  
Lesley "Les" Miller, Jr.  
Sandra L. Murman  
Kimberly Overman  
Mariella Smith  
Stacy R. White

## COUNTY ADMINISTRATOR

Michael S. Merrill

## COUNTY ATTORNEY

Christine M. Beck

## INTERNAL AUDITOR

Peggy Caskey

## INFRASTRUCTURE SERVICES

## ADMINISTRATOR

John Lyons

**WASTE TIRE FACILITY  
QUARTERLY TONNAGE REPORT  
FIRST QUARTER 2020**

|                |                | FIRST QUARTER               | Beginning Tonnage<br>(Jan. 1, 2020) |               |
|----------------|----------------|-----------------------------|-------------------------------------|---------------|
|                |                |                             |                                     | 603.69        |
| Month          | Tires Received | Tires Removed by Contractor | Tires to SCTS                       | Tons Adjusted |
| Jan. 2020      | 266.70         | 186.27                      | 51.55                               | 5.29          |
|                |                |                             |                                     |               |
|                |                |                             |                                     |               |
| Beginning Tons | 603.69         |                             |                                     |               |
|                | 870.39         | -186.27                     | -51.55                              | -5.29         |
|                |                |                             | Ending Tonnage                      | 627.28        |
|                |                |                             |                                     |               |
| Month          | Tires Received | Tires Removed by Contractor | Tires to SCTS                       | Tons Adjusted |
| Feb. 2020      | 216.77         | 247.81                      | 99.50                               | 5.12          |
|                |                |                             |                                     |               |
|                |                |                             |                                     |               |
| Beginning Tons | 627.28         |                             |                                     |               |
|                | 844.05         | -247.81                     | -99.50                              | -5.12         |
|                |                |                             | Ending Tonnage                      | 491.62        |
|                |                |                             |                                     |               |
| Month          | Tires Received | Tires Removed by Contractor | Tires to SCTS                       | Tons Adjusted |
| Mar. 2020      | 314.85         | 45.87                       | 120.59                              | 0.00          |
|                |                |                             |                                     |               |
|                |                |                             |                                     |               |
| Beginning Tons | 491.62         |                             |                                     |               |
|                | 806.47         | -45.87                      | -120.59                             | 0.00          |
|                |                |                             | Ending Tonnage                      | 640.01        |
|                |                |                             |                                     |               |
| Month          | Tires Received | Tires Removed by Contractor | Tires to SCTS                       | Tons Adjusted |
| Jan. 2020      | 266.70         | 186.27                      | 51.55                               | 5.29          |
| Feb. 2020      | 216.77         | 247.81                      | 99.50                               | 5.12          |
| Mar. 2019      | 314.85         | 45.87                       | 120.59                              | 0.00          |
| Sub-Total      | 798.32         | 479.95                      | 271.64                              | 10.41         |
| Beginning Tons | 603.69         |                             |                                     |               |
| TOTAL          | 1,402.01       | -479.95                     | -271.64                             | -10.41        |
|                |                |                             | Ending Tonnage                      | 640.01        |



# Department of Environmental Protection

|   |
|---|
| DEP Form # 62-701.900(21)                       |
| Waste Tire Processing Facility                  |
| Form Title <u>Quarterly Report</u>              |
| Effective Date <u>3/22/00</u>                   |
| DEP Application No. _____<br>(Filled in by DEP) |

## Waste Tire Processing Facility Quarterly Report

Pursuant to Rule 62-711.530, Florida Administrative Code, the owner or operator of a waste tire processing facility shall submit the following information to the Department quarterly.

Quarter covered by this report 1/1/20 thru 3/31/20 (First quarter begins on January 1 of any given year)

1. Facility name: Hillsborough County Southeast Landfill Waste Tire Facility
2. Facility mailing address: 332 N. Falkenburg Road  
city: Tampa County: Hillsborough Zip: 33619
3. Facility permit number: 126787-005-WT/02
4. Facility telephone number (813) 671-7707
5. Authorized person preparing report: Larry E. Ruiz
6. Affiliation with facility: Owner Representative - Manager Landfill Operations
7. Telephone number (if different from above): ( )
8. Activity: Report in tons

|                   | Beginning Inventory | Received | Processed | Consumed | Removed | Adjustments | Ending Inventory |
|-------------------|---------------------|----------|-----------|----------|---------|-------------|------------------|
| Used Tires        | 603.69              | 798.32   |           |          | 751.60  | 10.41       | 640.01           |
| Other whole Tires |                     |          |           |          |         |             |                  |
| Processed tires   |                     |          |           |          |         |             |                  |
| Processing Waste  |                     |          |           |          |         |             |                  |
| Other             |                     |          |           |          |         |             |                  |
| Total             | 603.69              | 798.32   |           |          | 751.60  | 10.41       | 640.01           |

- a. Explain all inventory adjustments. 10.41  
10.41 tons of unprocessed truck tires.
- b. List any period in which one or more category of inventory exceeded the permitted maximum for that category. How was that condition relieved?

For any excess inventory at the end of the quarter, state how and when this condition will be relieved. Attach Additional sheets, if necessary.

### 9. Certification:

To the best of my knowledge and belief, I certify the information provided in this report is true, accurate, and complete.

Larry E. Ruiz

Print Name of Authorized Agent

Larry E. Ruiz

Signature of Authorized Agent

4/15/2020

Date

Mail complete form to  
the appropriate district office

Northwest District  
160 Governmental Center  
Pensacola, FL 32501-5794  
850-595-8360

Northeast District  
7825 Baymeadows Way, Ste. 200 B  
Jacksonville, FL 32256-7590  
904-448-4300

Central District  
3319 Maguire Blvd., Ste. 232  
Orlando, FL 32803-3767  
407-894-7555

Southwest District  
3804 Coconut Palm Dr.  
Tampa, FL 33619  
813-744-6100

South District  
2295 Victoria Ave., Ste. 364  
Fort Myers, FL 33902-2549  
941-332-6975

Southeast District  
400 North Congress Ave.  
West Palm Beach, FL 33401  
561-681-6600



## Hillsborough County Florida

**SOLID WASTE MANAGEMENT**  
PO Box 1110 Tampa, FL 33601-1110  
813-272-5680

April 15, 2020

Mr. Steve Morgan  
Solid Waste Section  
Florida Department of Environmental Protection, Southwest  
District  
13051 N. Telecom Pkwy  
Temple Terrace, Florida 33637

RE: Southeast County Landfill – Leachate Data Quarterly Report

Dear Mr. Morgan:

In accordance with Specific Condition No. C.12.d of Permit No. 35435-023-SO/01, the Solid Waste Management Division (SWMD) is submitting the Quarterly Leachate Water Balance summary for the Southeast County Landfill for the quarter ending March 31, 2020.

The data is being submitted as separate monthly reports for January, February and March 2020. The attached reports include the leachate level in Pump Station B (PS-B).

Please advise should you have any questions concerning the attached submittal.

Sincerely,

Larry E. Ruiz, SC  
Manager Landfill Operations  
Solid Waste Management Division

LER/rw  
Attachment  
xc: Kollan Spradlin, SCS  
Ron Cope, EPC

### BOARD OF COUNTY COMMISSIONERS

Ken Hagan  
Pat Kemp  
Lesley "Les" Miller, Jr.  
Sandra L. Murman  
Kimberly Overman  
Mariella Smith  
Stacy R. White

### COUNTY ADMINISTRATOR

Michael S. Merrill  
COUNTY ATTORNEY  
Christine M. Beck  
INTERNAL AUDITOR  
Peggy Caskey

### INFRASTRUCTURE SERVICES

ADMINISTRATOR  
John Lyons



# Hillsborough County Florida

## SOLID WASTE MANAGEMENT

PO Box 1110 Tampa, FL 33601-1110  
813-272-5680

### MEMORANDUM

**DATE:** February 10, 2020

**TO:** Larry E. Ruiz, Manager Landfill Operations, Solid  
Waste Management Division

**FROM:** Ron W. Wiesman, Manager, Solid Waste  
Management Division

**SUBJECT:** Leachate Water Balance Report Forms for January 2020  
Southeast County Landfill, Hillsborough County, Florida

The Solid Waste Management Division (SWMD) staff has compiled and reviewed the leachate management operational data from the Southeast County Landfill Phases I-VI, Sections 7-8, and Section 9. Attached are the Leachate Water Balance Report Form (Table 1), the Leachate Field Data Entry Form (Table 2), and the 2020 Summary (Table 3). Also, attached find Figure 1 showing leachate levels in Pump Station B sump of Phases I-VI and rainfall for the month.

### TABLE 1

#### Day (Column I)

Column I presents the calendar days for the month.

#### Rainfall (Column II)

Column II presents the average rainfall, in inches, as measured in the field from rainfall stations at the site. This month there was 0.58 inches of rainfall recorded at the Southeast County Landfill (SCLF).

#### Depth in Pond A (Column III)

Column III presents the daily depth, in feet, of effluent stored in effluent pond (Pond A). The daily depth in Pond A varies as a function of the spray irrigation frequency/duration and effluent hauled from the pond. This month the daily average of effluent stored in Pond A was 2.2 feet.

#### BOARD OF COUNTY COMMISSIONERS

Ken Hagan  
Pat Kemp  
Lesley "Les" Miller, Jr.  
Sandra L. Murman  
Kimberly Overman  
Mariella Smith  
Stacy R. White

#### COUNTY ADMINISTRATOR

Michael S. Merrill

#### COUNTY ATTORNEY

Christine M. Beck

#### INTERNAL AUDITOR

Peggy Caskey

#### INFRASTRUCTURE SERVICES ADMINISTRATOR

John Lyons

**Depth in Pond B (Column IV)**

Column IV presents the daily depth, in feet, of effluent or leachate that is stored in the effluent/leachate storage pond (Pond B). The depth in Pond B varies as a function of the evaporation frequency/duration and effluent or leachate hauled from the pond. This month the daily average depth of effluent in Pond B was 0.6 feet.

**Estimated Depth at Pump Station B Sump (PS-B) (Column V)**

Column V presents the depth of leachate, in inches, in the PS-B sump. Leachate from Phases I-VI flows to the PS-B sump for removal from the landfill. PS-B then pumps the leachate to Pump Station A (PS-A). Daily depth readings from the PS-B sump are included in this column. The average recorded depth of leachate in the PS-B sump was 17.0 inches.

**Leachate Pumped to MLPS from Phases I-VI (Column VI)**

Column VI presents the daily amount of leachate, in gallons, collected from PS-A and pumped through the MLPS to the 575,000-gallon storage tank at the Leachate Treatment and Reclamation Facility (LTRF) for treatment or disposal. This column also includes the Phase II data from the dewatering wells and PS-2. The average daily amount of leachate pumped from PS-A was 99,341 gallons. A total of 3,079,565 gallons of leachate was pumped this month.

**Leachate Pumped from Sections 7-8 LDS (Column VII)**

Column VII presents the quantity of leachate removed from the leak detection system (LDS) of Sections 7-8. The quantity is measured by a flow meter before being pumped for removal with Sections 7-8 leachate. The removal rate did not exceed 1,930 gallons per day. This month 832 gallons of leachate was removed from the leak detection system of Sections 7-8.

**Leachate Pumped to MLPS from Sections 7-8 (Column VIII)**

Column VIII presents the quantity of leachate collected at Sections 7-8 and pumped to the MLPS. The quantity is measured by a flow meter and includes any leachate removed from the leak detection system of Sections 7-8 (Column VII). This month a total of 217,468 gallons was removed.

**Leachate Pumped to LTRF from the MLPS (Column IX)**

Column IX presents the total quantity of leachate pumped to the LTRF from Phases I-VI (including condensate removed from LFG Wells and Condensate Traps), and Sections 7-8. This month a total of 3,288,232 gallons of leachate was pumped to the LTRF.



**Leachate Pumped to LTRF from Section 9 (Column X)**

Column X presents the daily amount of leachate, in gallons, collected from Section 9 and pumped to the 575,000-gallon storage tank at the Leachate Treatment and Reclamation Facility (LTRF) for treatment or disposal. A total of 141,635 gallons of leachate was pumped this month.

**Leachate Pumped from Section 9 LDS (Column XI)**

Column XI presents the daily amount of leachate, in gallons, collected from the LDS of Section 9 and pumped to the 575,000-gallon storage tank at the LTRF for treatment or disposal. The removal rate did not exceed 4,651 gallons per day. This month zero gallons of leachate was removed from the leak detection system.

**Leachate in 575,000-Gallon Tank (Column XII)**

Column XII presents the daily amount of leachate, in gallons, stored in the 575,000-gallon leachate holding tank T1 at the LTRF. The amount of leachate stored in T1 is calculated based on the circumference of the tank and the daily level reading. This month an average of 235,400 gallons of leachate was stored in the tank.

**Effluent in 575,000-Gallon Tank (Column XIII)**

Column XIII typically presents the daily amount of effluent, in gallons, stored in the 575,000-gallon effluent holding tank T6 at the LTRF. The amount of effluent/leachate stored in T6 is calculated based on the circumference of the tank and the daily level reading. This month an average of 131,000 gallons of effluent was stored in the tank.

**Leachate Treated at LTRF (Column XIV)**

Column XIV presents the daily amount of leachate, in gallons, treated at the LTRF. On September 15, 2019, plant staff restarted treatment operations. This month a total of 853,457 gallons of leachate was treated at the plant.

**Total Leachate Hauled (Column XV)**

Column XV presents the daily amount of leachate, in gallons, hauled off site. This month a total of 2,360,372 gallons of leachate was hauled off site.



**Leachate Dust Control Sprayed (Column XVI)**

Column XVI presents the daily amount of leachate, in gallons, measured from the flow meter at the bypass-loading arm at the leachate storage tank. The leachate is used for dust control in the active area of the landfill. This month leachate was not used for dust control.

**Pond A Storage (Column XVII)**

Column XVII presents the daily amount of effluent, in gallons, stored in Pond A. The daily amount stored in the pond is calculated by using the daily depth of effluent in the Pond A (Column III). Under normal operating conditions, the daily amount of effluent stored in the pond varies depending upon the daily amount of leachate treated at the LTRF, the daily rainfall, daily effluent hauling operations, daily spray irrigation operations, and the daily amount of effluent used for dust control/evaporation. This month a daily average of 74,900 gallons of effluent was stored in Pond A.

**Pond B Storage (Column XVIII)**

Column XVIII presents the daily amount of effluent, in gallons, stored in Pond B. The daily amount stored in the pond is calculated by using the daily depth of liquid in Pond B (Column IV). Under normal operating conditions, the amount stored in the pond will vary depending upon the daily amount of leachate/effluent removed from the pond by the evaporation system, hauled from the pond, used for dust control or evaporated; was stored in Pond B. This month an average of 17,600 gallons per day of effluent was stored in Pond B.

**Effluent Sprayed at Pond B (Column XIX)**

Column XIX presents the daily amount of effluent, in gallons, sprayed for evaporation at Pond B. The amount evaporated is calculated by using 5 percent of the daily flow meter quantity sprayed at Pond B and it is included in Column XX. This month effluent was not sprayed in Pond B.

**Effluent Irrigation (Column XX)**

Column XX presents the daily amount of effluent, in gallons, used for spray irrigation on top of Phases IV-VI. The daily amount of effluent irrigation on Phases I-VI is measured from the flow meter at the irrigation pump station. This month a total of 544,716 gallons of effluent was sprayed.

**Effluent Dust Control Sprayed (Column XXI)**

Column XXI presents the daily amount of effluent, in gallons, sprayed for dust control in the active areas of the SCLF. The daily amount of effluent used for dust control, is measured from the flow meter at the bypass-loading arm. This month effluent was not sprayed as dust control.

**Total Effluent Hauled (Column XXII)**

Column XXII presents the daily amount of effluent, in gallons, hauled off site, as measured from the flow meter at the bypass-loading arm. This month effluent was not hauled off site.

**Total Evaporation (Column XXIII)**

Column XXIII presents the daily amount of leachate and effluent, in gallons, that evaporates and therefore will not be returned to the SCLF and/or requires treatment. Evaporation rates of 80 percent and 5 percent evaporation rate for spray in Pond B are assumed. Total evaporation estimated for this month was 435,800 gallons.

**TABLE 2**

Table 2 presents data assembled from daily logs compiled by the SWMD staff.

**TABLE 3**

**Leachate Balance Summary**

The Leachate Balance Summary (see Table 3) presents a review of inflow and outflow quantities for the LTRF, as well as rainfall and effluent disposal quantities at the landfill. Total inflow quantity to the LTRF was 3,439,577 gallons. Total outflow quantity from the LTRF was 3,213,829 gallons. The change in storage for the month increased by 225,748 gallons.

Please advise should you have any questions concerning the information provided.

**TABLE 1. LEACHATE WATER BALANCE REPORT FORM**  
**JANUARY 2020**  
**SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA**

| I             | II                | III                               | IV                                | V   | VI  | VII  | VIII   | IX   | X   | XI  | XII                                      | XIII                                     | XIV   | XV                                    | XVI   | XVII                           | XVIII                          | XIX  | XX                               | XXI   | XXII                                  | XXIII                          |
|---------------|-------------------|-----------------------------------|-----------------------------------|---|---|--|--|--|---|---|--|--|---|---------------------------------------|---|--------------------------------|--------------------------------|--|----------------------------------|---|---------------------------------------|--------------------------------|
| Day           | Rainfall<br>(in.) | Depth<br>in<br>Pond<br>A<br>(ft.) | Depth<br>in<br>Pond<br>B<br>(ft.) | Estimated<br>Depth<br>at<br>PS-B<br>(in.) | Leachate<br>Pumped<br>to MLPS<br>from Phases I-VI<br>(gal.) | Leachate<br>Pumped from<br>Sections 7-8<br>LDS<br>(gal.) | Leachate<br>Pumped<br>to MLPS from<br>Sections 7-8<br>(gal.) | Leachate<br>Pumped<br>to LTRF from<br>MPLS<br>(gal.) | Leachate<br>Pumped<br>to LTRF from<br>Section 9<br>(gal.) | Leachate<br>Pumped from<br>Section 9<br>LDS<br>(gal.) | Leachate<br>in<br>575K<br>Tank<br>(gal.) | Effluent<br>in<br>575K<br>Tank<br>(gal.) | Leachate<br>Treated<br>at<br>LTRF<br>(gal.) | Total<br>Leachate<br>Hauled<br>(gal.) | Leachate<br>Dust Control<br>(Sprayed)<br>(gal.) | Pond<br>A<br>Storage<br>(gal.) | Pond<br>B<br>Storage<br>(gal.) | Effluent<br>Sprayed<br>Pond<br>B<br>(gal.) | Effluent<br>Irrigation<br>(gal.) | Effluent<br>Dust Control<br>(Sprayed)<br>(gal.) | Total<br>Effluent<br>Hauled<br>(gal.) | Total<br>Evaporation<br>(gal.) |
| 1             | 0.00              | 3.6                               | 1.4                               | 18.0                                      | 94,201  | 27   | 5,695  | 99,895   | 5,281   | 0   | 278,000                                  | 0  | 19,295                                      | 0                                     | 0   | 145,000                        | 38,000                         | 0  | 0                                | 0   | 0                                     | 0                              |
| 2             | 0.00              | 3.6                               | 1.4                               | 19.2                                      | 105,214   | 27   | 5,695  | 110,908  | 5,281   | 0   | 312,000                                  | 0  | 19,296                                      | 143,174                               | 0   | 145,000                        | 38,000                         | 0  | 35,767                           | 0   | 0                                     | 28,600                         |
| 3             | 0.00              | 3.5                               | 1.5                               | 17.1                                      | 109,659   | 18   | 7,731  | 117,390  | 3,197   | 0   | 240,000                                  | 0  | 18,664                                      | 128,633                               | 0   | 140,000                        | 44,000                         | 0  | 0                                | 0   | 0                                     | 0                              |
| 4             | 0.57              | 3.4                               | 1.5                               | 12.4                                      | 100,404   | 29   | 5,873  | 106,277  | 6,544   | 0   | 214,000                                  | 0  | 20,847                                      | 121,552                               | 0   | 129,000                        | 44,000                         | 0  | 43,632                           | 0   | 0                                     | 34,900                         |
| 5             | 0.00              | 3.4                               | 1.5                               | 15.3                                      | 92,083  | 36   | 5,888  | 97,971   | 10,804  | 0   | 222,000                                  | 0  | 20,847                                      | 0                                     | 0   | 129,000                        | 44,000                         | 0  | 0                                | 0   | 0                                     | 0                              |
| 6             | 0.00              | 3.3                               | 1.5                               | 18.2                                      | 93,928  | 36   | 5,888  | 99,816   | 10,804  | 0   | 230,000                                  | 0  | 18,872                                      | 107,177                               | 0   | 123,000                        | 44,000                         | 0  | 26,367                           | 0   | 0                                     | 21,100                         |
| 7             | 0.00              | 3.1                               | 1.5                               | 14.1                                      | 95,583  | 25   | 7,811  | 103,394  | 5,102   | 0   | 209,000                                  | 0  | 18,872                                      | 143,022                               | 0   | 113,000                        | 44,000                         | 0  | 14,705                           | 0   | 0                                     | 0                              |
| 8             | 0.00              | 3.2                               | 1.5                               | 17.1                                      | 98,181  | 26   | 5,770  | 103,951  | 4,373   | 0   | 149,000                                  | 0  | 20,626                                      | 85,759                                | 0   | 118,000                        | 44,000                         | 0  | 17,425                           | 0   | 0                                     | 13,900                         |
| 9             | 0.00              | 2.9                               | 1.5                               | 17.5                                      | 73,903  | 23   | 5,810  | 79,713   | 6,662   | 0   | 149,000                                  | 0  | 19,935                                      | 42,907                                | 0   | 103,000                        | 44,000                         | 0  | 19,980                           | 0   | 0                                     | 16,000                         |
| 10            | 0.00              | 2.5                               | 1.5                               | 16.9                                      | 112,591   | 21   | 5,813  | 118,404  | 4,037   | 0   | 178,000                                  | 0  | 15,054                                      | 84,902                                | 0   | 83,000                         | 44,000                         | 0  | 0                                | 0   | 0                                     | 0                              |
| 11            | 0.00              | 2.5                               | 1.5                               | 19.0                                      | 103,042   | 24   | 7,559  | 110,601  | 1,369   | 0   | 194,000                                  | 36,000                                   | 15,054                                      | 42,782                                | 0   | 83,000                         | 44,000                         | 0  | 52,308                           | 0   | 0                                     | 41,800                         |
| 12            | 0.00              | 1.6                               | 1.4                               | 20.9                                      | 98,421  | 26   | 5,832  | 104,253  | 4,971   | 0   | 238,000                                  | 55,000                                   | 15,055                                      | 0                                     | 0   | 44,000                         | 38,000                         | 0  | 38,876                           | 0   | 0                                     | 31,100                         |
| 13            | 0.00              | 1.0                               | 1.2                               | 18.8                                      | 109,268   | 22   | 5,626  | 114,894  | 4,886   | 0   | 288,000                                  | 70,000                                   | 30,108                                      | 99,811                                | 0   | 24,000                         | 28,000                         | 0  | 0                                | 0   | 0                                     | 0                              |
| 14            | 0.00              | 1.0                               | 0.6                               | 15.9                                      | 93,823  | 30   | 7,575  | 101,398  | 4,588   | 0   | 266,000                                  | 91,000                                   | 19,536                                      | 100,282                               | 0   | 24,000                         | 7,000                          | 0  | 0                                | 0   | 0                                     | 0                              |
| 15            | 0.00              | 2.1                               | 0.0                               | 16.6                                      | 97,409  | 29   | 5,535  | 102,944  | 4,180   | 0   | 250,000                                  | 106,000                                  | 20,193                                      | 100,035                               | 0   | 65,000                         | 0                              | 0  | 32,580                           | 0   | 0                                     | 26,100                         |
| 16            | 0.00              | 1.8                               | 0.0                               | 16.4                                      | 100,433   | 30   | 5,471  | 105,904  | 2,427   | 0   | 245,000                                  | 125,000                                  | 18,880                                      | 84,963                                | 0   | 52,000                         | 0                              | 0  | 0                                | 0   | 0                                     | 0                              |
| 17            | 0.00              | 1.8                               | 0.0                               | 15.0                                      | 98,651  | 32   | 7,668  | 106,319  | 4,899   | 0   | 240,000                                  | 144,000                                  | 20,575                                      | 91,226                                | 0   | 52,000                         | 0                              | 0  | 0                                | 0   | 0                                     | 0                              |
| 18            | 0.00              | 1.8                               | 0.0                               | 21.2                                      | 98,720  | 28   | 6,461  | 105,181  | 4,355   | 0   | 223,000                                  | 166,000                                  | 20,870                                      | 84,711                                | 0   | 52,000                         | 0                              | 0  | 26,874                           | 0   | 0                                     | 21,500                         |
| 19            | 0.00              | 1.1                               | 0.0                               | 20.0                                      | 99,027  | 27   | 7,263  | 106,290  | 2,075   | 0   | 240,000                                  | 180,000                                  | 20,870                                      | 0                                     | 0   | 28,000                         | 0                              | 0  | 0                                | 0   | 0                                     | 0                              |
| 20            | 0.00              | 1.1                               | 0.0                               | 16.1                                      | 101,219   | 22   | 6,737  | 107,956  | 5,701   | 0   | 302,000                                  | 197,000                                  | 20,872                                      | 71,384                                | 0   | 28,000                         | 0                              | 0  | 16,312                           | 0   | 0                                     | 13,000                         |
| 21            | 0.00              | 0.7                               | 0.0                               | 17.7                                      | 96,891  | 26   | 8,927  | 105,818  | 4,033   | 0   | 307,000                                  | 214,000                                  | 33,613                                      | 86,007                                | 0   | 13,000                         | 0                              | 0  | 0                                | 0   | 0                                     | 0                              |
| 22            | 0.00              | 0.7                               | 0.0                               | 17.1                                      | 109,292   | 41   | 12,389   | 121,681  | 1,255   | 0   | 288,000                                  | 242,000                                  | 47,866                                      | 100,264                               | 0   | 13,000                         | 0                              | 0  | 0                                | 0   | 0                                     | 0                              |
| 23            | 0.00              | 1.0                               | 0.0                               | 15.9                                      | 109,623   | 19   | 12,880   | 122,503  | 3,370   | 0   | 259,000                                  | 264,000                                  | 41,762                                      | 100,272                               | 0   | 24,000                         | 0                              | 0  | 0                                | 0   | 0                                     | 0                              |
| 24            | 0.00              | 2.3                               | 0.0                               | 13.1                                      | 95,613  | 32   | 12,165   | 107,778  | 3,375   | 0   | 218,000                                  | 223,000                                  | 40,975                                      | 78,673                                | 0   | 74,000                         | 0                              | 0  | 0                                | 0   | 0                                     | 0                              |
| 25            | 0.00              | 2.3                               | 0.0                               | 17.5                                      | 99,983  | 0  | 12,000   | 111,983  | 4,337   | 0   | 238,000                                  | 257,000                                  | 40,975                                      | 78,703                                | 0   | 74,000                         | 0                              | 0  | 40,646                           | 0   | 0                                     | 32,500                         |
| 26            | 0.01              | 1.4                               | 0.0                               | 15.7                                      | 96,308  | 40   | 5,464  | 101,771  | 3,369   | 0   | 264,000                                  | 288,000                                  | 40,975                                      | 0                                     | 0   | 36,000                         | 0                              | 0  | 0                                | 0   | 0                                     | 0                              |
| 27            | 0.00              | 1.4                               | 0.0                               | 13.9                                      | 100,146   | 40   | 5,464  | 105,610  | 3,369   | 0   | 290,000                                  | 319,000                                  | 40,976                                      | 86,114                                | 0   | 36,000                         | 0                              | 0  | 37,576                           | 0   | 0                                     | 30,100                         |
| 28            | 0.00              | 2.6                               | 0.0                               | 16.9                                      | 101,833   | 22   | 5,308  | 107,141  | 3,372   | 0   | 238,000                                  | 269,000                                  | 42,998                                      | 100,081                               | 0   | 88,000                         | 0                              | 0  | 37,256                           | 0   | 0                                     | 29,800                         |
| 29            | 0.00              | 3.3                               | 0.0                               | 18.5                                      | 99,893  | 23   | 5,082  | 104,975  | 4,317   | 0   | 202,000                                  | 230,000                                  | 42,999                                      | 98,835                                | 0   | 123,000                        | 0                              | 0  | 39,000                           | 0   | 0                                     | 31,200                         |
| 30            | 0.00              | 2.6                               | 0.0                               | 18.7                                      | 97,896  | 27   | 5,035  | 102,931  | 4,462   | 0   | 175,000                                  | 269,000                                  | 42,998                                      | 63,729                                | 0   | 88,000                         | 0                              | 0  | 15,946                           | 0   | 0                                     | 12,800                         |
| 31            | 0.00              | 2.3                               | 0.0                               | 17.2                                      | 96,331  | 25   | 5,056  | 101,387  | 4,841   | 0   | 151,000                                  | 317,000                                  | 42,999                                      | 35,374                                | 0   | 74,000                         | 0                              | 0  | 49,466                           | 0   | 0                                     | 39,600                         |
| Total         | 0.58              |                                   |                                   |   | 3,079,565   | 832  | 217,468  | 3,297,033  | 141,635   | 0   |  |  | 853,457                                     | 2,360,372                             | 0   |                                |                                | 0  | 544,716                          | 0   | 0                                     | 435,800                        |
| Daily Average |                   | 2.2                               | 0.6                               | 17.0                                      | 99,341  | 27   | 7,015  | 106,356  | 4,569   | 0   | 235,400                                  | 131,000                                  |   |                                       |   | 74,900                         | 17,600                         |  |                                  |   |                                       |                                |
| Mo. Average   |                   |                                   |                                   |   |   |  |  |  |   |   |  |  |   |                                       | 0   |                                |                                |  | 17,600                           | 0   | 0                                     | 14,060                         |

balance 2020/1-20bal.xls

Notes:

1. NR = No Records, NA = Not Available.
2. Values in bold are estimated; values in italic are substitute for missing data and are based on averaged values.
3. Daily average is calculated by dividing the total by the actual days measured in the month.
4. Monthly average calculated by dividing the total by the number of days of the month.
5. Column II, Trace is less than 0.01 inches and is not included in total.
6. Columns III and IV, field measured at staff gauges.
7. Columns VII, Section 7-8 leak detection pumped into Section 7 leachate sump riser.
8. Column XII and XIII, calculated from depth in 575,000 gal. tanks.
9. Columns VI-XI, XIV, XV, XVI and XIX-XXII, quantities from flow meters.
10. Column XXIII includes 80% of the daily values from Columns XVI, XX - XXI, plus 5% of the daily values from column XIX.

**TABLE 2. FIELD DATA ENTRY FORM  
JANUARY 2020  
SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA**

| A      | B                 | C                                   | D                        | E                             | F                             | G                          | H                              | I                             | J                        | K                                       | L                        | M   | N  | O  | P  | Q                    | R                | S   | T                    | U                | V   |
|--------|-------------------|-------------------------------------|--------------------------|-------------------------------|-------------------------------|----------------------------|--------------------------------|-------------------------------|--------------------------|---|--------------------------|---|--|--|--|----------------------|------------------|---|----------------------|------------------|---|
| Day    | Rainfall<br>(in.) | Flow Meter<br>Pump Sta. A<br>(gal.) | Reading<br>PS-B<br>(in.) | Section 9<br>Pump 1<br>(gal.) | Section 9<br>Pump 2<br>(gal.) | Section 9<br>LDS<br>(gal.) | Sections 7-8<br>Pump<br>(gal.) | Sections 7-8<br>LDS<br>(gal.) | Pond B<br>Depth<br>(ft.) | Pond B<br>Effluent<br>Sprayed<br>(gal.) | Pond A<br>Depth<br>(ft.) | Effluent<br>Spray<br>Irrigation<br>(gal.) | Depth in<br>575K Tank<br>Leachate<br>(ft.) | Depth in<br>575K Tank<br>Effluent<br>(ft.) | Leachate<br>Treated<br>at LTRF<br>(gal.) | Leachate Hauled      |                  | Leachate<br>Dust Control<br>(Sprayed)<br>(gal.) | Effluent Hauled      |                  | Effluent<br>Dust Control<br>(Sprayed)<br>(gal.) |
|        |                   |                                     |                          |                               |                               |                            |                                |                               |                          |   |                          |   |  |  |  | Contractor<br>(gal.) | County<br>(gal.) |   | Contractor<br>(gal.) | County<br>(gal.) |   |
| 1      | 0.00              | 8,956,203                           | 18.0                     | 2,479,499                     | 2,493,547                     | 5,885,285                  | 2,963,025                      | 91,387                        | 1.4                      | 0.0                                     | 3.6                      | 0   | 9.67                                       | 0.00                                       | 19,295                                   | 0                    | 0                | 0   | 0                    | 0                | 0   |
| 2      | 0.00              | 9,030,454                           | 19.2                     | 2,484,732                     | 2,493,594                     | 5,885,267                  | 2,968,719                      | 91,413                        | 1.4                      | 0.0                                     | 3.6                      | 35,767                                    | 10.83                                      | 0.00                                       | 19,296                                   | 57,322               | 85,852           | 0   | 0                    | 0                | 0   |
| 3      | 0.00              | 9,111,279                           | 17.1                     | 2,487,925                     | 2,493,598                     | 5,885,267                  | 2,976,450                      | 91,431                        | 1.5                      | 0.0                                     | 3.5                      | 0   | 8.33                                       | 0.00                                       | 18,664                                   | 57,268               | 71,365           | 0   | 0                    | 0                | 0   |
| 4      | 0.57              | 9,187,570                           | 12.4                     | 2,494,451                     | 2,493,616                     | 5,885,267                  | 2,982,323                      | 91,460                        | 1.5                      | 0                                       | 3.4                      | 43,632                                    | 7.42                                       | 0.00                                       | 20,847                                   | 43,036               | 78,516           | 0   | 0                    | 0                | 0   |
| 5      | 0.00              | 9,255,540                           | 15.3                     | 2,505,246                     | 2,493,625                     | 5,885,267                  | 2,988,211                      | 91,496                        | 1.5                      | 0.0                                     | 3.4                      | 0   | 7.71                                       | 0.00                                       | 20,847                                   | 0                    | 0                | 0   | 0                    | 0                | 0   |
| 6      | 0.00              | 9,323,510                           | 18.2                     | 2,516,041                     | 2,493,634                     | 5,885,267                  | 2,994,098                      | 91,532                        | 1.5                      | 0                                       | 3.3                      | 26,367                                    | 8.00                                       | 0.00                                       | 18,872                                   | 64,407               | 42,770           | 0   | 0                    | 0                | 0   |
| 7      | 0.00              | 9,395,740                           | 14.1                     | 2,516,329                     | 2,498,448                     | 5,885,267                  | 3,001,909                      | 91,557                        | 1.5                      | 0                                       | 3.1                      | 14,705                                    | 7.25                                       | 0.00                                       | 18,872                                   | 57,259               | 85,763           | 0   | 0                    | 0                | 0   |
| 8      | 0.00              | 9,471,322                           | 17.1                     | 2,517,401                     | 2,501,749                     | 5,885,267                  | 3,007,679                      | 91,583                        | 1.5                      | 0.0                                     | 3.2                      | 17,425                                    | 5.17                                       | 0.00                                       | 20,626                                   | 42,902               | 42,857           | 0   | 0                    | 0                | 0   |
| 9      | 0.00              | 9,523,046                           | 17.5                     | 2,517,847                     | 2,507,965                     | 5,885,267                  | 3,013,489                      | 91,606                        | 1.5                      | 0.0                                     | 2.9                      | 19,980                                    | 5.17                                       | 0.00                                       | 19,935                                   | 0                    | 42,907           | 0   | 0                    | 0                | 0   |
| 10     | 0.00              | 9,607,482                           | 16.9                     | 2,520,925                     | 2,508,924                     | 5,885,267                  | 3,019,302                      | 91,627                        | 1.5                      | 0                                       | 2.5                      | 0   | 6.17                                       | 0.00                                       | 15,054                                   | 41,932               | 42,970           | 0   | 0                    | 0                | 0   |
| 11     | 0.00              | 9,682,312                           | 19.0                     | 2,522,293                     | 2,508,925                     | 5,885,267                  | 3,026,861                      | 91,651                        | 1.5                      | 0.0                                     | 2.5                      | 52,308                                    | 6.75                                       | 1.25                                       | 15,054                                   | 0                    | 42,782           | 0   | 0                    | 0                | 0   |
| 12     | 0.00              | 9,752,118                           | 20.9                     | 2,527,264                     | 2,508,925                     | 5,885,267                  | 3,032,693                      | 91,677                        | 1.4                      | 0.0                                     | 1.6                      | 38,876                                    | 8.25                                       | 1.92                                       | 15,055                                   | 0                    | 0                | 0   | 0                    | 0                | 0   |
| 13     | 0.00              | 9,834,118                           | 18.8                     | 2,532,150                     | 2,508,925                     | 5,885,267                  | 3,038,319                      | 91,699                        | 1.2                      | 0                                       | 1.0                      | 0   | 10.00                                      | 2.42                                       | 30,108                                   | 57,007               | 42,804           | 0   | 0                    | 0                | 0   |
| 14     | 0.00              | 9,901,380                           | 15.9                     | 2,536,738                     | 2,508,925                     | 5,885,267                  | 3,045,894                      | 91,729                        | 0.6                      | 0.0                                     | 1.0                      | 0   | 9.25                                       | 3.17                                       | 19,536                                   | 57,290               | 42,992           | 0   | 0                    | 0                | 0   |
| 15     | 0.00              | 9,970,766                           | 16.6                     | 2,540,916                     | 2,508,927                     | 5,885,267                  | 3,051,429                      | 91,758                        | 0.0                      | 0.0                                     | 2.1                      | 32,580                                    | 8.67                                       | 3.67                                       | 20,193                                   | 57,084               | 42,951           | 0   | 0                    | 0                | 0   |
| 16     | 0.00              | 44,107                              | 16.4                     | 2,543,343                     | 2,508,927                     | 5,885,267                  | 3,056,900                      | 91,788                        | 0.0                      | 0.0                                     | 1.8                      | 0   | 8.50                                       | 4.33                                       | 18,880                                   | 42,012               | 42,951           | 0   | 0                    | 0                | 0   |
| 17     | 0.00              | 115,112                             | 15.0                     | 2,548,242                     | 2,508,927                     | 5,885,267                  | 3,064,568                      | 91,820                        | 0.0                      | 0.0                                     | 1.8                      | 0   | 8.33                                       | 5.00                                       | 20,575                                   | 49,016               | 42,210           | 0   | 0                    | 0                | 0   |
| 18     | 0.00              | 185,241                             | 21.2                     | 2,552,596                     | 2,508,928                     | 5,885,267                  | 3,071,029                      | 91,848                        | 0.0                      | 0.0                                     | 1.8                      | 26,874                                    | 7.75                                       | 5.75                                       | 20,870                                   | 41,996               | 42,715           | 0   | 0                    | 0                | 0   |
| 19     | 0.00              | 254,016                             | 20.0                     | 2,554,671                     | 2,508,928                     | 5,885,267                  | 3,078,292                      | 91,875                        | 0.0                      | 0.0                                     | 1.1                      | 0   | 8.33                                       | 6.25                                       | 20,870                                   | 0                    | 0                | 0   | 0                    | 0                | 0   |
| 20     | 0.00              | 327,933                             | 16.1                     | 2,560,372                     | 2,508,928                     | 5,885,267                  | 3,085,029                      | 91,897                        | 0.0                      | 0.0                                     | 1.1                      | 16,312                                    | 10.50                                      | 6.83                                       | 20,872                                   | 57,113               | 14,271           | 0   | 0                    | 0                | 0   |
| 21     | 0.00              | 397,449                             | 17.7                     | 2,564,405                     | 2,508,928                     | 5,885,267                  | 3,093,956                      | 91,923                        | 0.0                      | 0.0                                     | 0.7                      | 0   | 10.67                                      | 7.42                                       | 33,613                                   | 57,333               | 28,674           | 0   | 0                    | 0                | 0   |
| 22     | 0.00              | 478,058                             | 17.1                     | 2,565,138                     | 2,509,450                     | 5,885,267                  | 3,106,345                      | 91,964                        | 0.0                      | 0.0                                     | 0.7                      | 0   | 10.00                                      | 8.42                                       | 47,866                                   | 57,317               | 42,947           | 0   | 0                    | 0                | 0   |
| 23     | 0.00              | 558,893                             | 15.9                     | 2,568,508                     | 2,509,450                     | 5,885,267                  | 3,119,225                      | 91,983                        | 0.0                      | 0.0                                     | 1.0                      | 0   | 9.00                                       | 9.17                                       | 41,762                                   | 57,290               | 42,982           | 0   | 0                    | 0                | 0   |
| 24     | 0.00              | 632,903                             | 13.1                     | 2,571,883                     | 2,509,450                     | 5,885,267                  | 3,131,390                      | 92,015                        | 0.0                      | 0.0                                     | 2.3                      | 0   | 7.58                                       | 7.75                                       | 40,975                                   | 42,999               | 35,674           | 0   | 0                    | 0                | 0   |
| 25     | 0.00              | 707,399                             | 17.5                     | 2,574,704                     | 2,510,966                     | 5,885,267                  | 3,199                          | 92,015                        | 0.0                      | 0.0                                     | 2.3                      | 40,646                                    | 8.25                                       | 8.92                                       | 40,975                                   | 43,005               | 35,698           | 0   | 0                    | 0                | 0   |
| 26     | 0.01              | 778,220                             | 15.7                     | 2,578,073                     | 2,510,966                     | 5,885,267                  | 8,663                          | 92,055                        | 0.0                      | 0.0                                     | 1.4                      | 0   | 9.17                                       | 10.00                                      | 40,975                                   | 0                    | 0                | 0   | 0                    | 0                | 0   |
| 27     | 0.00              | 849,041                             | 13.9                     | 2,581,441                     | 2,510,966                     | 5,885,267                  | 14,126                         | 92,095                        | 0.0                      | 0.0                                     | 1.4                      | 37,576                                    | 10.08                                      | 11.08                                      | 40,976                                   | 43,229               | 42,885           | 0   | 0                    | 0                | 0   |
| 28     | 0.00              | 924,923                             | 16.9                     | 2,584,813                     | 2,510,966                     | 5,885,267                  | 19,434                         | 92,117                        | 0.0                      | 0.0                                     | 2.6                      | 37,256                                    | 8.25                                       | 9.33                                       | 42,998                                   | 57,198               | 42,883           | 0   | 0                    | 0                | 0   |
| 29     | 0.00              | 998,188                             | 18.5                     | 2,589,130                     | 2,510,966                     | 5,885,267                  | 24,516                         | 92,140                        | 0.0                      | 0.0                                     | 3.3                      | 39,000                                    | 7.00                                       | 8.00                                       | 42,999                                   | 55,993               | 42,842           | 0   | 0                    | 0                | 0   |
| 30     | 0.00              | 1,071,996                           | 18.7                     | 2,593,591                     | 2,510,967                     | 5,885,267                  | 29,551                         | 92,167                        | 0.0                      | 0.0                                     | 2.6                      | 15,946                                    | 6.08                                       | 9.33                                       | 42,998                                   | 42,335               | 21,394           | 0   | 0                    | 0                | 0   |
| 31     | 0.00              | 1,142,211                           | 17.2                     | 2,598,431                     | 2,510,968                     | 5,885,267                  | 34,607                         | 92,192                        | 0.0                      | 0.0                                     | 2.3                      | 49,466                                    | 5.25                                       | 11.00                                      | 42,999                                   | 28,247               | 7,127            | 0   | 0                    | 0                | 0   |
| Totals | 0.58              |                                     |                          |                               |                               |                            |                                |                               |                          | 0                                       |                          | 544,716                                   |  |  | 853,457                                  | 1,210,590            | 1,149,782        | 0   | 0                    | 0                | 0   |

balance\2020\1-20bal.xls

Notes:

1. NR = No Records, NA = Not Available.
2. Values in bold are estimated; values in italic are substitute for missing data and are based on averaged values
3. Columns G and J include quantities from leak detection system.
4. Column B, trace is less than 0.01 inches.
5. Columns C, D, E, F, G, H, I, J, K, L, N, R-V and W are quantities from flow meters.
6. Columns K and M measured from staff gages in each pond.

| Type of Cover | Phases I-VI<br>acres | Section 7-9<br>acres |
|---------------|----------------------|----------------------|
| Open          | 5                    | 0                    |
| Intermediate  | 134.4                | 34.5                 |
| Final         | 23                   | 0                    |
| Not Opened    | 0                    | 0                    |

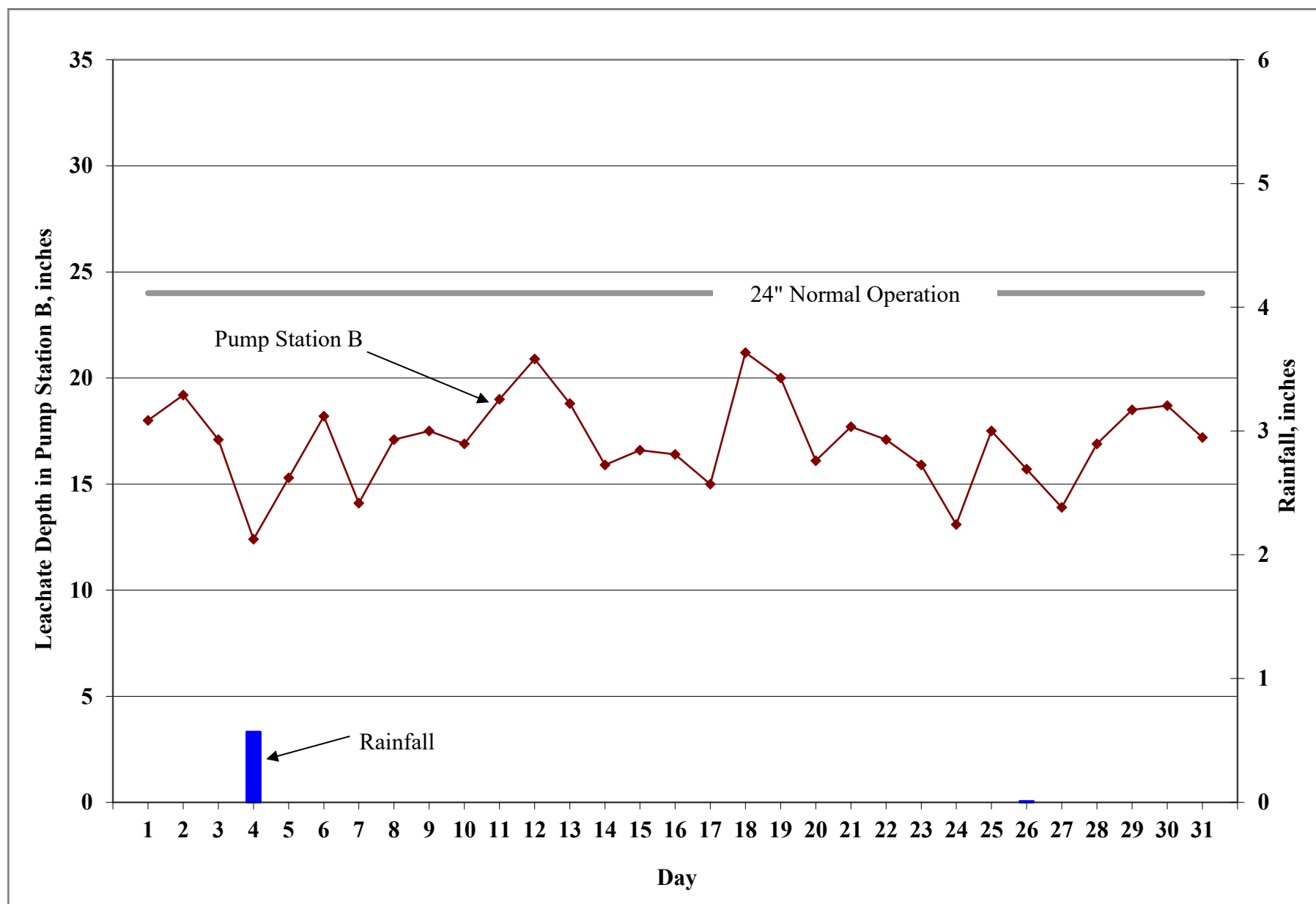


Figure 1. Leachate Levels in Pump Station B and Rainfall for January 2020.

**TABLE 3. LEACHATE BALANCE SUMMARY  
SOUTHEAST COUNTY LANDFILL  
HILLSBOROUGH COUNTY, FLORIDA  
YEAR-2020**

| Month     | Rainfall<br>(in.) | Leachate Arriving at LTRF                |  |  |  | Leachate Leaving LTRF                           |   |  | Effluent Disposal                     |   |                                  | Inflow / Outflow For LTRF            |   |  |
|-----------|-------------------|--|--|--|--|---|---|--|---------------------------------------|---|----------------------------------|--------------------------------------|---|--|
|           |                   | Condensate<br>from LFG<br>CS-1<br>(gal.) | Leachate<br>from Section 9<br>Pumped to LTRF<br>(gal.) | Leachate<br>from Section 7-8<br>Pumped to LTRF<br>(gal.) | Leachate<br>from Phases I-VI<br>Pumped to LTRF<br>(gal.) | Total Leachate<br>Hauled<br>from LTRF<br>(gal.) | Leachate<br>Dust Control<br>(Sprayed)<br>(gal.) | Leachate<br>Treated at<br>LTRF<br>(gal.) | Total<br>Effluent<br>Hauled<br>(gal.) | Effluent<br>Dust Control<br>(Sprayed)<br>(gal.) | Effluent<br>Irrigation<br>(gal.) | Total Inflow<br>to<br>LTRF<br>(gal.) | Total Outflow<br>from<br>LTRF<br>(gal.) | Change<br>in<br>Storage <sup>3</sup><br>(gal.) |
| January   | 0.58              | 909                                      | 141,635  | 217,468  | 3,079,565  | 2,360,372                                       | 0   | 853,457                                  | 0                                     | 0   | 544,716                          | 3,439,577                            | 3,213,829                               | 225,748  |
| February  |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| March     |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| April     |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| May       |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| June      |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| July      |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| August    |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| September |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| October   |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| November  |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| December  |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
|           |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| YTD Total | 0.58              | 909                                      | 141,635  | 217,468  | 3,079,565  | 2,360,372                                       | 0   | 853,457                                  | 0                                     | 0   | 544,716                          | 3,439,577                            | 3,213,829                               | 225,748  |

Note:

1. If the bypass at the effluent pond is ever used to pump effluent back to the LTRF, this table must be modified.
2. Change in storage represents total inflow to LTRF minus total outflow from LTRF.



**Hillsborough  
County Florida**

**SOLID WASTE MANAGEMENT**

PO Box 1110 Tampa, FL 33601-1110  
813-272-5680

**MEMORANDUM**

**DATE:** March 9, 2020

**TO:** Larry E. Ruiz, Manager Landfill Operations, Solid Waste Management Division

**FROM:** Ron W. Wiesman, Manager, Solid Waste Management Division

**SUBJECT:** Leachate Water Balance Report Forms for February 2020  
Southeast County Landfill, Hillsborough County, Florida

The Solid Waste Management Division (SWMD) staff has compiled and reviewed the leachate management operational data from the Southeast County Landfill Phases I-VI, Sections 7-8, and Section 9. Attached are the Leachate Water Balance Report Form (Table 1), the Leachate Field Data Entry Form (Table 2), and the 2020 Summary (Table 3). Also, attached find Figure 1 showing leachate levels in Pump Station B sump of Phases I-VI and rainfall for the month.

**TABLE 1**

**Day (Column I)**

Column I presents the calendar days for the month.

**Rainfall (Column II)**

Column II presents the average rainfall, in inches, as measured in the field from rainfall stations at the site. This month there was 1.65 inches of rainfall recorded at the Southeast County Landfill (SCLF).

**Depth in Pond A (Column III)**

Column III presents the daily depth, in feet, of effluent stored in effluent pond (Pond A). The daily depth in Pond A varies as a function of the spray irrigation frequency/duration and effluent hauled from the pond. This month the daily average of effluent stored in Pond A was 2.4 feet.

**BOARD OF COUNTY  
COMMISSIONERS**

Ken Hagan  
Pat Kemp  
Lesley "Les" Miller, Jr.  
Sandra L. Murman  
Kimberly Overman  
Mariella Smith  
Stacy R. White

**COUNTY ADMINISTRATOR**

Michael S. Merrill

**COUNTY ATTORNEY**

Christine M. Beck

**INTERNAL AUDITOR**

Peggy Caskey

**INFRASTRUCTURE SERVICES  
ADMINISTRATOR**

John Lyons



**Depth in Pond B (Column IV)**

Column IV presents the daily depth, in feet, of effluent or leachate that is stored in the effluent/leachate storage pond (Pond B). The depth in Pond B varies as a function of the evaporation frequency/duration and effluent or leachate hauled from the pond. This month the daily average depth of effluent in Pond B was 0.6 feet.

**Estimated Depth at Pump Station B Sump (PS-B) (Column V)**

Column V presents the depth of leachate, in inches, in the PS-B sump. Leachate from Phases I-VI flows to the PS-B sump for removal from the landfill. PS-B then pumps the leachate to Pump Station A (PS-A). Daily depth readings from the PS-B sump are included in this column. The average recorded depth of leachate in the PS-B sump was 16.1 inches.

**Leachate Pumped to MLPS from Phases I-VI (Column VI)**

Column VI presents the daily amount of leachate, in gallons, collected from PS-A and pumped through the MLPS to the 575,000-gallon storage tank at the Leachate Treatment and Reclamation Facility (LTRF) for treatment or disposal. This column also includes the Phase II data from the dewatering wells and PS-2. The average daily amount of leachate pumped from PS-A was 85,650 gallons. A total of 2,483,841 gallons of leachate was pumped this month.

**Leachate Pumped from Sections 7-8 LDS (Column VII)**

Column VII presents the quantity of leachate removed from the leak detection system (LDS) of Sections 7-8. The quantity is measured by a flow meter before being pumped for removal with Sections 7-8 leachate. The removal rate did not exceed 1,930 gallons per day. This month 736 gallons of leachate was removed from the leak detection system of Sections 7-8.

**Leachate Pumped to MLPS from Sections 7-8 (Column VIII)**

Column VIII presents the quantity of leachate collected at Sections 7-8 and pumped to the MLPS. The quantity is measured by a flow meter and includes any leachate removed from the leak detection system of Sections 7-8 (Column VII). This month a total of 152,518 gallons was removed.

**Leachate Pumped to LTRF from the MLPS (Column IX)**

Column IX presents the total quantity of leachate pumped to the LTRF from Phases I-VI (including condensate removed from LFG Wells and Condensate Traps), and Sections 7-8. This month a total of 2,636,359 gallons of leachate was pumped to the LTRF.

**Leachate Pumped to LTRF from Section 9 (Column X)**

Column X presents the daily amount of leachate, in gallons, collected from Section 9 and pumped to the 575,000-gallon storage tank at the Leachate Treatment and Reclamation Facility (LTRF) for treatment or disposal. A total of 89,491 gallons of leachate was pumped this month.

**Leachate Pumped from Section 9 LDS (Column XI)**

Column XI presents the daily amount of leachate, in gallons, collected from the LDS of Section 9 and pumped to the 575,000-gallon storage tank at the LTRF for treatment or disposal. The removal rate did not exceed 4,651 gallons per day. This month zero gallons of leachate was removed from the leak detection system.

**Leachate in 575,000-Gallon Tank (Column XII)**

Column XII presents the daily amount of leachate, in gallons, stored in the 575,000-gallon leachate holding tank T1 at the LTRF. The amount of leachate stored in T1 is calculated based on the circumference of the tank and the daily level reading. This month an average of 307,400 gallons of leachate was stored in the tank.

**Effluent in 575,000-Gallon Tank (Column XIII)**

Column XIII typically presents the daily amount of effluent, in gallons, stored in the 575,000-gallon effluent holding tank T6 at the LTRF. The amount of effluent/leachate stored in T6 is calculated based on the circumference of the tank and the daily level reading. This month an average of 346,900 gallons of effluent was stored in the tank.

**Leachate Treated at LTRF (Column XIV)**

Column XIV presents the daily amount of leachate, in gallons, treated at the LTRF. On September 15, 2019, plant staff restarted treatment operations. This month a total of 883,611 gallons of leachate was treated at the plant.

**Total Leachate Hauled (Column XV)**

Column XV presents the daily amount of leachate, in gallons, hauled off site. This month a total of 1,621,644 gallons of leachate was hauled off site.

**Leachate Dust Control Sprayed (Column XVI)**

Column XVI presents the daily amount of leachate, in gallons, measured from the flow meter at the bypass-loading arm at the leachate storage tank. The leachate is used for dust control in the active area of the landfill. This month leachate was not used for dust control.

**Pond A Storage (Column XVII)**

Column XVII presents the daily amount of effluent, in gallons, stored in Pond A. The daily amount stored in the pond is calculated by using the daily depth of effluent in the Pond A (Column III). Under normal operating conditions, the daily amount of effluent stored in the pond varies depending upon the daily amount of leachate treated at the LTRF, the daily rainfall, daily effluent hauling operations, daily spray irrigation operations, and the daily amount of effluent used for dust control/evaporation. This month a daily average of 79,300 gallons of effluent was stored in Pond A.

**Pond B Storage (Column XVIII)**

Column XVIII presents the daily amount of effluent, in gallons, stored in Pond B. The daily amount stored in the pond is calculated by using the daily depth of liquid in Pond B (Column IV). Under normal operating conditions, the amount stored in the pond will vary depending upon the daily amount of leachate/effluent removed from the pond by the evaporation system, hauled from the pond, used for dust control or evaporated; was stored in Pond B. This month an average of 16,800 gallons per day of effluent was stored in Pond B.

**Effluent Sprayed at Pond B (Column XIX)**

Column XIX presents the daily amount of effluent, in gallons, sprayed for evaporation at Pond B. The amount evaporated is calculated by using 5 percent of the daily flow meter quantity sprayed at Pond B and it is included in Column XX. This month effluent was not sprayed in Pond B.

**Effluent Irrigation (Column XX)**

Column XX presents the daily amount of effluent, in gallons, used for spray irrigation on top of Phases IV-VI. The daily amount of effluent irrigation on Phases I-VI is measured from the flow meter at the irrigation pump station. This month a total of 435,684 gallons of effluent was sprayed.

**Effluent Dust Control Sprayed (Column XXI)**

Column XXI presents the daily amount of effluent, in gallons, sprayed for dust control in the active areas of the SCLF. The daily amount of effluent used for dust control, is measured from the flow meter at the bypass-loading arm. This month effluent was not sprayed as dust control.

**Total Effluent Hauled (Column XXII)**

Column XXII presents the daily amount of effluent, in gallons, hauled off site, as measured from the flow meter at the bypass-loading arm. This month a total of 507,900 gallons of effluent was hauled off site.

**Total Evaporation (Column XXIII)**

Column XXIII presents the daily amount of leachate and effluent, in gallons, that evaporates and therefore will not be returned to the SCLF and/or requires treatment. Evaporation rates of 80 percent and 5 percent evaporation rate for spray in Pond B are assumed. Total evaporation estimated for this month was 348,600 gallons.

**TABLE 2**

Table 2 presents data assembled from daily logs compiled by the SWMD staff.

**TABLE 3**

**Leachate Balance Summary**

The Leachate Balance Summary (see Table 3) presents a review of inflow and outflow quantities for the LTRF, as well as rainfall and effluent disposal quantities at the landfill. Total inflow quantity to the LTRF was 2,727,731 gallons. Total outflow quantity from the LTRF was 2,505,255 gallons. The change in storage for the month increased by 222,476 gallons.

Please advise should you have any questions concerning the information provided.

**TABLE 1. LEACHATE WATER BALANCE REPORT FORM  
FEBRUARY 2020  
SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA**

| I             | II                | III                               | IV                                | V   | VI  | VII  | VIII   | IX   | X   | XI  | XII                                      | XIII                                     | XIV   | XV                                    | XVI   | XVII                           | XVIII                          | XIX  | XX                               | XXI   | XXII                                  | XXIII                          |
|---------------|-------------------|-----------------------------------|-----------------------------------|---|---|--|--|--|---|---|--|--|---|---------------------------------------|---|--------------------------------|--------------------------------|--|----------------------------------|---|---------------------------------------|--------------------------------|
| Day           | Rainfall<br>(in.) | Depth<br>in<br>Pond<br>A<br>(ft.) | Depth<br>in<br>Pond<br>B<br>(ft.) | Estimated<br>Depth<br>at<br>PS-B<br>(in.) | Leachate<br>Pumped<br>to MLPS<br>from Phases I-VI<br>(gal.) | Leachate<br>Pumped from<br>Sections 7-8<br>LDS<br>(gal.) | Leachate<br>Pumped<br>to MLPS from<br>Sections 7-8<br>(gal.) | Leachate<br>Pumped<br>to LTRF from<br>MPLS<br>(gal.) | Leachate<br>Pumped<br>to LTRF from<br>Section 9<br>(gal.) | Leachate<br>Pumped from<br>Section 9<br>LDS<br>(gal.) | Leachate<br>in<br>575K<br>Tank<br>(gal.) | Effluent<br>in<br>575K<br>Tank<br>(gal.) | Leachate<br>Treated<br>at<br>LTRF<br>(gal.) | Total<br>Leachate<br>Hauled<br>(gal.) | Leachate<br>Dust Control<br>(Sprayed)<br>(gal.) | Pond<br>A<br>Storage<br>(gal.) | Pond<br>B<br>Storage<br>(gal.) | Effluent<br>Sprayed<br>Pond<br>B<br>(gal.) | Effluent<br>Irrigation<br>(gal.) | Effluent<br>Dust Control<br>(Sprayed)<br>(gal.) | Total<br>Effluent<br>Hauled<br>(gal.) | Total<br>Evaporation<br>(gal.) |
| 1             | 0.00              | 3.3                               | 0.0                               | 14.0                                      | 90,601  | 29   | 5,132  | 95,733   | 1,336   | 0   | 180,000                                  | 274,000                                  | 62,452                                      | 0                                     | 0   | 123,000                        | 0                              | 0  | 0                                | 0   | 0                                     | 0                              |
| 2             | 0.00              | 3.3                               | 0.0                               | 13.5                                      | 86,434  | 23   | 5,050  | 91,483   | 2,816   | 0   | 199,000                                  | 326,000                                  | 62,451                                      | 0                                     | 0   | 123,000                        | 0                              | 0  | 0                                | 0   | 0                                     | 0                              |
| 3             | 0.00              | 3.3                               | 0.0                               | 13.0                                      | 87,669  | 23   | 5,050  | 92,718   | 2,816   | 0   | 218,000                                  | 379,000                                  | 62,451                                      | 49,455                                | 0   | 123,000                        | 0                              | 0  | 45,448                           | 0   | 0                                     | 36,400                         |
| 4             | 0.00              | 4.0                               | 0.0                               | 15.7                                      | 91,469  | 27   | 6,677  | 98,146   | 5,631   | 0   | 238,000                                  | 338,000                                  | 62,452                                      | 42,944                                | 0   | 129,000                        | 0                              | 0  | 0                                | 0   | 0                                     | 0                              |
| 5             | 1.07              | 3.4                               | 1.2                               | 15.4                                      | 97,728  | 27   | 5,210  | 102,938  | 3,941   | 0   | 235,000                                  | 353,000                                  | 32,980                                      | 42,684                                | 0   | 129,000                        | 28,000                         | 0  | 37,476                           | 0   | 0                                     | 30,000                         |
| 6             | 0.00              | 2.8                               | 1.2                               | 15.8                                      | 102,167   | 28   | 5,132  | 107,299  | 4,884   | 0   | 264,000                                  | 386,000                                  | 34,337                                      | 49,966                                | 0   | 98,000                         | 28,000                         | 0  | 0                                | 0   | 0                                     | 0                              |
| 7             | 0.00              | 2.8                               | 1.2                               | 19.7                                      | 96,886  | 27   | 5,287  | 102,173  | 491   | 0   | 297,000                                  | 410,000                                  | 34,614                                      | 49,996                                | 0   | 98,000                         | 28,000                         | 0  | 0                                | 0   | 0                                     | 0                              |
| 8             | 0.00              | 3.2                               | 1.2                               | 18.4                                      | 80,888  | 28   | 5,029  | 85,917   | 3,405   | 0   | 288,000                                  | 425,000                                  | 32,896                                      | 85,805                                | 0   | 118,000                        | 28,000                         | 0  | 0                                | 0   | 0                                     | 0                              |
| 9             | 0.00              | 1.2                               | 1.3                               | 16.3                                      | 79,671  | 23   | 5,226  | 84,896   | 3,346   | 0   | 295,000                                  | 432,000                                  | 32,896                                      | 0                                     | 0   | 32,000                         | 28,000                         | 0  | 0                                | 0   | 0                                     | 0                              |
| 10            | 0.00              | 3.7                               | 1.4                               | 14.2                                      | 82,133  | 23   | 5,226  | 87,358   | 3,346   | 0   | 302,000                                  | 439,000                                  | 32,896                                      | 50,137                                | 0   | 129,000                        | 38,000                         | 0  | 39,700                           | 0   | 0                                     | 31,800                         |
| 11            | 0.00              | 3.5                               | 1.4                               | 17.0                                      | 92,779  | 28   | 5,324  | 98,103   | 1,799   | 0   | 307,000                                  | 439,000                                  | 37,799                                      | 57,330                                | 0   | 129,000                        | 38,000                         | 0  | 0                                | 0   | 28,722                                | 0                              |
| 12            | 0.00              | 4.0                               | 1.4                               | 19.1                                      | 92,506  | 0  | 5,433  | 97,939   | 3,104   | 0   | 317,000                                  | 403,000                                  | 32,428                                      | 57,334                                | 0   | 129,000                        | 38,000                         | 0  | 34,962                           | 0   | 35,612                                | 28,000                         |
| 13            | 0.00              | 3.4                               | 1.4                               | 17.5                                      | 89,870  | 26   | 3,784  | 93,654   | 3,532   | 0   | 317,000                                  | 398,000                                  | 39,218                                      | 50,174                                | 0   | 129,000                        | 38,000                         | 0  | 36,900                           | 0   | 49,980                                | 29,500                         |
| 14            | 0.23              | 2.8                               | 1.4                               | 15.2                                      | 77,613  | 29   | 6,213  | 83,826   | 3,024   | 0   | 322,000                                  | 374,000                                  | 30,845                                      | 50,146                                | 0   | 98,000                         | 38,000                         | 0  | 0                                | 0   | 28,568                                | 0                              |
| 15            | 0.00              | 2.8                               | 1.4                               | 14.9                                      | 45,781  | 26   | 5,203  | 50,984   | 3,383   | 0   | 274,000                                  | 374,000                                  | 22,817                                      | 0                                     | 0   | 98,000                         | 38,000                         | 0  | 69,156                           | 0   | 42,756                                | 55,300                         |
| 16            | 0.35              | 1.4                               | 1.4                               | 15.1                                      | 66,077  | 31   | 3,620  | 69,697   | 2,830   | 0   | 332,000                                  | 374,000                                  | 32,302                                      | 0                                     | 0   | 36,000                         | 38,000                         | 0  | 0                                | 0   | 0                                     | 0                              |
| 17            | 0.00              | 1.4                               | 1.4                               | 15.2                                      | 78,338  | 31   | 3,620  | 81,957   | 2,830   | 0   | 391,000                                  | 374,000                                  | 30,865                                      | 79,349                                | 0   | 36,000                         | 38,000                         | 0  | 0                                | 0   | 7,121                                 | 0                              |
| 18            | 0.00              | 1.2                               | 1.5                               | 13.5                                      | 122,813   | 29   | 20,900   | 143,713  | 3,331   | 0   | 394,000                                  | 403,000                                  | 19,510                                      | 72,369                                | 0   | 32,000                         | 44,000                         | 0  | 36,960                           | 0   | 28,568                                | 29,600                         |
| 19            | 0.00              | 2.3                               | 0.0                               | 17.5                                      | 90,440  | 28   | 14   | 90,454   | 3,374   | 0   | 389,000                                  | 374,000                                  | 19,510                                      | 100,922                               | 0   | 74,000                         | 0                              | 0  | 0                                | 0   | 42,980                                | 0                              |
| 20            | 0.00              | 2.5                               | 0.0                               | 14.4                                      | 87,590  | 31   | 3,745  | 91,335   | 3,682   | 0   | 360,000                                  | 343,000                                  | 13,687                                      | 92,929                                | 0   | 83,000                         | 0                              | 0  | 19,230                           | 0   | 50,128                                | 15,400                         |
| 21            | 0.00              | 2.2                               | 0.0                               | 16.9                                      | 85,191  | 29   | 3,720  | 88,911   | 1,849   | 0   | 331,000                                  | 302,000                                  | 18,791                                      | 85,915                                | 0   | 70,000                         | 0                              | 0  | 0                                | 0   | 28,489                                | 0                              |
| 22            | 0.00              | 2.2                               | 0.0                               | 14.5                                      | 80,711  | 29   | 5,229  | 85,940   | 4,228   | 0   | 326,000                                  | 286,000                                  | 17,066                                      | 78,696                                | 0   | 70,000                         | 0                              | 0  | 49,026                           | 0   | 7,184                                 | 39,200                         |
| 23            | 0.00              | 2.2                               | 0.0                               | 17.6                                      | 81,381  | 25   | 5,130  | 86,510   | 2,561   | 0   | 359,000                                  | 296,000                                  | 17,067                                      | 0                                     | 0   | 70,000                         | 0                              | 0  | 0                                | 0   | 0                                     | 0                              |
| 24            | 0.00              | 1.6                               | 0.0                               | 20.6                                      | 86,371  | 25   | 5,130  | 91,501   | 2,561   | 0   | 391,000                                  | 307,000                                  | 17,066                                      | 51,127                                | 0   | 44,000                         | 0                              | 0  | 34,178                           | 0   | 28,473                                | 27,300                         |
| 25            | 0.00              | 1.1                               | 0.0                               | 16.1                                      | 92,763  | 0  | 5,089  | 97,852   | 3,369   | 0   | 365,000                                  | 295,000                                  | 18,717                                      | 108,314                               | 0   | 28,000                         | 0                              | 0  | 0                                | 0   | 35,752                                | 0                              |
| 26            | 0.00              | 0.8                               | 0.0                               | 17.8                                      | 85,797  | 31   | 5,053  | 90,850   | 3,339   | 0   | 350,000                                  | 264,000                                  | 24,414                                      | 86,351                                | 0   | 17,000                         | 0                              | 0  | 0                                | 0   | 57,577                                | 0                              |
| 27            | 0.00              | 0.8                               | 0.0                               | 16.2                                      | 80,392  | 29   | 3,350  | 83,742   | 3,501   | 0   | 317,000                                  | 242,000                                  | 10,842                                      | 93,513                                | 0   | 17,000                         | 0                              | 0  | 0                                | 0   | 35,990                                | 0                              |
| 28            | 0.00              | 0.8                               | 0.0                               | 15.7                                      | 76,764  | 26   | 4,973  | 81,737   | 1,743   | 0   | 312,000                                  | 230,000                                  | 14,144                                      | 100,557                               | 0   | 17,000                         | 0                              | 0  | 32,648                           | 0   | 0                                     | 26,100                         |
| 29            | 0.00              | 0.9                               | 0.0                               | 17.1                                      | 75,020  | 26   | 3,973  | 78,993   | 3,440   | 0   | 245,000                                  | 221,000                                  | 16,098                                      | 85,631                                | 0   | 21,000                         | 0                              | 0  | 0                                | 0   | 0                                     | 0                              |
|               |                   |                                   |                                   |   |   |  |  |  |   |   |  |  |   |                                       |   |                                |                                |  |                                  |   |                                       |                                |
|               |                   |                                   |                                   |   |   |  |  |  |   |   |  |  |   |                                       |   |                                |                                |  |                                  |   |                                       |                                |
|               |                   |                                   |                                   |   |   |  |  |  |   |   |  |  |   |                                       |   |                                |                                |  |                                  |   |                                       |                                |
| Total         | 1.65              |                                   |                                   |   | 2,483,841   | 736  | 152,518  | 2,636,359  | 89,491  | 0   |  |  | 883,611                                     | 1,621,644                             | 0   |                                |                                | 0  | 435,684                          | 0   | 507,900                               | 348,600                        |
| Daily Average |                   | 2.4                               | 0.6                               | 16.1                                      | 85,650  | 25   | 5,259  | 90,909   | 3,086   | 0   | 307,400                                  | 346,900                                  |   |                                       |   | 79,300                         | 16,800                         |  |                                  |   |                                       |                                |
| Mo. Average   |                   |                                   |                                   |   |   |  |  |  |   |   |  |  |   |                                       | 0   |                                |                                |  | 15,000                           | 0   | 17,500                                | 12,020                         |

balance 2020/2-20bal.xls

Notes:

1. NR = No Records, NA = Not Available.
2. Values in bold are estimated; values in italic are substitute for missing data and are based on averaged values.
3. Daily average is calculated by dividing the total by the actual days measured in the month.
4. Monthly average calculated by dividing the total by the number of days of the month.
5. Column II, Trace is less than 0.01 inches and is not included in total.
6. Columns III and IV, field measured at staff gauges.
7. Columns VII, Section 7-8 leak detection pumped into Section 7 leachate sump riser.
8. Column XII and XIII, calculated from depth in 575,000 gal. tanks.
9. Columns VI-XI, XIV, XV, XVI and XIX-XXII, quantities from flow meters.
10. Column XXIII includes 80% of the daily values from Columns XVI, XX - XXI, plus 5% of the daily values from column XIX.

**TABLE 2. FIELD DATA ENTRY FORM  
FEBRUARY 2020  
SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA**

| A      | B                 | C                                   | D                        | E                             | F                             | G                          | H                              | I                             | J                        | K                                      | L                        | M   | N  | O  | P  | Q                    | R                | S   | T                    | U                | V  |
|--------|-------------------|-------------------------------------|--------------------------|-------------------------------|-------------------------------|----------------------------|--------------------------------|-------------------------------|--------------------------|--|--------------------------|---|--|--|--|----------------------|------------------|---|----------------------|------------------|--|
| Day    | Rainfall<br>(in.) | Flow Meter<br>Pump Sta. A<br>(gal.) | Reading<br>PS-B<br>(in.) | Section 9<br>Pump 1<br>(gal.) | Section 9<br>Pump 2<br>(gal.) | Section 9<br>LDS<br>(gal.) | Sections 7-8<br>Pump<br>(gal.) | Sections 7-8<br>LDS<br>(gal.) | Pond B<br>Depth<br>(ft.) | Pond B<br>Effluent<br>Sprayed<br>(gal) | Pond A<br>Depth<br>(ft.) | Effluent<br>Spray<br>Irrigation<br>(gal.) | Depth in<br>575K Tank<br>Leachate<br>(ft.) | Depth in<br>575K Tank<br>Effluent<br>(ft.) | Leachate<br>Treated<br>at LTRF<br>(gal.) | Leachate Hauled      |                  | Leachate<br>Dust Control<br>(Sprayed)<br>(gal.) | Effluent Hauled      |                  | Effluent<br>Dust Control<br>(Sprayed)<br>(gal) |
|        |                   |                                     |                          |                               |                               |                            |                                |                               |                          |  |                          |   |  |  |  | Contractor<br>(gal.) | County<br>(gal.) |   | Contractor<br>(gal.) | County<br>(gal.) |  |
| 1      | 0.00              | 1,211,872                           | 14.0                     | 2,599,766                     | 2,510,969                     | 5,885,267                  | 39,739                         | 92,221                        | 0.0                      | 0.0                                    | 3.3                      | 0   | 6.25                                       | 9.50                                       | 62,452                                   | 0                    | 0                | 0   | 0                    | 0                | 0  |
| 2      | 0.00              | 1,277,366                           | 13.5                     | 2,600,133                     | 2,513,418                     | 5,885,267                  | 44,789                         | 92,244                        | 0.0                      | 0.0                                    | 3.3                      | 0   | 6.92                                       | 11.34                                      | 62,451                                   | 0                    | 0                | 0   | 0                    | 0                | 0  |
| 3      | 0.00              | 1,342,859                           | 13.0                     | 2,600,500                     | 2,515,867                     | 5,885,267                  | 49,838                         | 92,266                        | 0.0                      | 0.0                                    | 3.3                      | 45,448                                    | 7.58                                       | 13.17                                      | 62,451                                   | 28,006               | 21,449           | 0   | 0                    | 0                | 0  |
| 4      | 0.00              | 1,409,848                           | 15.7                     | 2,603,900                     | 2,518,098                     | 5,885,267                  | 56,515                         | 92,293                        | 0.0                      | 0.0                                    | 4.0                      | 0   | 8.25                                       | 11.75                                      | 62,452                                   | 0                    | 42,944           | 0   | 0                    | 0                | 0  |
| 5      | 1.07              | 1,480,199                           | 15.4                     | 2,605,665                     | 2,520,274                     | 5,885,267                  | 61,725                         | 92,320                        | 1.2                      | 0.0                                    | 3.4                      | 37,476                                    | 8.17                                       | 12.25                                      | 32,980                                   | 0                    | 42,684           | 0   | 0                    | 0                | 0  |
| 6      | 0.00              | 1,552,718                           | 15.8                     | 2,610,549                     | 2,520,274                     | 5,885,267                  | 66,857                         | 92,348                        | 1.2                      | 0.0                                    | 2.8                      | 0   | 9.17                                       | 13.42                                      | 34,337                                   | 0                    | 49,966           | 0   | 0                    | 0                | 0  |
| 7      | 0.00              | 1,629,153                           | 19.7                     | 2,611,040                     | 2,520,274                     | 5,885,267                  | 72,144                         | 92,375                        | 1.2                      | 0.0                                    | 2.8                      | 0   | 10.33                                      | 14.25                                      | 34,614                                   | 0                    | 49,996           | 0   | 0                    | 0                | 0  |
| 8      | 0.00              | 1,690,033                           | 18.4                     | 2,614,445                     | 2,520,274                     | 5,885,267                  | 77,173                         | 92,403                        | 1.2                      | 0.0                                    | 3.2                      | 0   | 10.00                                      | 14.75                                      | 32,896                                   | 42,995               | 42,810           | 0   | 0                    | 0                | 0  |
| 9      | 0.00              | 1,749,696                           | 16.3                     | 2,617,791                     | 2,520,275                     | 5,885,267                  | 82,399                         | 92,426                        | 1.3                      | 0.0                                    | 1.2                      | 0   | 10.25                                      | 15.00                                      | 32,896                                   | 0                    | 0                | 0   | 0                    | 0                | 0  |
| 10     | 0.00              | 1,809,359                           | 14.2                     | 2,621,136                     | 2,520,275                     | 5,885,267                  | 87,624                         | 92,449                        | 1.4                      | 0                                      | 3.7                      | 39,700                                    | 10.50                                      | 15.25                                      | 32,896                                   | 50,137               | 0                | 0   | 0                    | 0                | 0  |
| 11     | 0.00              | 1,878,804                           | 17.0                     | 2,622,935                     | 2,520,275                     | 5,885,268                  | 92,948                         | 92,477                        | 1.4                      | 0.0                                    | 3.5                      | 0   | 10.67                                      | 15.25                                      | 37,799                                   | 43,007               | 14,323           | 0   | 0                    | 28,722           | 0  |
| 12     | 0.00              | 1,947,265                           | 19.1                     | 2,626,039                     | 2,520,275                     | 5,885,267                  | 98,381                         | 92,477                        | 1.4                      | 0.0                                    | 4.0                      | 34,962                                    | 11.00                                      | 14.00                                      | 32,428                                   | 50,178               | 7,156            | 0   | 0                    | 35,612           | 0  |
| 13     | 0.00              | 2,013,966                           | 17.5                     | 2,629,571                     | 2,520,275                     | 5,885,267                  | 102,165                        | 92,503                        | 1.4                      | 0.0                                    | 3.4                      | 36,900                                    | 11.00                                      | 13.83                                      | 39,218                                   | 43,001               | 7,173            | 0   | 14,375               | 35,605           | 0  |
| 14     | 0.23              | 2,079,165                           | 15.2                     | 2,632,595                     | 2,520,275                     | 5,885,267                  | 108,378                        | 92,532                        | 1.4                      | 0.0                                    | 2.8                      | 0   | 11.17                                      | 13.00                                      | 30,845                                   | 35,867               | 14,279           | 0   | 7,164                | 21,404           | 0  |
| 15     | 0.00              | 2,107,675                           | 14.9                     | 2,635,978                     | 2,520,275                     | 5,885,267                  | 113,581                        | 92,558                        | 1.4                      | 0.0                                    | 2.8                      | 69,156                                    | 9.50                                       | 13.00                                      | 22,817                                   | 0                    | 0                | 0   | 0                    | 42,756           | 0  |
| 16     | 0.35              | 2,156,482                           | 15.1                     | 2,638,808                     | 2,520,275                     | 5,885,267                  | 117,201                        | 92,589                        | 1.4                      | 0.0                                    | 1.4                      | 0   | 11.54                                      | 13.00                                      | 32,302                                   | 0                    | 0                | 0   | 0                    | 0                | 0  |
| 17     | 0.00              | 2,205,288                           | 15.2                     | 2,641,637                     | 2,520,275                     | 5,885,267                  | 120,820                        | 92,620                        | 1.4                      | 0.0                                    | 1.4                      | 0   | 13.58                                      | 13.00                                      | 30,865                                   | 43,380               | 35,969           | 0   | 0                    | 7,121            | 0  |
| 18     | 0.00              | 2,305,699                           | 13.5                     | 2,644,968                     | 2,520,275                     | 5,885,267                  | 141,720                        | 92,649                        | 1.5                      | 0.0                                    | 1.2                      | 36,960                                    | 13.67                                      | 14.00                                      | 19,510                                   | 58,000               | 14,369           | 0   | 0                    | 28,568           | 0  |
| 19     | 0.00              | 2,374,899                           | 17.5                     | 2,648,342                     | 2,520,275                     | 5,885,267                  | 141,734                        | 92,677                        | 0.0                      | 0.0                                    | 2.3                      | 0   | 13.50                                      | 13.00                                      | 19,510                                   | 50,658               | 50,264           | 0   | 7,368                | 35,612           | 0  |
| 20     | 0.00              | 2,441,129                           | 14.4                     | 2,652,024                     | 2,520,275                     | 5,885,267                  | 145,479                        | 92,708                        | 0.0                      | 0.0                                    | 2.5                      | 19,230                                    | 12.50                                      | 11.92                                      | 13,687                                   | 42,901               | 50,028           | 0   | 14,442               | 35,686           | 0  |
| 21     | 0.00              | 2,509,733                           | 16.9                     | 2,653,872                     | 2,520,276                     | 5,885,267                  | 149,199                        | 92,737                        | 0.0                      | 0.0                                    | 2.2                      | 0   | 11.50                                      | 10.50                                      | 18,791                                   | 43,029               | 42,886           | 0   | 0                    | 28,489           | 0  |
| 22     | 0.00              | 2,571,370                           | 14.5                     | 2,658,100                     | 2,520,276                     | 5,885,267                  | 154,428                        | 92,766                        | 0.0                      | 0.0                                    | 2.2                      | 49,026                                    | 11.33                                      | 9.92                                       | 17,066                                   | 35,843               | 42,853           | 0   | 7,184                | 0                | 0  |
| 23     | 0.00              | 2,633,677                           | 17.6                     | 2,660,661                     | 2,520,276                     | 5,885,267                  | 159,558                        | 92,791                        | 0.0                      | 0.0                                    | 2.2                      | 0   | 12.46                                      | 10.30                                      | 17,067                                   | 0                    | 0                | 0   | 0                    | 0                | 0  |
| 24     | 0.00              | 2,695,984                           | 20.6                     | 2,663,222                     | 2,520,276                     | 5,885,267                  | 164,687                        | 92,816                        | 0.0                      | 0.0                                    | 1.6                      | 34,178                                    | 13.58                                      | 10.67                                      | 17,066                                   | 36,714               | 14,413           | 0   | 0                    | 28,473           | 0  |
| 25     | 0.00              | 2,767,745                           | 16.1                     | 2,666,590                     | 2,520,277                     | 5,885,267                  | 169,776                        | 92,816                        | 0.0                      | 0.0                                    | 1.1                      | 0   | 12.67                                      | 10.25                                      | 18,717                                   | 50,928               | 57,386           | 0   | 7,263                | 28,489           | 0  |
| 26     | 0.00              | 2,834,278                           | 17.8                     | 2,669,929                     | 2,520,277                     | 5,885,267                  | 174,829                        | 92,847                        | 0.0                      | 0.0                                    | 0.8                      | 0   | 12.17                                      | 9.17                                       | 24,414                                   | 36,171               | 50,180           | 0   | 21,930               | 35,647           | 0  |
| 27     | 0.00              | 2,897,651                           | 16.2                     | 2,673,430                     | 2,520,277                     | 5,885,267                  | 178,179                        | 92,876                        | 0.0                      | 0.0                                    | 0.8                      | 0   | 11.00                                      | 8.42                                       | 10,842                                   | 43,428               | 50,085           | 0   | 14,604               | 21,386           | 0  |
| 28     | 0.00              | 2,955,742                           | 15.7                     | 2,675,173                     | 2,520,277                     | 5,885,267                  | 183,152                        | 92,902                        | 0.0                      | 0.0                                    | 0.8                      | 32,648                                    | 10.83                                      | 8.00                                       | 14,144                                   | 50,682               | 49,875           | 0   | 0                    | 0                | 0  |
| 29     | 0.00              | 3,014,939                           | 17.1                     | 2,678,613                     | 2,520,277                     | 5,885,267                  | 187,125                        | 92,928                        | 0.0                      | 0.0                                    | 0.9                      | 0   | 8.50                                       | 7.67                                       | 16,098                                   | 42,897               | 42,734           | 0   | 0                    | 0                | 0  |
|        |                   |                                     |                          |                               |                               |                            |                                |                               |                          |  |                          |   |  |  |  |                      |                  | 0   | 0                    | 0                | 0  |
|        |                   |                                     |                          |                               |                               |                            |                                |                               |                          |  |                          |   |  |  |  |                      |                  | 0   | 0                    | 0                | 0  |
| Totals | 1.65              |                                     |                          |                               |                               |                            |                                |                               |                          | 0                                      |                          | 435,684                                   |  |  | 1,445,611                                | 827,822              | 793,822          | 0   | 94,330               | 413,570          | 0  |

balance\2020\2-20bal.xls

Notes:

1. NR = No Records, NA = Not Available.
2. Values in bold are estimated; values in italic are substitute for missing data and are based on averaged values
3. Columns G and J include quantities from leak detection system.
4. Column B, trace is less than 0.01 inches.
5. Columns C, D, E, F, G, H, I, J, K, L, N, R-V and W are quantities from flow meters.
6. Columns K and M measured from staff gages in each pond.

| Type of Cover | Phases I-VI<br>acres | Section 7-9<br>acres |
|---------------|----------------------|----------------------|
| Open          | 5                    | 0                    |
| Intermediate  | 134.4                | 34.5                 |
| Final         | 23                   | 0                    |
| Not Opened    | 0                    | 0                    |

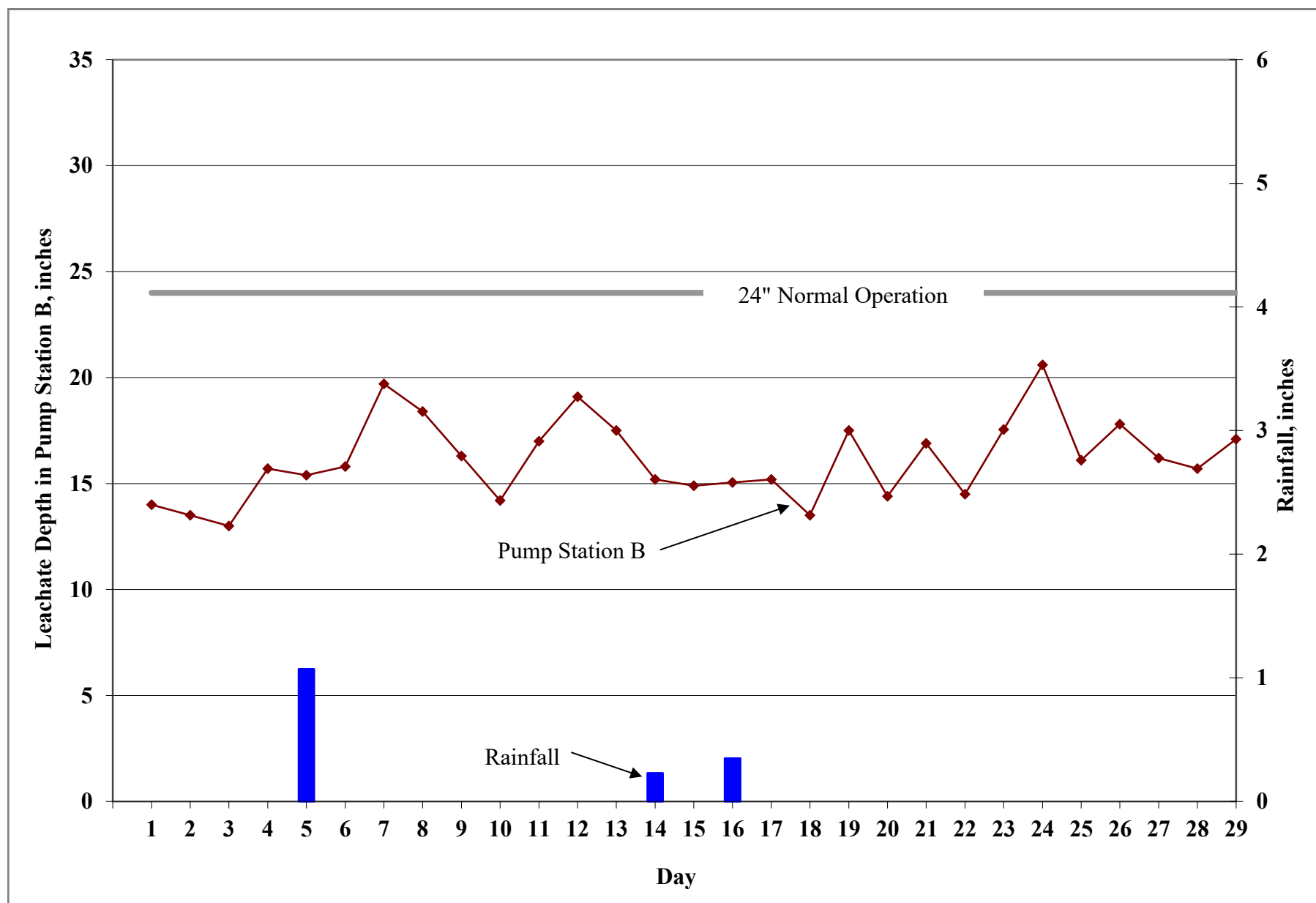


Figure 1. Leachate Levels in Pump Station B and Rainfall for February 2020.



**TABLE 3. LEACHATE BALANCE SUMMARY  
SOUTHEAST COUNTY LANDFILL  
HILLSBOROUGH COUNTY, FLORIDA  
YEAR-2020**

| Month     | Rainfall<br>(in.) | Leachate Arriving at LTRF                |  |  |  | Leachate Leaving LTRF                           |   |  | Effluent Disposal                     |   |                                  | Inflow / Outflow For LTRF            |   |  |
|-----------|-------------------|--|--|--|--|---|---|--|---------------------------------------|---|----------------------------------|--------------------------------------|---|--|
|           |                   | Condensate<br>from LFG<br>CS-1<br>(gal.) | Leachate<br>from Section 9<br>Pumped to LTRF<br>(gal.) | Leachate<br>from Section 7-8<br>Pumped to LTRF<br>(gal.) | Leachate<br>from Phases I-VI<br>Pumped to LTRF<br>(gal.) | Total Leachate<br>Hauled<br>from LTRF<br>(gal.) | Leachate<br>Dust Control<br>(Sprayed)<br>(gal.) | Leachate<br>Treated at<br>LTRF<br>(gal.) | Total<br>Effluent<br>Hauled<br>(gal.) | Effluent<br>Dust Control<br>(Sprayed)<br>(gal.) | Effluent<br>Irrigation<br>(gal.) | Total Inflow<br>to<br>LTRF<br>(gal.) | Total Outflow<br>from<br>LTRF<br>(gal.) | Change<br>in<br>Storage <sup>3</sup><br>(gal.) |
| January   | 0.58              | 909                                      | 141,635  | 217,468  | 3,079,565  | 2,360,372                                       | 0   | 853,457                                  | 0                                     | 0   | 544,716                          | 3,439,577                            | 3,213,829                               | 225,748  |
| February  | 1.65              | 1,881                                    | 89,491   | 152,518  | 2,483,841  | 1,621,644                                       | 0   | 883,611                                  | 507,900                               | 0   | 435,684                          | 2,727,731                            | 2,505,255                               | 222,476  |
| March     |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| April     |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| May       |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| June      |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| July      |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| August    |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| September |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| October   |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| November  |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| December  |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| YTD Total | 2.23              | 2,790                                    | 231,126  | 369,986  | 5,563,406  | 3,982,016                                       | 0   | 1,737,068                                | 507,900                               | 0   | 980,400                          | 6,167,308                            | 5,719,084                               | 448,224  |

Note:

1. If the bypass at the effluent pond is ever used to pump effluent back to the LTRF, this table must be modified.
2. Change in storage represents total inflow to LTRF minus total outflow from LTRF.



**Hillsborough  
County Florida**

**SOLID WASTE MANAGEMENT**

PO Box 1110 Tampa, FL 33601-1110  
813-272-5680

**MEMORANDUM**

**DATE:** April 10, 2020

**TO:** Larry E. Ruiz, Manager Landfill Operations, Solid Waste Management Division

**FROM:** Ron W. Wiesman, Manager, Solid Waste Management Division

**SUBJECT:** Leachate Water Balance Report Forms for March 2020  
Southeast County Landfill, Hillsborough County, Florida

The Solid Waste Management Division (SWMD) staff has compiled and reviewed the leachate management operational data from the Southeast County Landfill Phases I-VI, Sections 7-8, and Section 9. Attached are the Leachate Water Balance Report Form (Table 1), the Leachate Field Data Entry Form (Table 2), and the 2020 Summary (Table 3). Also, attached find Figure 1 showing leachate levels in Pump Station B sump of Phases I-VI and rainfall for the month.

**TABLE 1**

**Day (Column I)**

Column I presents the calendar days for the month.

**Rainfall (Column II)**

Column II presents the average rainfall, in inches, as measured in the field from rainfall stations at the site. This month there was .01 inches of rainfall recorded at the Southeast County Landfill (SCLF).

**Depth in Pond A (Column III)**

Column III presents the daily depth, in feet, of effluent stored in effluent pond (Pond A). The daily depth in Pond A varies as a function of the spray irrigation frequency/duration and effluent hauled from the pond. This month the daily average of effluent stored in Pond A was 2.1 feet.

**BOARD OF COUNTY  
COMMISSIONERS**

Ken Hagan  
Pat Kemp  
Lesley "Les" Miller, Jr.  
Sandra L. Murman  
Kimberly Overman  
Mariella Smith  
Stacy R. White

**COUNTY ADMINISTRATOR**

Michael S. Merrill

**COUNTY ATTORNEY**

Christine M. Beck

**INTERNAL AUDITOR**

Peggy Caskey

**INFRASTRUCTURE SERVICES  
ADMINISTRATOR**

John Lyons

**Depth in Pond B (Column IV)**

Column IV presents the daily depth, in feet, of effluent or leachate that is stored in the effluent/leachate storage pond (Pond B). The depth in Pond B varies as a function of the evaporation frequency/duration and effluent or leachate hauled from the pond. This month the daily average depth of effluent in Pond B was zero feet.

**Estimated Depth at Pump Station B Sump (PS-B) (Column V)**

Column V presents the depth of leachate, in inches, in the PS-B sump. Leachate from Phases I-VI flows to the PS-B sump for removal from the landfill. PS-B then pumps the leachate to Pump Station A (PS-A). Daily depth readings from the PS-B sump are included in this column. The average recorded depth of leachate in the PS-B sump was 17.6 inches.

**Leachate Pumped to MLPS from Phases I-VI (Column VI)**

Column VI presents the daily amount of leachate, in gallons, collected from PS-A and pumped through the MLPS to the 575,000-gallon storage tank at the Leachate Treatment and Reclamation Facility (LTRF) for treatment or disposal. This column also includes the Phase II data from the dewatering wells and PS-2. The average daily amount of leachate pumped from PS-A was 76,322 gallons. A total of 2,365,967 gallons of leachate was pumped this month.

**Leachate Pumped from Sections 7-8 LDS (Column VII)**

Column VII presents the quantity of leachate removed from the leak detection system (LDS) of Sections 7-8. The quantity is measured by a flow meter before being pumped for removal with Sections 7-8 leachate. The removal rate did not exceed 1,930 gallons per day. This month 730 gallons of leachate was removed from the leak detection system of Sections 7-8.

**Leachate Pumped to MLPS from Sections 7-8 (Column VIII)**

Column VIII presents the quantity of leachate collected at Sections 7-8 and pumped to the MLPS. The quantity is measured by a flow meter and includes any leachate removed from the leak detection system of Sections 7-8 (Column VII). This month a total of 145,289 gallons was removed.

**Leachate Pumped to LTRF from the MLPS (Column IX)**

Column IX presents the total quantity of leachate pumped to the LTRF from Phases I-VI (including condensate removed from LFG Wells and Condensate Traps), and Sections 7-8. This month a total of 2,511,256 gallons of leachate was pumped to the LTRF.

**Leachate Pumped to LTRF from Section 9 (Column X)**

Column X presents the daily amount of leachate, in gallons, collected from Section 9 and pumped to the 575,000-gallon storage tank at the Leachate Treatment and Reclamation Facility (LTRF) for treatment or disposal. A total of 88,920 gallons of leachate was pumped this month.

**Leachate Pumped from Section 9 LDS (Column XI)**

Column XI presents the daily amount of leachate, in gallons, collected from the LDS of Section 9 and pumped to the 575,000-gallon storage tank at the LTRF for treatment or disposal. The removal rate did not exceed 4,651 gallons per day. This month 1,426 gallons of leachate was removed from the leak detection system.

**Leachate in 575,000-Gallon Tank (Column XII)**

Column XII presents the daily amount of leachate, in gallons, stored in the 575,000-gallon leachate holding tank T1 at the LTRF. The amount of leachate stored in T1 is calculated based on the circumference of the tank and the daily level reading. This month an average of 248,700 gallons of leachate was stored in the tank.

**Effluent in 575,000-Gallon Tank (Column XIII)**

Column XIII typically presents the daily amount of effluent, in gallons, stored in the 575,000-gallon effluent holding tank T6 at the LTRF. The amount of effluent/leachate stored in T6 is calculated based on the circumference of the tank and the daily level reading. This month an average of 292,600 gallons of effluent was stored in the tank.

**Leachate Treated at LTRF (Column XIV)**

Column XIV presents the daily amount of leachate, in gallons, treated at the LTRF. On September 15, 2019, plant staff restarted treatment operations. This month a total of 716,248 gallons of leachate was treated at the plant.

**Total Leachate Hauled (Column XV)**

Column XV presents the daily amount of leachate, in gallons, hauled off site. This month a total of 1,725,209 gallons of leachate was hauled off site.

**Leachate Dust Control Sprayed (Column XVI)**

Column XVI presents the daily amount of leachate, in gallons, measured from the flow meter at the bypass-loading arm at the leachate storage tank. The leachate is used for dust control in the active area of the landfill. This month leachate was not used for dust control.

**Pond A Storage (Column XVII)**

Column XVII presents the daily amount of effluent, in gallons, stored in Pond A. The daily amount stored in the pond is calculated by using the daily depth of effluent in the Pond A (Column III). Under normal operating conditions, the daily amount of effluent stored in the pond varies depending upon the daily amount of leachate treated at the LTRF, the daily rainfall, daily effluent hauling operations, daily spray irrigation operations, and the daily amount of effluent used for dust control/evaporation. This month a daily average of 69,800 gallons of effluent was stored in Pond A.

**Pond B Storage (Column XVIII)**

Column XVIII presents the daily amount of effluent, in gallons, stored in Pond B. The daily amount stored in the pond is calculated by using the daily depth of liquid in Pond B (Column IV). Under normal operating conditions, the amount stored in the pond will vary depending upon the daily amount of leachate/effluent removed from the pond by the evaporation system, hauled from the pond, used for dust control or evaporated; was stored in Pond B. This month an average of zero gallons per day of effluent was stored in Pond B.

**Effluent Sprayed at Pond B (Column XIX)**

Column XIX presents the daily amount of effluent, in gallons, sprayed for evaporation at Pond B. The amount evaporated is calculated by using 5 percent of the daily flow meter quantity sprayed at Pond B and it is included in Column XX. This month effluent was not sprayed in Pond B.

**Effluent Irrigation (Column XX)**

Column XX presents the daily amount of effluent, in gallons, used for spray irrigation on top of Phases IV-VI. The daily amount of effluent irrigation on Phases I-VI is measured from the flow meter at the irrigation pump station. This month a total of 342,461 gallons of effluent was sprayed.

**Effluent Dust Control Sprayed (Column XXI)**

Column XXI presents the daily amount of effluent, in gallons, sprayed for dust control in the active areas of the SCLF. The daily amount of effluent used for dust control, is measured from the flow meter at the bypass-loading arm. This month effluent was not sprayed as dust control.

**Total Effluent Hauled (Column XXII)**

Column XXII presents the daily amount of effluent, in gallons, hauled off site, as measured from the flow meter at the bypass-loading arm. This month a total of 200,631 gallons of effluent was hauled off site.

**Total Evaporation (Column XXIII)**

Column XXIII presents the daily amount of leachate and effluent, in gallons, that evaporates and therefore will not be returned to the SCLF and/or requires treatment. Evaporation rates of 80 percent and 5 percent evaporation rate for spray in Pond B are assumed. Total evaporation estimated for this month was 273,800 gallons.

**TABLE 2**

Table 2 presents data assembled from daily logs compiled by the SWMD staff.

**TABLE 3**

**Leachate Balance Summary**

The Leachate Balance Summary (see Table 3) presents a review of inflow and outflow quantities for the LTRF, as well as rainfall and effluent disposal quantities at the landfill. Total inflow quantity to the LTRF was 2,601,712 gallons. Total outflow quantity from the LTRF was 2,441,457 gallons. The change in storage for the month increased by 160,255 gallons.

Please advise should you have any questions concerning the information provided.

**TABLE 1. LEACHATE WATER BALANCE REPORT FORM**  
**MARCH 2020**  
**SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA**

| I             | II                | III                               | IV                                | V   | VI  | VII  | VIII   | IX   | X   | XI  | XII                                      | XIII                                     | XIV   | XV                                    | XVI   | XVII                           | XVIII                          | XIX  | XX                               | XXI   | XXII                                  | XXIII                          |
|---------------|-------------------|-----------------------------------|-----------------------------------|---|---|--|--|--|---|---|--|--|---|---------------------------------------|---|--------------------------------|--------------------------------|--|----------------------------------|---|---------------------------------------|--------------------------------|
| Day           | Rainfall<br>(in.) | Depth<br>in<br>Pond<br>A<br>(ft.) | Depth<br>in<br>Pond<br>B<br>(ft.) | Estimated<br>Depth<br>at<br>PS-B<br>(in.) | Leachate<br>Pumped<br>to MLPS<br>from Phases I-VI<br>(gal.) | Leachate<br>Pumped from<br>Sections 7-8<br>LDS<br>(gal.) | Leachate<br>Pumped<br>to MLPS from<br>Sections 7-8<br>(gal.) | Leachate<br>Pumped<br>to LTRF from<br>MPLS<br>(gal.) | Leachate<br>Pumped<br>to LTRF from<br>Section 9<br>(gal.) | Leachate<br>Pumped from<br>Section 9<br>LDS<br>(gal.) | Leachate<br>in<br>575K<br>Tank<br>(gal.) | Effluent<br>in<br>575K<br>Tank<br>(gal.) | Leachate<br>Treated<br>at<br>LTRF<br>(gal.) | Total<br>Leachate<br>Hauled<br>(gal.) | Leachate<br>Dust Control<br>(Sprayed)<br>(gal.) | Pond<br>A<br>Storage<br>(gal.) | Pond<br>B<br>Storage<br>(gal.) | Effluent<br>Sprayed<br>Pond<br>B<br>(gal.) | Effluent<br>Irrigation<br>(gal.) | Effluent<br>Dust Control<br>(Sprayed)<br>(gal.) | Total<br>Effluent<br>Hauled<br>(gal.) | Total<br>Evaporation<br>(gal.) |
| 1             | 0.00              | 1.0                               | 0.0                               | 18.8                                      | 72,987  | 26   | 4,266  | 77,253   | 2,867   | 0   | 259,000                                  | 216,000                                  | 16,099                                      | 0                                     | 0   | 24,000                         | 0                              | 0  | 0                                | 0   | 0                                     | 0                              |
| 2             | 0.00              | 1.0                               | 0.0                               | 20.8                                      | 84,456  | 26   | 4,299  | 88,755   | 2,308   | 0   | 288,000                                  | 230,000                                  | 16,098                                      | 77,997                                | 0   | 24,000                         | 0                              | 0  | 38,638                           | 0   | 7,120                                 | 30,900                         |
| 3             | 0.00              | 0.0                               | 0.0                               | 15.7                                      | 86,755  | 25   | 5,290  | 92,045   | 3,468   | 0   | 288,000                                  | 211,000                                  | 16,257                                      | 85,053                                | 0   | 800                            | 0                              | 0  | 0                                | 0   | 0                                     | 0                              |
| 4             | 0.00              | 1.4                               | 0.0                               | 19.9                                      | 71,114  | 20   | 5,330  | 76,444   | 3,470   | 0   | 274,000                                  | 202,000                                  | 15,266                                      | 84,960                                | 0   | 36,000                         | 0                              | 0  | 0                                | 0   | 0                                     | 0                              |
| 5             | 0.00              | 1.4                               | 0.0                               | 17.7                                      | 95,549  | 28   | 3,565  | 99,114   | 3,250   | 0   | 240,000                                  | 218,000                                  | 23,027                                      | 85,359                                | 0   | 36,000                         | 0                              | 0  | 0                                | 0   | 0                                     | 0                              |
| 6             | 0.00              | 1.4                               | 0.0                               | 17.2                                      | 78,646  | 25   | 1,965  | 80,611   | 2,781   | 80  | 233,000                                  | 238,000                                  | 22,873                                      | 85,041                                | 0   | 36,000                         | 0                              | 0  | 0                                | 0   | 0                                     | 0                              |
| 7             | 0.00              | 1.8                               | 0.0                               | 14.7                                      | 77,015  | 23   | 7,765  | 84,780   | 3,015   | 28  | 216,000                                  | 240,000                                  | 24,303                                      | 79,230                                | 0   | 52,000                         | 0                              | 0  | 0                                | 0   | 0                                     | 0                              |
| 8             | 0.00              | 1.8                               | 0.0                               | 16.6                                      | 64,328  | 27   | 4,647  | 68,975   | 2,393   | 9   | 218,000                                  | 260,000                                  | 24,303                                      | 0                                     | 0   | 52,000                         | 0                              | 0  | 0                                | 0   | 0                                     | 0                              |
| 9             | 0.00              | 1.8                               | 0.0                               | 18.4                                      | 66,884  | 27   | 4,647  | 71,531   | 2,393   | 9   | 221,000                                  | 281,000                                  | 34,303                                      | 85,665                                | 0   | 52,000                         | 0                              | 0  | 0                                | 0   | 0                                     | 0                              |
| 10            | 0.00              | 3.6                               | 0.0                               | 19.9                                      | 77,000  | 0  | 5,152  | 82,152   | 3,851   | 14  | 180,000                                  | 211,000                                  | 29,487                                      | 86,667                                | 0   | 145,000                        | 0                              | 0  | 38,640                           | 0   | 0                                     | 30,900                         |
| 11            | 0.00              | 2.9                               | 0.0                               | 15.0                                      | 78,944  | 25   | 8,176  | 87,120   | 2,872   | 7   | 182,000                                  | 238,000                                  | 30,787                                      | 21,449                                | 0   | 103,000                        | 0                              | 0  | 43,420                           | 0   | 21,347                                | 34,700                         |
| 12            | 0.00              | 2.1                               | 0.0                               | 19.0                                      | 84,794  | 32   | 14,965   | 99,759   | 2,119   | 272   | 218,000                                  | 238,000                                  | 32,075                                      | 7,159                                 | 0   | 65,000                         | 0                              | 0  | 0                                | 0   | 28,511                                | 0                              |
| 13            | 0.00              | 2.1                               | 0.0                               | 17.1                                      | 78,440  | 17   | 21   | 78,461   | 2,800   | 15  | 269,000                                  | 240,000                                  | 28,429                                      | 35,711                                | 0   | 65,000                         | 0                              | 0  | 0                                | 0   | 7,124                                 | 0                              |
| 14            | 0.00              | 2.1                               | 0.0                               | 16.9                                      | 76,185  | 28   | 3,332  | 79,517   | 3,054   | 185   | 274,000                                  | 266,000                                  | 33,452                                      | 42,796                                | 0   | 65,000                         | 0                              | 0  | 0                                | 0   | 0                                     | 0                              |
| 15            | 0.00              | 2.1                               | 0.0                               | 17.4                                      | 76,961  | 25   | 4,174  | 81,134   | 2,842   | 121   | 283,000                                  | 295,000                                  | 33,453                                      | 0                                     | 0   | 65,000                         | 0                              | 0  | 0                                | 0   | 0                                     | 0                              |
| 16            | 0.00              | 2.1                               | 0.0                               | 17.8                                      | 76,687  | 25   | 4,174  | 80,861   | 2,842   | 121   | 293,000                                  | 324,000                                  | 33,452                                      | 79,708                                | 0   | 65,000                         | 0                              | 0  | 0                                | 0   | 7,118                                 | 0                              |
| 17            | 0.00              | 2.1                               | 0.0                               | 22.3                                      | 74,183  | 26   | 3,451  | 77,634   | 3,864   | 0   | 240,000                                  | 353,000                                  | 40,517                                      | 86,758                                | 0   | 65,000                         | 0                              | 0  | 0                                | 0   | 0                                     | 0                              |
| 18            | 0.00              | 2.1                               | 0.0                               | 17.6                                      | 72,962  | 20   | 4,968  | 77,930   | 3,032   | 69  | 216,000                                  | 381,000                                  | 31,405                                      | 86,628                                | 0   | 65,000                         | 0                              | 0  | 0                                | 0   | 0                                     | 0                              |
| 19            | 0.00              | 3.4                               | 0.0                               | 15.6                                      | 71,491  | 28   | 3,426  | 74,917   | 1,606   | 0   | 178,000                                  | 353,000                                  | 39,482                                      | 64,756                                | 0   | 129,000                        | 0                              | 0  | 0                                | 0   | 21,332                                | 0                              |
| 20            | 0.00              | 3.4                               | 0.0                               | 20.9                                      | 73,609  | 0  | 4,992  | 78,601   | 3,103   | 102   | 197,000                                  | 345,000                                  | 31,325                                      | 0                                     | 0   | 129,000                        | 0                              | 0  | 0                                | 0   | 14,336                                | 0                              |
| 21            | 0.00              | 3.2                               | 0.0                               | 18.6                                      | 69,174  | 0  | 3,287  | 72,461   | 2,756   | 87  | 233,000                                  | 355,000                                  | 32,261                                      | 0                                     | 0   | 118,000                        | 0                              | 0  | 61,236                           | 0   | 0                                     | 49,000                         |
| 22            | 0.00              | 3.2                               | 0.0                               | 18.7                                      | 73,729  | 0  | 4,153  | 77,882   | 2,822   | 110   | 256,000                                  | 385,000                                  | 32,661                                      | 0                                     | 0   | 118,000                        | 0                              | 0  | 0                                | 0   | 0                                     | 0                              |
| 23            | 0.00              | 2.1                               | 0.0                               | 18.7                                      | 74,642  | 0  | 4,153  | 78,795   | 2,822   | 110   | 278,000                                  | 415,000                                  | 32,661                                      | 79,107                                | 0   | 65,000                         | 0                              | 0  | 0                                | 0   | 7,122                                 | 0                              |
| 24            | 0.00              | 3.8                               | 0.0                               | 17.5                                      | 79,289  | 0  | 4,908  | 84,197   | 2,466   | 0   | 276,000                                  | 322,000                                  | 6,804                                       | 63,914                                | 0   | 157,000                        | 0                              | 0  | 0                                | 0   | 20,692                                | 0                              |
| 25            | 0.00              | 3.7                               | 0.0                               | 14.8                                      | 78,558  | 0  | 4,990  | 83,548   | 3,302   | 16  | 288,000                                  | 317,000                                  | 6,804                                       | 85,269                                | 0   | 151,000                        | 0                              | 0  | 55,308                           | 0   | 0                                     | 44,200                         |
| 26            | 0.00              | 1.6                               | 0.0                               | 17.4                                      | 84,685  | 0  | 3,375  | 88,060   | 3,168   | 0   | 269,000                                  | 317,000                                  | 2,794                                       | 87,125                                | 0   | 44,000                         | 0                              | 0  | 55,307                           | 0   | 0                                     | 44,200                         |
| 27            | 0.00              | 1.5                               | 0.0                               | 16.0                                      | 72,517  | 0  | 4,938  | 77,455   | 3,285   | 16  | 240,000                                  | 338,000                                  | 5,196                                       | 75,411                                | 0   | 40,000                         | 0                              | 0  | 0                                | 0   | 0                                     | 0                              |
| 28            | 0.00              | 1.5                               | 0.0                               | 19.0                                      | 70,912  | 0  | 3,368  | 74,280   | 1,428   | 7   | 221,000                                  | 345,000                                  | 16,643                                      | 44,725                                | 0   | 40,000                         | 0                              | 0  | 0                                | 0   | 37,169                                | 0                              |
| 29            | 0.00              | 1.5                               | 0.0                               | 17.3                                      | 70,565  | 0  | 4,159  | 74,723   | 2,987   | 15  | 269,000                                  | 331,000                                  | 2,519                                       | 0                                     | 0   | 40,000                         | 0                              | 0  | 0                                | 0   | 0                                     | 0                              |
| 30            | 0.00              | 1.6                               | 0.0                               | 15.5                                      | 72,436  | 0  | 4,159  | 76,595   | 2,987   | 15  | 317,000                                  | 317,000                                  | 2,793                                       | 86,756                                | 0   | 44,000                         | 0                              | 0  | 49,912                           | 0   | 0                                     | 39,900                         |
| 31            | 0.01              | 2.3                               | 0.0                               | 14.5                                      | 80,475  | 278  | 5,196  | 85,671   | 2,970   | 21  | 297,000                                  | 290,000                                  | 18,719                                      | 107,973                               | 0   | 74,000                         | 0                              | 0  | 0                                | 0   | 28,752                                | 0                              |
| Total         | 0.01              |                                   |                                   |   | 2,365,967   | 730  | 145,289  | 2,511,256  | 88,920  | 1,426   |  |  | 716,248                                     | 1,725,217                             | 0   |                                |                                | 0  | 342,461                          | 0   | 200,623                               | 273,800                        |
| Daily Average |                   | 2.1                               | 0.0                               | 17.6                                      | 76,322  | 24   | 4,687  | 81,008   | 2,868   | 46  | 248,700                                  | 292,600                                  |   |                                       |   | 69,800                         | 0                              |  |                                  |   |                                       |                                |
| Mo. Average   |                   |                                   |                                   |   |   |  |  |  |   |   |  |  |   |                                       | 0   |                                |                                |  | 11,000                           | 0   | 6,500                                 | 8,830                          |

balance 2020/3-20bal.xls

Notes:

1. NR = No Records, NA = Not Available.
2. Values in bold are estimated; values in italic are substitute for missing data and are based on averaged values.
3. Daily average is calculated by dividing the total by the actual days measured in the month.
4. Monthly average calculated by dividing the total by the number of days of the month.
5. Column II, Trace is less than 0.01 inches and is not included in total.
6. Columns III and IV, field measured at staff gauges.
7. Columns VII, Section 7-8 leak detection pumped into Section 7 leachate sump riser.
8. Column XII and XIII, calculated from depth in 575,000 gal. tanks.
9. Columns VI-XI, XIV, XV, XVI and XIX-XXII, quantities from flow meters.
10. Column XXIII includes 80% of the daily values from Columns XVI, XX - XXI, plus 5% of the daily values from column XIX.



**TABLE 2. FIELD DATA ENTRY FORM  
MARCH 2020  
SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA**

| A      | B                 | C                                   | D                        | E                             | F                             | G                          | H                              | I                             | J                        | K                                       | L                        | M   | N  | O  | P  | Q                    | R                | S   | T                    | U                | V   |
|--------|-------------------|-------------------------------------|--------------------------|-------------------------------|-------------------------------|----------------------------|--------------------------------|-------------------------------|--------------------------|---|--------------------------|---|--|--|--|----------------------|------------------|---|----------------------|------------------|---|
| Day    | Rainfall<br>(in.) | Flow Meter<br>Pump Sta. A<br>(gal.) | Reading<br>PS-B<br>(in.) | Section 9<br>Pump 1<br>(gal.) | Section 9<br>Pump 2<br>(gal.) | Section 9<br>LDS<br>(gal.) | Sections 7-8<br>Pump<br>(gal.) | Sections 7-8<br>LDS<br>(gal.) | Pond B<br>Depth<br>(ft.) | Pond B<br>Effluent<br>Sprayed<br>(gal.) | Pond A<br>Depth<br>(ft.) | Effluent<br>Spray<br>Irrigation<br>(gal.) | Depth in<br>575K Tank<br>Leachate<br>(ft.) | Depth in<br>575K Tank<br>Effluent<br>(ft.) | Leachate<br>Treated<br>at LTRF<br>(gal.) | Leachate Hauled      |                  | Leachate<br>Dust Control<br>(Sprayed)<br>(gal.) | Effluent Hauled      |                  | Effluent<br>Dust Control<br>(Sprayed)<br>(gal.) |
|        |                   |                                     |                          |                               |                               |                            |                                |                               |                          |   |                          |   |  |  |  | Contractor<br>(gal.) | County<br>(gal.) |   | Contractor<br>(gal.) | County<br>(gal.) |   |
| 1      | 0.00              | 3,068,989                           | 18.8                     | 2,681,480                     | 2,520,277                     | 5,885,267                  | 191,391                        | 92,954                        | 0.0                      | 0.0                                     | 1.0                      | 0   | 9.00                                       | 7.50                                       | 16,099                                   | 0                    | 0                | 0   | 0                    | 0                | 0   |
| 2      | 0.00              | 3,129,433                           | 20.8                     | 2,683,788                     | 2,520,277                     | 5,885,267                  | 195,690                        | 92,980                        | 0.0                      | 0.0                                     | 1.0                      | 38,638                                    | 10.00                                      | 8.00                                       | 16,098                                   | 42,188               | 35,809           | 0   | 0                    | 7,120            | 0   |
| 3      | 0.00              | 3,195,013                           | 15.7                     | 2,687,255                     | 2,520,278                     | 5,885,267                  | 200,980                        | 93,005                        | 0.0                      | 0.0                                     | 0.0                      | 0   | 10.00                                      | 7.33                                       | 16,257                                   | 42,051               | 43,002           | 0   | 0                    | 0                | 0   |
| 4      | 0.00              | 3,257,640                           | 19.9                     | 2,690,725                     | 2,520,278                     | 5,885,267                  | 206,310                        | 93,025                        | 0.0                      | 0                                       | 1.4                      | 0   | 9.50                                       | 7.00                                       | 15,266                                   | 42,030               | 42,930           | 0   | 0                    | 0                | 0   |
| 5      | 0.00              | 3,326,160                           | 17.7                     | 2,693,914                     | 2,520,339                     | 5,885,267                  | 209,875                        | 93,053                        | 0.0                      | 0.0                                     | 1.4                      | 0   | 8.33                                       | 7.58                                       | 23,027                                   | 42,434               | 42,925           | 0   | 0                    | 0                | 0   |
| 6      | 0.00              | 3,385,056                           | 17.2                     | 2,694,559                     | 2,522,475                     | 5,885,347                  | 211,840                        | 93,078                        | 0.0                      | 0                                       | 1.4                      | 0   | 8.08                                       | 8.25                                       | 22,873                                   | 42,266               | 42,775           | 0   | 0                    | 0                | 0   |
| 7      | 0.00              | 3,447,599                           | 14.7                     | 2,697,574                     | 2,522,475                     | 5,885,375                  | 219,605                        | 93,101                        | 0.0                      | 0                                       | 1.8                      | 0   | 7.50                                       | 8.33                                       | 24,303                                   | 36,474               | 42,756           | 0   | 0                    | 0                | 0   |
| 8      | 0.00              | 3,497,455                           | 16.6                     | 2,699,967                     | 2,522,475                     | 5,885,384                  | 224,252                        | 93,128                        | 0.0                      | 0.0                                     | 1.8                      | 0   | 7.59                                       | 9.04                                       | 24,303                                   | 0                    | 0                | 0   | 0                    | 0                | 0   |
| 9      | 0.00              | 3,547,310                           | 18.4                     | 2,702,359                     | 2,522,475                     | 5,885,393                  | 228,899                        | 93,155                        | 0.0                      | 0.0                                     | 1.8                      | 0   | 7.67                                       | 9.75                                       | 34,303                                   | 42,987               | 42,678           | 0   | 0                    | 0                | 0   |
| 10     | 0.00              | 3,604,280                           | 19.9                     | 2,706,210                     | 2,522,475                     | 5,885,407                  | 234,051                        | 93,155                        | 0.0                      | 0                                       | 3.6                      | 38,640                                    | 6.25                                       | 7.33                                       | 29,487                                   | 43,832               | 42,835           | 0   | 0                    | 0                | 0   |
| 11     | 0.00              | 3,662,920                           | 15.0                     | 2,709,082                     | 2,522,475                     | 5,885,414                  | 242,227                        | 93,180                        | 0.0                      | 0.0                                     | 2.9                      | 43,420                                    | 6.33                                       | 8.25                                       | 30,787                                   | 0                    | 21,449           | 0   | 0                    | 21,347           | 0   |
| 12     | 0.00              | 3,729,979                           | 19.0                     | 2,711,199                     | 2,522,477                     | 5,885,686                  | 257,192                        | 93,212                        | 0.0                      | 0.0                                     | 2.1                      | 0   | 7.58                                       | 8.25                                       | 32,075                                   | 0                    | 7,159            | 0   | 0                    | 28,511           | 0   |
| 13     | 0.00              | 3,790,473                           | 17.1                     | 2,713,999                     | 2,522,477                     | 5,885,701                  | 257,213                        | 93,229                        | 0.0                      | 0                                       | 2.1                      | 0   | 9.33                                       | 8.33                                       | 28,429                                   | 0                    | 35,711           | 0   | 0                    | 7,124            | 0   |
| 14     | 0.00              | 3,849,117                           | 16.9                     | 2,717,053                     | 2,522,477                     | 5,885,886                  | 260,545                        | 93,257                        | 0.0                      | 0.0                                     | 2.1                      | 0   | 9.50                                       | 9.25                                       | 33,452                                   | 0                    | 42,796           | 0   | 0                    | 0                | 0   |
| 15     | 0.00              | 3,908,537                           | 17.4                     | 2,719,895                     | 2,522,477                     | 5,886,007                  | 264,719                        | 93,282                        | 0.0                      | 0.0                                     | 2.1                      | 0   | 9.84                                       | 10.25                                      | 33,453                                   | 0                    | 0                | 0   | 0                    | 0                | 0   |
| 16     | 0.00              | 3,967,957                           | 17.8                     | 2,722,737                     | 2,522,477                     | 5,886,127                  | 268,892                        | 93,306                        | 0.0                      | 0.0                                     | 2.1                      | 0   | 10.17                                      | 11.25                                      | 33,452                                   | 43,875               | 35,833           | 0   | 0                    | 7,118            | 0   |
| 17     | 0.00              | 4,027,638                           | 22.3                     | 2,726,601                     | 2,522,477                     | 5,886,120                  | 272,343                        | 93,332                        | 0.0                      | 0.0                                     | 2.1                      | 0   | 8.33                                       | 12.25                                      | 40,517                                   | 43,865               | 42,893           | 0   | 0                    | 0                | 0   |
| 18     | 0.00              | 4,082,102                           | 17.6                     | 2,729,633                     | 2,522,477                     | 5,886,189                  | 277,311                        | 93,352                        | 0.0                      | 0.0                                     | 2.1                      | 0   | 7.50                                       | 13.25                                      | 31,405                                   | 43,698               | 42,930           | 0   | 0                    | 0                | 0   |
| 19     | 0.00              | 4,136,160                           | 15.6                     | 2,731,239                     | 2,522,477                     | 5,886,189                  | 280,737                        | 93,380                        | 0.0                      | 0.0                                     | 3.4                      | 0   | 6.17                                       | 12.25                                      | 39,482                                   | 43,268               | 21,488           | 0   | 0                    | 21,332           | 0   |
| 20     | 0.00              | 4,193,483                           | 20.9                     | 2,734,342                     | 2,522,477                     | 5,886,291                  | 285,729                        | 93,380                        | 0.0                      | 0.0                                     | 3.4                      | 0   | 6.83                                       | 12.00                                      | 31,325                                   | 0                    | 0                | 0   | 0                    | 14,336           | 0   |
| 21     | 0.00              | 4,245,704                           | 18.6                     | 2,737,097                     | 2,522,478                     | 5,886,378                  | 289,016                        | 93,380                        | 0.0                      | 0.0                                     | 3.2                      | 61,236                                    | 8.08                                       | 12.33                                      | 32,261                                   | 0                    | 0                | 0   | 0                    | 0                | 0   |
| 22     | 0.00              | 4,302,480                           | 18.7                     | 2,739,919                     | 2,522,478                     | 5,886,488                  | 293,169                        | 93,380                        | 0.0                      | 0.0                                     | 3.2                      | 0   | 8.88                                       | 13.38                                      | 32,661                                   | 0                    | 0                | 0   | 0                    | 0                | 0   |
| 23     | 0.00              | 4,359,256                           | 18.7                     | 2,742,740                     | 2,522,478                     | 5,886,597                  | 297,322                        | 93,380                        | 0.0                      | 0.0                                     | 2.1                      | 0   | 9.67                                       | 14.42                                      | 32,661                                   | 43,276               | 35,831           | 0   | 0                    | 7,122            | 0   |
| 24     | 0.00              | 4,419,655                           | 17.5                     | 2,745,206                     | 2,522,478                     | 5,886,597                  | 302,230                        | 93,380                        | 0.0                      | 0.0                                     | 3.8                      | 0   | 9.58                                       | 11.17                                      | 6,804                                    | 21,001               | 42,913           | 0   | 20,692               | 0                | 0   |
| 25     | 0.00              | 4,477,943                           | 14.8                     | 2,748,508                     | 2,522,478                     | 5,886,613                  | 307,220                        | 93,380                        | 0.0                      | 0.0                                     | 3.7                      | 55,308                                    | 10.00                                      | 11.00                                      | 6,804                                    | 42,302               | 42,967           | 0   | 0                    | 0                | 0   |
| 26     | 0.00              | 4,544,263                           | 17.4                     | 2,751,676                     | 2,522,478                     | 5,886,613                  | 310,595                        | 93,380                        | 0.0                      | 0.0                                     | 1.6                      | 55,307                                    | 9.33                                       | 11.00                                      | 2,794                                    | 44,141               | 42,984           | 0   | 0                    | 0                | 0   |
| 27     | 0.00              | 4,601,510                           | 16.0                     | 2,754,961                     | 2,522,478                     | 5,886,629                  | 315,533                        | 93,380                        | 0.0                      | 0.0                                     | 1.5                      | 0   | 8.33                                       | 11.75                                      | 5,196                                    | 46,864               | 28,547           | 0   | 0                    | 0                | 0   |
| 28     | 0.00              | 4,656,353                           | 19.0                     | 2,756,388                     | 2,522,479                     | 5,886,636                  | 318,901                        | 93,380                        | 0.0                      | 0.0                                     | 1.5                      | 0   | 7.67                                       | 12.00                                      | 16,643                                   | 23,349               | 21,376           | 0   | 15,545               | 21,624           | 0   |
| 29     | 0.00              | 4,710,849                           | 17.3                     | 2,759,375                     | 2,522,479                     | 5,886,651                  | 323,060                        | 93,380                        | 0.0                      | 0.0                                     | 1.5                      | 0   | 9.34                                       | 11.50                                      | 2,519                                    | 0                    | 0                | 0   | 0                    | 0                | 0   |
| 30     | 0.00              | 4,765,345                           | 15.5                     | 2,762,361                     | 2,522,479                     | 5,886,665                  | 327,218                        | 93,380                        | 0.0                      | 0.0                                     | 1.6                      | 49,912                                    | 11.00                                      | 11.00                                      | 2,793                                    | 44,066               | 42,690           | 0   | 0                    | 0                | 0   |
| 31     | 0.01              | 4,823,032                           | 14.5                     | 2,765,331                     | 2,522,479                     | 5,886,686                  | 332,414                        | 93,658                        | 0.0                      | 0.0                                     | 2.3                      | 0   | 10.33                                      | 10.08                                      | 18,719                                   | 43,585               | 64,388           | 0   | 0                    | 28,752           | 0   |
| Totals | 0.01              |                                     |                          |                               |                               |                            |                                |                               |                          | 0                                       |                          | 342,461                                   |  |  | 716,248                                  | 817,552              | 907,665          | 0   | 36,237               | 164,386          | 0   |

balance2020\3-20bal.xls

Notes:

- NR = No Records, NA = Not Available.
- Values in bold are estimated; values in italic are substitute for missing data and are based on averaged values
- Columns G and J include quantities from leak detection system.
- Column B, trace is less than 0.01 inches.
- Columns C, D, E, F, G, H, I, J, K, L, N, R-V and W are quantities from flow meters.
- Columns K and M measured from staff gages in each pond.

| Type of Cover | Phases I-VI<br>acres | Section 7-9<br>acres |
|---------------|----------------------|----------------------|
| Open          | 5                    | 0                    |
| Intermediate  | 134.4                | 34.5                 |
| Final         | 23                   | 0                    |
| Not Opened    | 0                    | 0                    |

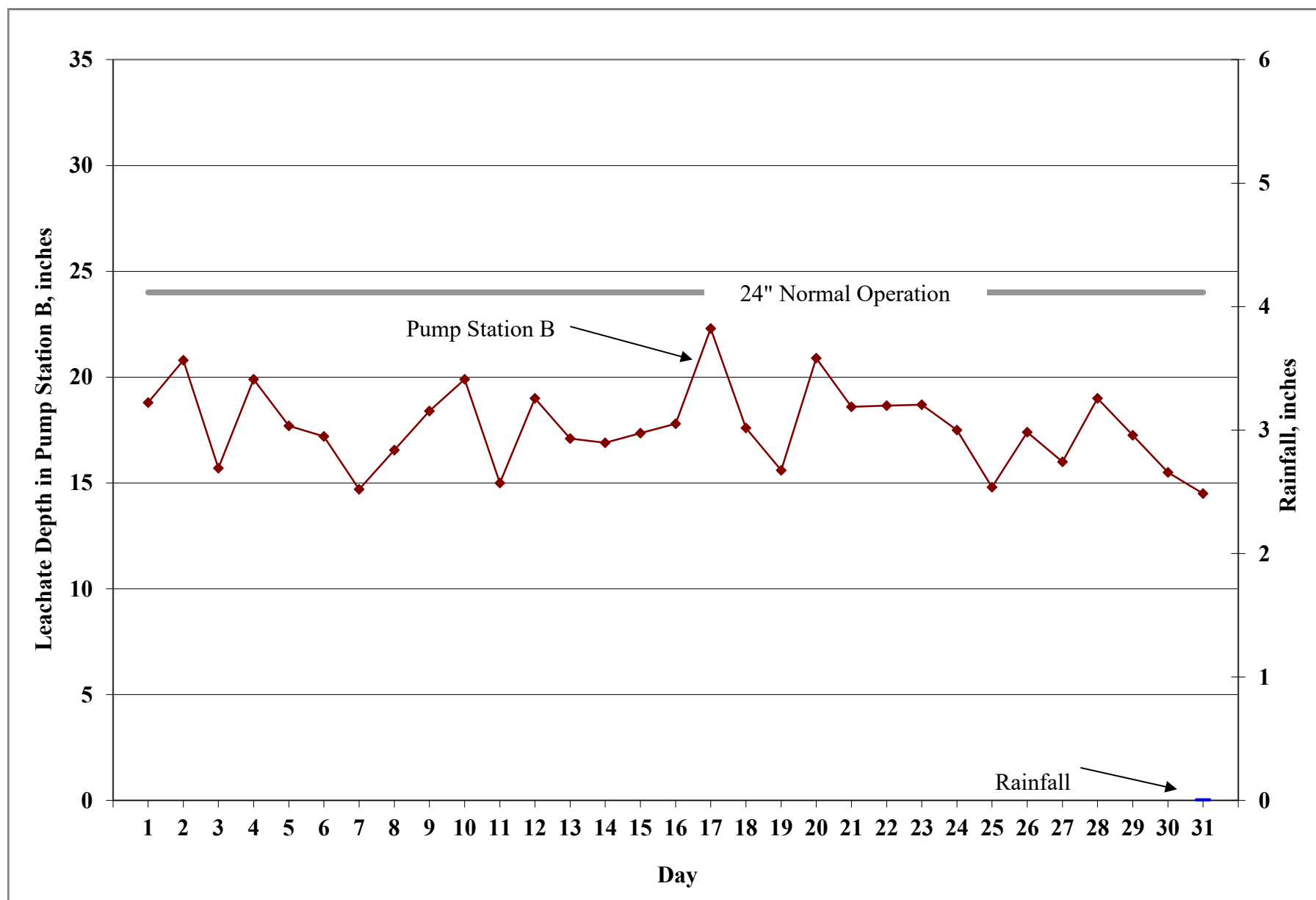


Figure 1. Leachate Levels in Pump Station B and Rainfall for March 2020.

**TABLE 3. LEACHATE BALANCE SUMMARY  
SOUTHEAST COUNTY LANDFILL  
HILLSBOROUGH COUNTY, FLORIDA  
YEAR-2020**

| Month     | Rainfall<br>(in.) | Leachate Arriving at LTRF                |  |  |  | Leachate Leaving LTRF                           |   |  | Effluent Disposal                     |   |                                  | Inflow / Outflow For LTRF            |   |  |
|-----------|-------------------|--|--|--|--|---|---|--|---------------------------------------|---|----------------------------------|--------------------------------------|---|--|
|           |                   | Condensate<br>from LFG<br>CS-1<br>(gal.) | Leachate<br>from Section 9<br>Pumped to LTRF<br>(gal.) | Leachate<br>from Section 7-8<br>Pumped to LTRF<br>(gal.) | Leachate<br>from Phases I-VI<br>Pumped to LTRF<br>(gal.) | Total Leachate<br>Hauled<br>from LTRF<br>(gal.) | Leachate<br>Dust Control<br>(Sprayed)<br>(gal.) | Leachate<br>Treated at<br>LTRF<br>(gal.) | Total<br>Effluent<br>Hauled<br>(gal.) | Effluent<br>Dust Control<br>(Sprayed)<br>(gal.) | Effluent<br>Irrigation<br>(gal.) | Total Inflow<br>to<br>LTRF<br>(gal.) | Total Outflow<br>from<br>LTRF<br>(gal.) | Change<br>in<br>Storage <sup>3</sup><br>(gal.) |
| January   | 0.58              | 909                                      | 141,635  | 217,468  | 3,079,565  | 2,360,372                                       | 0   | 853,457                                  | 0                                     | 0   | 544,716                          | 3,439,577                            | 3,213,829                               | 225,748  |
| February  | 1.66              | 1,881                                    | 89,491   | 152,518  | 2,483,841  | 1,621,644                                       | 0   | 883,611                                  | 507,900                               | 0   | 435,684                          | 2,727,731                            | 2,505,255                               | 222,476  |
| March     | 0.01              | 110                                      | 90,346   | 145,289  | 2,365,967  | 1,725,209                                       | 0   | 716,248                                  | 200,631                               | 0   | 342,461                          | 2,601,712                            | 2,441,457                               | 160,255  |
| April     |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| May       |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| June      |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| July      |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| August    |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| September |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| October   |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| November  |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| December  |                   |  |  |  |  |   |   |  |                                       |   |                                  |                                      |   |  |
| YTD Total | 2.25              | 2,900                                    | 321,472  | 515,275  | 7,929,373  | 5,707,225                                       | 0   | 2,453,316                                | 708,531                               | 0   | 1,322,861                        | 8,769,020                            | 8,160,541                               | 608,479  |

Note:

1. If the bypass at the effluent pond is ever used to pump effluent back to the LTRF, this table must be modified.
2. Change in storage represents total inflow to LTRF minus total outflow from LTRF.