

Inspection ID: 3438286

# **Municipal Waste Landfill Inspection Report**

| Permit Number          | 100022                             | EPA ID Number       |                       |
|------------------------|------------------------------------|---------------------|-----------------------|
| Facility Name          | CHRIN BROS SANI LDFL               | Operator Name       | CHRIN BROS INC        |
| Address                | 1225 INDUSTRIAL DR                 | Address             | 1225 INDUSTRIAL DR    |
| City/State/Zip         | EASTON PA 18042-6829               | City/State/Zip      | EASTON PA 18042-6829  |
| Municipality           | Williams Township                  | County              | Northampton           |
| Responsible Official   | Gregory Chrin                      | Title               | Owner/Operator        |
| Person Interviewed     | Joseph Klobusicky                  | Title               | Environmental Manager |
|                        |                                    | Telephone #         | 1                     |
| Lead Inspector         | AMY E FAULCH                       | Title               | SLD WSTE SUPV         |
| Additional Personnel   | MAATTHEW GLOGOWSKI                 | Title               |                       |
| Site ID                | 238053                             | Client ID           | 42952                 |
| PF ID                  | 240650                             | SF ID               | 201820                |
| Inspection Start Date  | 09/26/2022 08:43 AM                | Inspection End Date | 09/28/2022 02:00 PM   |
| Inspection Type        | RTNC - Routine/Complete Inspection | Inspection Result   | No Violations Noted   |
| Permit Expiration Date | 01/06/2030                         | Days/Week Operated  | 6                     |
|                        |                                    | Max. Daily Volume   | 2000 Tons/Day         |

# **Check Lists**

| Municipal Waste Landfill (0131) |   |           |  |
|---------------------------------|---|-----------|--|
| Status                          | Requirement Chapter Citation  | Line Item |  |
|                                 | GENERAL PROVISIONS  |           |  |
| No Violation                    | Required insurance in effect 271.371  | 1         |  |
|                                 | (expiration date) 12/01/2022  | 1A        |  |
| No Violation                    | Operation in accordance with approved plans and 273.201(c)(2) permit.       | 2         |  |
| No Violation                    | Operation within permit boundaries (vertical and 273.201(c)(2) horizontal). | 3         |  |
| No Violation                    | Disposal Timing and sequence as per Section 273.201(c)(2) 273.112(1).       | 4         |  |

| No Violation   | No unapproved wastes or liquids.  | 273.201(d)-(m)  | 5  |
|----------------|---|-----------------|----|
| No Violation   | Isolation distances are adhered to.   | 273.202(a)      | 6  |
| No Violation   | Facilities certification requirements followed.   | 273.203(a), (b) | 7  |
| No Violation   | Written Department approval of new construction prior to waste disposal.  | 273.203(c)      | 8  |
|                | DAILY OPERATIONS  |                 |    |
| No Violation   | Proper signs posted.  | 273.211(a)      | 9  |
| No Violation   | Site perimeter clearly marked and grid coordinate system in use.  | 273.211(b)-(d)  | 10 |
| No Violation   | Proper barriers installed around site and access controlled when attendant not present.   | 273.212(a)-(i)  | 11 |
| No Violation   | Access roads maintained and negotiable by collection vehicles.  | 273.213(a)-(i)  | 12 |
| No Violation   | Approved means of measuring and inspected waste utilized.   | 273.214(a), (b) | 13 |
| No Violation   | Adequate equipment on-site and stand-by equipment available.  | 273.215(a), (b) | 14 |
| No Violation   | Vehicles directed promptly to unloading area and promptly unloaded.   | 273.216(a), (b) | 15 |
| No Violation   | Solid waste spread and compacted as approved by Department as part of permit.   | 273.216(c)      | 16 |
| Not Determined | Operator implements fugitive air contaminant control/measures and prevents and controls air pollution including no exceeding of ambient air quality standards, no open burning, and minimizing generation of fugitive dust emissions from facility. |                 | 17 |
| Not Determined | Operator complies with Air Quality Plan approval and Air quality Operating Permit.  | 273.217(b)      | 18 |
| No Violation   | Operator does not cause or allow attraction, harborage, or breeding of vector.  | 273.218(a)      | 19 |
| Not Determined | Operator implements nuisance minimization and control plan.   | 273.218(b)(1)   | 20 |

| No Violation   | Operator performs regular, frequent, and comprehensive site inspections to reduce potential for offsite odors.   | 273.218(b)(2) | 21 |
|----------------|--|---------------|----|
| No Violation   | Operator promptly addresses and correct problems and deficiencies discovered during inspections.   | 273.218(b)(3) | 22 |
| Not Determined | Operator implements nuisance minimization and control plan to minimize and control other conditions harmful to the environment or public health, or which create safety hazards, odors, dirt, noise, unsightliness and other public nuisances. | 273.218(c)    | 23 |
| No Violation   | Operator does not receive solid waste at a landfill in excess of the maximum or average daily volume approved in the permit.   | 273.221(a)    | 24 |
| No Violation   | Operator implements radiation protection action plan.  | 273.223(a)    | 25 |
| No Violation   | Operator monitors incoming waste in accordance with Department's guidance or in a manner at least as protective of the environment, facility staff and public health and safety.   | 273.223(b)    | 26 |
| No Violation   | Radiation detector elements shall be as close as practical to wasteload and in appropriate geometry to monitor the waste.  | 273.223(c)    | 27 |
| No Violation   | Operator has portable radiation monitors capable of determining the dose rate and presence of contamination of a vehicle that has caused an alarm. Upon exceedance of alarm level, a radiological survey of the vehicle is performed.          | 273.223(d)    | 28 |
| No Violation   | Operator notifies Department immediately and isolates vehicle when radiation dose rates are exceeded.  | 273.223(e)    | 29 |
| No Violation   | Monitoring equipment is calibrated at frequency specified by manufacturer, but not less than once a year.  | 273.223(f)    | 30 |
| No Violation   | If radioactive material is detected, vehicle containing material shall not leave facility without written Department approval and an authorized federal Department of Transportation exemption form.   | 273.223(g)    | 31 |

| No Violation   | Uniform cover of the approved daily cover material is placed on exposed solid waste at the end of each working day or at the end of every 24 hours, whichever interval is less. | 273.232(a)     | 32 |
|----------------|---|----------------|----|
| No Violation   | If intermediate cover requires revegetation, it is established within 30 days.  | 273.233(e)     | 33 |
| No Violation   | Slopes constructed during daily landfilling and intermediate cover activities may not exceed 50 percent.  | 273.233(f)     | 34 |
| No Violation   | Operator does not cause or allow waste pollution within or outside the site from operation of the facility.   | 273.241(a)-(c) | 35 |
| Not Applicable | Operator has restored or replaced adversely affected water supply with an alternative source of like quantity and quality.  | 273.245(a)     | 36 |
| Not Applicable | Temporary water supply is provided within 48 hours.   | 273.245(b)     | 37 |
| Not Applicable | Permanent water supply is provided within 90 days.  | 273.245(c)     | 38 |
| No Violation   | No waste 15 feet of inside top of the lined perimeter berm.   | 273.252(e)     | 39 |
| No Violation   | Lined perimeter berm 4 ft. high constructed and maintained along edge of the lined disposal area.   | 273.252(f)     | 40 |
| No Violation   | Edge of liner clearly marked.   | 273.252(g)     | 41 |
| Not Applicable | Alternate leachate recirculation method may be used if approved if one of the liner systems is a composite liner.   | 273.274(b)     | 42 |
| No Violation   | Underground pipes used to transport leachate to leachate storage impoundments or tanks equipped with secondary containment or comply with 245.445.                              | 273.275(g)     | 43 |
| Not Applicable | Operator isolates coal seams, coal outcrops and coal refuse from waste deposits to prevent combustion of waste and damage to liner.   | 273.291(a)     | 44 |
| Not Applicable | Mine openings within site sealed as approved by Department.   | 273.291(b)     | 45 |
| Not Applicable | Operator implements plan for controlling potential damage from subsidence submitted and approved under 273.120.   | 273.291(c)     | 46 |

| Not Determined | Landfill designed, constructed, maintained and operated to prevent and minimize potential for fire, explosion, or release of solid waste constituents into air, water, or soil of the Commonwealth.  | 273.301                          | 47 |
|----------------|--|----------------------------------|----|
| No Violation   | Emergency equipment including portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment available. For fire equipment requiring water, facility has a water supply of or adequate quantity and pressure to supply the equipment. | 273.302(a)                       | 48 |
| No Violation   | Emergency equipment tested and maintained.   | 273.302(c)                       | 49 |
| No Violation   | Adequate space maintained to allow unobstructed movement of emergency personnel and equipment.   | 273.302(d)                       | 50 |
| No Violation   | Litter controlled/collected and barriers/fences in place.  | 273.220(a)-(c)                   | 51 |
|                | COVER/SLOPES/REVEGETATION  |                                  |    |
| Not Determined | Daily/intermediate cover meets performance and design requirements.  | 273.232(b), 273.233(b), (c)      | 52 |
| No Violation   | Minimum 5 day supply of daily and intermediate cover maintained on-site.   | 273.232(c) & 273.233(d)          | 53 |
| No Violation   | Intermediate cover applied within time limits.   | 273.233(a)                       | 54 |
| No Violation   | Intermediate slopes do not exceed 50%.   | 273.232(d)                       | 55 |
| No Violation   | Cap placed over entire surface of final lift meets performance standards.  | 273.234(a)(1)                    | 56 |
| No Violation   | Final cover meets performance and design requirements; applied within time limits.   | 273.234(b)-(e)                   | 57 |
| No Violation   | Final slopes stable and erosion controlled.  | 273.234(f)                       | 58 |
| No Violation   | Final slopes graded 3-15% or terraced to 33% as approved.  | 273.234(g)                       | 59 |
| No Violation   | Minimum revegetation and successful revegetation requirements adhered to.  | 273.235(a)-(e) & 273.236(a), (b) | 60 |
|                | WATER QUALITY PROTECTION   |                                  |    |
| No Violation   | Surface and groundwater treatment facilities properly operated and maintained.   | 273.241(b)                       | 61 |

| No Violation   | Surface water percolation minimized/prevented.   | 273.242(b)(1) & 273.234(e)(4) | 62 |
|----------------|--|-------------------------------|----|
| Not Determined | Soil erosion and sedimentation controls designed and implemented as per approved plans; gullies over nine inches repaired.   | 273.242(a)-(c)                | 63 |
| No Violation   | Sedimentation ponds and discharge structures designed, constructed, operated, and maintained in accordance with Chapters 273, 102, and 105.  | 273.243(a)-(g) & 273.244      | 64 |
|                | LINER SYSTEM   |                               |    |
| No Violation   | Liner system designed, constructed, operated, and maintained when required.  | 273.251(a), (b)               | 65 |
| No Violation   | Edge of liner requirements adhered to (i.e., no waste within 25 feet if adjacent liner, 4 feet high lined berm, to prevent lateral escape of leachate, adequate spacing on inside of berm to collect stormwater and sediment). | 273.252(d)                    | 66 |
| No Violation   | Leachate detection zone monitored weekly.  | 273.255(c)                    | 67 |
| No Violation   | Protective cover protects primary liner and leachate collection system and allows free flow of leachate into the collection system.  | 273.257(a)                    | 68 |
| No Violation   | Protective cover meets minimum requirements and at least 18 inches thick.  | 273.257(b)                    | 69 |
| No Violation   | Leachate collection system within protective cover meets minimum requirements.   | 273.258(a), (b)               | 70 |
| No Violation   | Barrier designed, constructed and maintained as required to prevent lateral migration of leachate off-site in surface mined areas.   | 273.259(a)-(d)                | 71 |
| No Violation   | 8 feet of select waste placed over protective cover.   | 273.260                       | 73 |
|                | LEACHATE TREATMENT   |                               |    |
| No Violation   | Leachate collected and handled through Department approved method(s).  | 273.272(a)-(c)                | 74 |
| Not Applicable | Leachate transportation requirements adhered to.   | 273.273(a)-(c)                | 75 |
| No Violation   | Cessation of site operation if alternate leachate handling not available.  | 273.273(d)                    | 76 |
| Not Applicable | Leachate treatment system permitted and fully operational at least 3 years before closure.   | 273.273(e)                    | 77 |

| Not Applicable | Leachate recirculation in accordance with regulations.  | 273.274(1)-(4)            | 78 |
|----------------|---|---------------------------|----|
| No Violation   | Leachate collection and storage systems on-site have capacity of 30 days or 250,000 gallons, whichever is greater.      | 273.275(a)-(f)            | 79 |
| No Violation   | Leachate flow rate measured daily; analyzed quarterly.  | 273.276(a)-(b)            | 80 |
| No Violation   | Department notified when remedial action(s) required.   | 273.277(1)-(4)            | 81 |
|                | WATER QUALITY MONITORING  |                           |    |
| No Violation   | Approved monitoring system installed and maintained.  | 273.281(a), (b) & 273.283 | 82 |
| No Violation   | Quarterly and annual monitoring requirements adhered to and results submitted Department within time constraints.       | 273.284 & 273.285         | 83 |
| No Violation   | Groundwater assessment plan submitted and implement as required.  | 273.286(a)-(g)            | 84 |
| No Violation   | Groundwater abatement plan submitted and implemented as required.   | 273.287(a)-(f)            | 85 |
|                | RECORDKEEPING AND REPORTING   | <del></del>               |    |
| No Violation   | Operational records maintained, available and submitted as required.  | 273.288 & 273.311-273.313 | 86 |
| No Violation   | Daily Operational Records kept in accordance with regulations for the life of the facility bond or longer if necessary. | 273.311(d)                | 87 |
| No Violation   | Operator submits quarterly operation report.  | 273.312                   | 88 |
| No Violation   | Operator submits annual operation report with fee.  | 273.313                   | 89 |
|                | MINERALS AND GAS  |                           |    |
| Not Determined | Gas venting and monitoring in accordance with approved plans.   | 273.292(a)-(d)            | 90 |
| Not Determined | Combustible gas levels not exceeded.  | 273.292(e)                | 91 |
| Not Determined | Forced gas venting if required.   | 273.292(f)                | 92 |
| Not Determined | Gas recovery conducted as per approved plan and §273.293, including annual analysis.                                    | 273.293(a), (b)           | 93 |
|                | EMERGENCY PROCEDURES  |                           |    |

| No Violation   | Contingency plan implemented if there is an emergency.   | 273.303(a)-(c)  | 94  |
|----------------|--|-----------------|-----|
|                | RECYCLING  |                 |     |
| No Violation   | Operator shall salvage and recycle waste in accord with recycling plan. (273.196)  | 273.331(a)      | 95  |
| No Violation   | Salvaging and recycling controlled by operator and prevents interference within operations and prevents health hazardous nuisance.     | 273.331(b)      | 96  |
| No Violation   | Salvaged materials stored in an approved area or transported offsite.  | 273.331(c)      | 97  |
| No Violation   | Drop off center established for at least three recyclables.  | 273.332(a)      | 98  |
| No Violation   | Drop off center properly located, contains bins or containers, open at least 8 hours per week and 4 hours during evenings or weekends. | 273.332(b), (c) | 99  |
| No Violation   | Approved public notice of availability of drop off center availability is provided.  | 273.332(d)      | 100 |
| No Violation   | On or before January 15 each year, operator informs municipality in writing of weight and type of materials recycled previous year.    | 273.332(e)      | 101 |
|                | SPECIAL HANDLING AND RESIDUAL WA   | STES            |     |
| No Violation   | Special handling and residual wastes disposed with prior Department approval, and in accordance with permit and Chapter 273.           | 273.501         | 102 |
| Not Applicable | Infectious waste disposal restrictions adhered to.   | 273.511(a)-(d)  | 103 |
| Not Applicable | Chemotherapeutic waste disposal restrictions adhered to.   | 273.512         | 104 |
| No Violation   | Sewage sludge co-disposal and monofill requirements followed.  | 273.513         | 105 |
| No Violation   | Sewage sludge sampling requirements adhered to and sludge meets standards for control of pathogens, vectors, and odors.                | 273.513(c)      | 106 |
| Not Applicable | Disposal of municipal waste incineration ash in landfill or landfill cell that meets Chapter 273 requirements.                         | 273.514(a)      | 107 |



Inspection ID: 3438286

| Not Applicable | Ash residue disposal in dedicated landfill or landfill cell unless co-disposal in accordance with Chapter 273 (including leachability treatment). | 273.514(b) | 108  |
|----------------|---|------------|------|
| Not Applicable | Ash residue covered immediately or as approved by the Department.   | 273.514(c) | 109  |
|                | BONDING AND INSURANCE   |            |      |
| No Violation   | Bond filed with Department.   | 271.312    | 110  |
| No Violation   | Bond maintained in an amount and with guarantees as required.   | 271.333(b) | 111  |
|                | Bond amount \$  |            | 111A |
|                | Phased deposit due date 12/01/2022  |            | 111B |
| No Violation   | Proof of a commercial policy of liability insurances submitted to the Department as specified by 271.374.   | 271.374    | 112  |
|                | Policy # GEC003617610   |            | 112A |
|                | Insurer (company name) Greenwich Insurance<br>Company   |            | 112B |
|                | Expiration Date: 12/01/2022   |            | 112C |

## Comments

The PA Department of Environmental Protection (Department) conducted a routine complete inspection on September 26, 2022 and a routine partial inspection and waste hauler inspection event on September 28, 2022 at Chrin Bros. Sanitary Landfill (Chrin). Representing the Department on 9/26/22 was Amy Faulch (this inspector), Matthew Glogowski and Chris Madden. Joseph Klobusicky provided a site tour and was interviewed on behalf of Chrin. See the 9/26/2022 odor patrol log for weather details. Representing the Department on 9/28/22 was this inspector, Mathew Vipond and Jeremy Scheivert. Tom McMonigle provided a site tour and was interviewed on behalf of Chrin. See narratives below.

The following Department personnel have entered the landfill since the 8/9/22 inspection: A. Faulch and M. Glogowski on 8/9/22; A. Faulch, M. Glogowski and C. Madden on 9/26/22; M. Glogowski on 9/27/22; A. Faulch, M. Vipond and J. Scheivert on 9/28/22.

### 9/26/22 SITE TOUR:



Inspection ID: 3438286

Prior to entering the landfill, this inspector and Chris Madden conducted an odor patrol in the areas surrounding the landfill. A light, intermittent gas odor was detected at the I-78E exit ramp. A light, intermittent "spray paint" odor was detected along Auburn Dr. A light, intermittent gas odor was detected at the intersection of Industrial Dr. and Morgan Hill Rd. A light, intermittent gas odor was detected along Industrial Dr. just east of the landfill entrance and along Morgan Hill Rd. See attached 9/26/22 odor patrol log for details.

This inspector, Mr. Glogowski and Mr. Madden entered the landfill at 0955 hours. During the site tour, this inspector and Mr. Glogowski accompanied Mr. Madden for surface monitoring in the 3D & 3E area. Several elevated methane readings and gas odors were detected in the 3D area. See attached Surface Methane Monitoring Field Sheet. Some areas of note include: GW-139 had a disconnected hose (hose was re-connected during this inspection); A nick in the vacuum line was observed near GW-145; and a low point in a condensate line was observed near GW-202. Chrin conducted follow-up monitoring for the areas of elevated readings on 9/27/22. See attached.

While walking the slopes, this inspector observed some waste flagging in the 3D area, and some washout erosion and flagging on the benches in 3E. Two trucks were dumping at the working face in Cell 3E. No odor was detected to the west of the working face. A hose was spraying water and odor neutralizer on the working face. Perimeter line odor control misters were in operation.

Chrin is preparing the Stage 3D area for final capping, and an anchor trench was dug at the bottom of 3D. The preparations for final capping may explain some of the elevated methane readings in the 3D area. Work has begun on the installation of leachate tank #4. Chrin has continued blasting in the expansion area, and liner installation is complete in Stage 9B. The site area on the north side of Industrial Drive has been cleared in preparation for the new maintenance building.

Chrin has terminated its partnership with EPP, and has ceased sending landfill gas to the landfill gas-to energy plant. Chrin has communicated with the Department regarding their evaluation of future gas-to energy options, however no plan is yet in place.

## 9/26/22 SITE TOUR (efacts ID# 3437977) & WASTE HAULER INSPECTION OPERATION:

On September 28, 2022 the Waste Management program of the Bethlehem District Office conducted a



Inspection ID: 3438286

Waste Hauler Inspection Program (WHIP) event at Chrin. 66 hauler trucks were inspected with three violations issued: one for a leaking truck; one for improper signage; and one for no written waste hauler authorization with the vehicle.

Prior to the site tour, an odor patrol was conducted in the area surrounding Chrin. A light, intermittent gas odor was detected along Spring Valley Rd. Near Mt. Top. A light, intermittent "burning wood/leaves" odor was detected along Waltman Loop Ln. A light, intermittent gas and garbage odor was detected along Morvale Rd. Just before Industrial Dr. A light, intermittent "odor mister" odor was detected along Industrial Dr.

During this site tour, three trucks were dumping in 3E. A light garbage odor was detected in the working face area. Some waste flagging was observed in the former 9A working face area. Some gas odor was also detected in the 3D area. The line misters were in operation and a spray bar mister was in operation near 3D. Flare 3 was running at 1487 scfm and at 1749°F. Chrin is working on hooking up the utility flare during the capping project in 3D, as per Mr. McMonigle.

## COMPLAINT INVESTIGATIONS:

The Department received no odor complaint since the last inspection on 8/9/22. Williams Twp. received one odor complaint on 9/20/22, which Chrin followed up on 9/20/22. See attached odor complaint log. The Department conducted odor patrols on 8/23/22, 9/26/22 and 9/28/22.

## **Check List Comments**

**Line Item 13** - Approved means of measuring and inspected waste utilized.

Remark: Chrin had nineteen overweight trucks in August 35 overweight trucks in September 2022.

**Line Item 20** - Operator implements nuisance minimization and control plan.

**Remark:** Line items #20-23: Daily odor patrol logs were reviewed at the time of this inspection. Chrin's odor patrols and odor control measures appear t be following their nuisance minimization and control plan.

**Line Item 24** - Operator does not receive solid waste at a landfill in excess of the maximum or average daily volume approved in the permit.

**Remark:** Daily tonnages were reviewed. There did not appear to be any exceedances of the 2,000 ton daily limit. The greatest one-day tonnages to date are as follows: 8/22/22: 845 tons; 9/6/22: 890 tons.

**Line Item 25** - Operator implements radiation protection action plan.

**Remark:** Line item # 25-31: Chrin's handheld radiation meter was last calibrated on 8/12/22. Radiation source checks were reviewed on site. Chrin has had no radiation hits since the last inspection.



Inspection ID: 3438286

Line Item 52 - Daily/intermediate cover meets performance and design requirements.

Remark: Some waste flagging was observed in the 3D area. This area is scheduled to be caped the week of 10/3/22.

**Line Item 63** - Soil erosion and sedimentation controls designed and implemented as per approved plans; gullies over nine inches repaired.

**Remark:** Some washout erosion and flagging was observed on the benches in 3E. Chrin is reminded to repair rails and gullies in accordance with 25 Pa. Code 273.242.

**Line Item 80** - Leachate flow rate measured daily; analyzed quarterly.

Remark: Leachate flow rates: August: 43,092 gallons per day. September: 51,837 gallons per day.

**Line Item 90** - Gas venting and monitoring in accordance with approved plans.

**Remark:** 1) Due to the termination of Chrin's relationship with EPP, the Department requested that Chrin provide an alternative plan for beneficial use for their landfill gas, in accordance with the approved plans included with the Eastern Expansion Overlay application. As per Mr. McMonigle, Chrin has completed a gas study and is working on some new engines for energy recovery.

2) Several elevated methane readings were identified at gas wells and drains in the 3D and 3E areas of the landfill. Chrin provided a follow-up to these elevated readings on 9/27/22. Capping of 3D began the week of 10/3/22.

## **Inspection Report Signature Page**

This inspection report is notice of the findings of an inspection conducted by a representative of the Department. This report is formal notification of any violations observed during the inspection. Additional notification of violations may be issued concerning either Violations noted herein, or other violations identified as a result of review of laboratory analyses. This report does not constitute an order or other appealable action of the Department. Nothing contained herein shall be deemed to grant or imply immunity from legal action for any violation noted herein. Signature by the persons interviewed does not necessarily imply concurrence with the findings of this report, but does acknowledge that the person was shown the report or that a copy was left with the person.

# Person Interviewed Unable To Obtain Reason: Sent to facility via email. Inspector Date 10/12/2022

# Surface Methane Monitoring Calibration Form



| Site: Chein Landfill                            | Date: 9/2612022   |
|---|---|
| Model:  | Serial #:   |
| Weather:  | Wind:   |
| P .   |   |
| Zero Accepted (Y/N):                            | Span Accepted (Y/N):                                    |
| D (470  |   |
| Response Time (450 ppm)                         |   |
| $T_1$ : $U_{00}$ sec                            |   |
| $T_2$ : $3.46$ sec                              | Avg Response: 3.82_sec                                  |
| T <sub>3</sub> : <u>\( \( \lambda \) \)</u> sec | Ok if response is <30 sec                               |
| Calibration Precision (500 pp                   | m)  |
| $R_1: 50$ ppm                                   |   |
| R <sub>2</sub> : <u>Ugq</u> ppm                 | $\frac{ 500-R_1 + 500-R_2 + 500-R_3 }{X\ 100} = 0.27\%$ |
| R <sub>3</sub> : 502 ppm                        | 3(500)  |
|   | Ok if deviation is <10%                                 |
| Calibrated by:                                  |   |

# **Surface Methane Monitoring Field Sheet**



| Landfill                                 | Chrin Bros.            | Inspection Date                    | 9126/2    |
|--|------------------------|------------------------------------|-----------|
| Specialist                               | C. Madder<br>A. Fanich | Date Instrument                    | 9/16/1704 |
| Background Location (Upwind of Facility) | (reinard 1 bank        | Background Value (FID Reading ppm) | 3.1       |

| Time | Location                 | FID Reading ppm | Comment   |
|------|--------------------------|-----------------|---|
| 1016 | EW-09                    | 710,000         | gas odor near well.   |
| 1020 | DR-098                   | 2972            | gas odor rear well.   |
| 1023 | EW-147                   | 2998            | 511,1   |
| 1025 | EW-008                   | 710,000         | gas odor near well  |
| 1029 | GW-139                   | 710,000         | hose was disconrected well to see of during maitoing to gas odor e well |
| 1032 | EW-07                    | 710,000         | C & gas odor @ well   |
| 1034 | Hw 36                    | 710,000         |   |
| 1641 | well upstoap of<br>EW-09 | 815             |   |
| 1046 | Gw 200                   | <b>5</b> 3.2    |   |
| 1048 | Gw 201                   | 16.4            |   |
| 1051 | GW 202                   | 28.2            | slightags odol  |
| 1056 | GW 145                   | 110             | nickinvacuum line<br>aas odol near well                                 |
| 105d | EW New                   | 4073            | J = 2 = 2 = 2 = 2 = 2 = 2 = 2 = 2 = 2 =                                 |
| 1101 | EW 011                   | 2009            |   |

| Time | Location                        | FID Reading ppm | Comment              |
|------|---------------------------------|-----------------|----------------------|
| 1103 | Pw 11                           | 59.8            |                      |
| 1105 | EW006                           | 4441            |                      |
| 1107 | EWOIZ                           | 41.0            |                      |
| 1108 | PW 24                           | 141             |                      |
| 1113 | HW 038                          | 1245            |                      |
| 1116 | EW 15                           | 710,000         | gas odor rear well   |
| 1117 | HW039                           | 29.6            |                      |
| 1120 | EW013                           | 35.1            | tall grass rear well |
| 1122 | EWOIY                           | 55.1            |                      |
| 1126 | GW 204                          | 14.2            |                      |
| 1122 | GW 203                          | 3066            |                      |
| 1130 | Gw 206                          | 8.1             |                      |
| 1134 | Gw 205                          | 1517            |                      |
| 1144 | 3D Trap 2?                      | 13.4            |                      |
| 1145 | H W 0 3 4                       | 25.0            |                      |
| 1147 | Cleanouts just 5 of             | 468             |                      |
| 1148 | D2097                           | 1054            |                      |
| 1152 | DRO97<br>Weadjust S of<br>DRO96 | 710,000         |                      |
| 1154 | Drog6                           | 2403            |                      |
| 1159 | DR 095                          | 1064            |                      |
| 1202 | HW035                           | 10.2            |                      |
| 203  | DR094                           | 9,1             |                      |

**Location**: Chrin Bros. Sanitary Landfill, Williams Twp., Northampton County **Date/Time**: 9/26/22 10:00 hours

Photographer: Joseph Klobusicky, Chrin

Landfill Environmental Manager Remarks: Provided via email

**Initials**:



Photo 1: Disconnected hose at Gas Well GW-139.



Photo 2: Disconnected hose at Gas Well GW-139.



Photo 3: Low point in condensate line at GW-202.



Photo 4: Nick in header pipe at GW-145.



Photo 5: Some washout and erosion in 3E bench.



Photo 6: Some washout erosion and flagging in 3E bench.

Investigator: A Faw Ich Date: 8/23/22
Weather Conditions: Cloudy, 76°F, wind We Emph,

630/0 H

CASE: Chan Condfill

ODOR PATROL SURVEY

|                         |   |                | 7                                   | 1217  | Oak Hill        |
|-------------------------|---|----------------|-------------------------------------|-------|-----------------|
| ٥                       |   |                | 2                                   | 1217  | St. to drew     |
|                         |   |                | 7                                   | 13%   | ad Course       |
|                         | =                                       |                | 7                                   | 1316  | Prestwick       |
| W a                     |   |                | 7                                   | 1315  | water ford      |
|                         |   |                | 2                                   | 1315  | Be-thoas        |
|                         |   |                | 7                                   | 16.83 | Pinehust        |
|                         | 265                                     |                | Z                                   | 1313  | Clubhouse       |
|                         |   | III            | Z                                   | 1312  | water Tower     |
|                         |   |                | て                                   | 11 %  | Turabe inin     |
| χ.                      |   |                | 7                                   | 1210  | Club hous       |
|                         |   |                | 2                                   | 1308  | Conaressional   |
|                         |   |                | Z                                   | 138   | Sewceep TAP ant |
|                         | ×                                       |                | 7                                   | 1303  | Auburn          |
|                         |   |                | 7                                   | 1302  | Knollwood       |
|                         |   |                | 7.                                  | 1300  | Ceclanillo      |
|                         |   |                | 2                                   | 1259  | MARYLYCICSTIC   |
|                         |   | 88             | Z                                   | 1256  | 1-78            |
| comments & observations | O = Other (describe)                    | N = None       | N = None                            | TIME  | SURVEY LOCATION |
| CFACTS IN# 54/0926      | G = Garbage<br>S = Sewage<br>D = Dredge | P = Persistent | S = Strong M = Moderate SL = Slight | 100   |                 |
| 5                       | EG = Rotten Egg<br>LFG = Landfill Gas   | ODOR           | ODOR                                | 171   |                 |
|                         | ODOR                                    |                | 15                                  |       |                 |

Weather Conditions: Cloudy, 75°F Wind we 8/45/14 8/23/22

E: Chrin Lands 1

ODOR PATROL SURVEY

|  |  |  | 944 |                                 |      | ò    |      | Spring Valley                          |      |      | Cedanille | امرا   |      | Pine Valley | SURVEY LOCATION         |                                    |                    | •                              |      |
|--|--|--|-----|---------------------------------|------|------|------|--|------|------|-----------|--|------|-------------|-------------------------|------------------------------------|--------------------|--------------------------------|------|
|  |  |  |     | 1837                            | 1334 | 1333 | 1332 | 1328                                   | 1326 | 1325 | 1324      | 1323   | 1322 | 13 19       | TIME                    |                                    |                    |                                |      |
|  |  |  |     | 7                               | 7    | 7    | 2    | 75                                     | Z    | 7    | 7         | ک  | 7    | 7           | N = None                | M = Moderate<br>SL = Slight        | S = Strong         | ODOR                           |      |
|  |  |  |     |                                 |      |      |      | _                                      |      |      |           |  |      |             | N = None                | P = Persistent<br>I = Intermittent | DURATION           |                                |      |
|  |  |  |     |                                 |      |      |      | 6                                      |      |      |           |  |      |             | O = Other (describe)    | S = Sewage<br>D = Dredge           | LFG ≈ Landfill Gas | DESCRIPTION<br>EG = Rotten Egg | ODOR |
|  |  |  |     | Street success rear E. Ottance. |      |      |      | very light aginalize odol & ord of SVR |      |      |           | and the second s |      |             | COMMENTS & OBSERVATIONS | SEXO 10 # 2410156                  |                    |                                |      |

Weather Conditions: Fair, 55°F, wind Sw@ 7mph, 89% H.

Date: 9/16/22

Chrin Land Fill ODOR PATROL SURVEY

Investigator: A Faulch / C, Madden Date: 9/26/22
Weather Conditions:

CASE: Chrin Landfill
ODOR PATROL SURVEY

|                          |                          |                                    |                | 72                       | 937  | Industrial          |   |
|--------------------------|--------------------------|------------------------------------|----------------|--------------------------|------|---------------------|---|
|                          |                          | 0                                  |                |                          | 14°0 | 4:1400              |   |
|                          |                          |                                    |                | 2                        | 930  | Industrial Dr.N 930 |   |
|                          |                          |                                    |                | Z                        | 929  | MHR                 |   |
| of orthonce of regul MHR | light cas 6dol war to of | LFG                                | _              | 75                       | 926  | Industrial          |   |
|                          |                          |                                    |                | Z                        | 923  | Morrale             |   |
|                          |                          |                                    |                | Z.                       | 921  | haltman Logo        |   |
|                          |                          |                                    |                | ح                        | 920  | Mt. TOD             |   |
|                          |                          |                                    |                | Z                        | 218  | Spring Velley       |   |
|                          | C                        |                                    | -              | Z                        | वाभ  | MHR                 |   |
| vertibes are             | light ages ador @ inter  | 77                                 |                | 25                       | 252  | MHRX Industrial     |   |
|                          |                          |                                    |                | Z                        | 913  | Cedarville          |   |
|                          |                          |                                    |                | 7                        | 912  | Congressional       |   |
|                          |                          |                                    |                | 2                        | 911  | Clubhouse           |   |
|                          |                          |                                    |                | ح                        | qos  | P: No Valley        |   |
|                          |                          |                                    |                | 2                        | 400  | Dak H: 11           |   |
|                          |                          |                                    |                | ح                        | 906  | St Andrews          |   |
| ATIONS                   | COMMENTS & OBSERVATIONS  | O = Other (describe)               | N = None       | N = None                 | TIME | SURVEY LOCATION     |   |
|                          |                          | S = Sewage                         | P = Persistent | M = Moderate SL = Slight |      |                     |   |
|                          |                          | LFG = Landfill Gas                 | DURATION       | S = Strong               | •    |                     |   |
|                          |                          | <b>DESCRIPTION</b> EG = Rotten Egg |                | ODOR                     |      |                     |   |
|                          |                          | ODOR                               |                |                          |      |                     | _ |

Page 2 of 3

Investigator: A. Fawloh / C. Madden Date: 9/26/22
Weather Conditions:

CASE: Chrin Land []

ODOR PATROL SURVEY

|                         |   |  |                                   |      | ×               |
|-------------------------|---|--|-----------------------------------|------|-----------------|
|                         |   |  |                                   |      |                 |
|                         |   |  | W).                               |      |                 |
|                         |   |  |                                   |      |                 |
|                         |   |  |                                   |      | ==              |
|                         |   |  | 22                                |      |                 |
|                         |   |  |                                   |      |                 |
|                         |   |  |                                   |      | -               |
|                         |   |  |                                   |      | * 0             |
|                         |   |  |                                   |      |                 |
|                         |   |  |                                   | 198  | ENTER LANDA     |
|                         |   |  | 7                                 | 953  | Industrial 953  |
|                         | 9   | E 4  | ک                                 | 953  | Morvale         |
|                         |   |  | 7                                 | 953  | Prices          |
|                         |   |  | 7                                 | 941  | Chrimlan        |
|                         |   |  | Z                                 | 940  | Berger          |
|                         |   |  | Z                                 | 939  | Morvale         |
| COMMENTS & OBSERVATIONS | S = Sewage<br>D = Dredge<br>O = Other (describe)                | P = Persistent<br>I = Intermittent<br>N = None | M = Moderate SL = Slight N = None | TIME | SURVEY LOCATION |
|                         | ODOR DESCRIPTION EG = Rotten Egg LFG = Landfill Gas G = Garbage | ODOR<br>DURATION                               | ODOR<br>INTENSITY<br>S = Strong   |      | 31<br>V         |
|                         |   |  |                                   | 1    |                 |

Page 3 of 3

Investigator: L. Eleven
Weather Conditions: 2055 Date: H= 7500

CASE: Chin Landell
ODOR PATROL SURVEY

| Waterfact Tens | ST Anchew Luay 1404 | Club Kouse Dr. 1103 | Pirchurst Or. 1102 | Obstair A. 1101 | Tord bong Br. 1100 | Menon CN 1058 | Tunsberg a. 1658 | Englis Creek CT 1058 | Clubbase Dr. 1057 | Congressional Dr. 105 | Cochonylle Ad 1654 | Color Parle Blud 1053 | ENOllwood D. 1052 | Arburs Dr. 1057 | Calm Park Bud 1859 | Codwille Rd 1646 | Industrial Dine 1043 | SURVEY LOCATION TIME N  | S. S             |                 |
|----------------|---------------------|---------------------|--------------------|-----------------|--------------------|---------------|------------------|----------------------|-------------------|-----------------------|--------------------|-----------------------|-------------------|-----------------|--------------------|------------------|----------------------|-------------------------|--|-----------------|
| ζ.             |                     |                     |                    |                 |                    |               | _                |                      |                   |                       | ,                  |                       |                   |                 |                    |                  | 2                    | H                       | S = Strong DU<br>M = Moderate P =<br>SL = Slight   = |                 |
|                |                     |                     |                    |                 |                    |               |                  |                      |                   |                       |                    |                       |                   | =               |                    | , .              |                      | 500                     | DURATION P = Persistent   = Intermittent             | ODOR<br>ODOR    |
|                |                     |                     |                    |                 |                    |               |                  |                      |                   |                       |                    |                       |                   |                 |                    |                  |                      | O = Other (describe)    | LFG = Landtill Gas G = Garbage S = Sewage D = Drødge | EG = Rotten Egg |
|                |                     |                     |                    |                 |                    | 3             |                  |                      |                   |                       |                    |                       |                   |                 |                    |                  |                      | COMMENTS & OBSERVATIONS | CFACTS # 3435345                                     |                 |

Investigator: O.Schenert
Weather Conditions:

CASE: \_

Chun Couffill
ODOR PATROL SURVEY

|       |                   |            |                       |              |              |                                  | 7           | e.              |                |  |              |              |                | -             |                  |              |           |             |   |
|-------|-------------------|------------|-----------------------|--------------|--------------|----------------------------------|-------------|-----------------|----------------|--|--------------|--------------|----------------|---------------|------------------|--------------|-----------|-------------|---|
| Below | Industry Din Note | All Fas ST | I well brat They Mull | Mugasthil Ad | Fredskal Or. | Musia le Rol                     | Mugalhil Rd | Waltman Loca LN | Marray Top Dr. | Soven Valley Rd                            | Magalfill Kd | Closhause Pr | Pin Valley Tow | Clubhouse Dr. | St. Anchors bray | old Court LN | Eclas Ten | Presence On | SURVEY LOCATION   |
| 1134  | 1134              | 11:29      | 1/27                  | 1126         | 1/23         | 1/20                             | ///8        | ////6           | 1116           | ///2                                       | ////         | 11/0         | 1108           | 1/08          | 1167             | 1107         | 1106      | 1106        | TIME  |
| 1     |                   |            |                       | >            | 22           | 25                               | 5           | 56              | ٤              | 25   | //           |              |                |               |                  |              |           | 7           | ODOR INTENSITY S = Strong M = Moderate SL = Slight N = None   |
|       |                   |            |                       |              | 7            | Z                                |             | 7               |                | I  |              |              |                |               |                  |              |           |             | ODOR DURATION P = Persistent I = Intermittent N = None  |
|       |                   |            |                       |              | 0            | LF4/G                            |             | 0               |                | LFG  |              |              |                |               |                  |              |           |             | ODOR DESCRIPTION EG = Rotten Egg LFG = Landfil Gas G = Garbage S = Sewage D = Dredge O = Other (describe) |
| J     |                   |            |                       |              | och mit      | BOR ? I What Just boke Indelical |             | Borny Long/wood | ,              | New (B) & Commanty lost Maintangue lastill |              |              |                |               |                  |              |           |             | COMMENTS & OBSERVATIONS   |

End

| CHRIN ODOR COMPLAINT LOG (1225 Industrial Dr., Easton, PA 18042) |  |
|--|--|
|--|--|

| Date     | Time  | Address                   | Distance from    |       | er Data (Allento<br>w.wundergrour | nd com                     | Residence / Drive-h | y Description / Notes  |                   | Gas               | Management        | Data          | ,            | Date of Initial | Addressed in Insp |
|----------|-------|---------------------------|------------------|-------|-----------------------------------|----------------------------|---------------------|--|-------------------|-------------------|-------------------|---------------|--------------|-----------------|-------------------|
| Dute     | Time  | Addiess                   | Landfill (miles) | Skies | Temperature °F                    |                            | nesidence y Drive-b | y Description / Notes  | Flare 1<br>(scfm) | Flare 3<br>(scfm) | Flare 4<br>(scfm) | PPL (scfm)    | Total (scfm) | Response        | Report Dated      |
| 01/23/22 | 9:47  | Merion Ln., Easton        | 1.744            |       | 20                                | West 2-6mph                | Residence           | heavy gas odor $\&$ methane smell from the landfill on property.   |                   | 521               | 674               | ļ             | 1195         | 01/27/22        | 02/02/22          |
| 03/15/22 | 9:33  | Merion Ln., Easton        | NA               |       | 45                                | Northeast 0-1mph           | Drive-by            | Drive-by complaint. The entire length of the landfill is giving off a horrible gas odor.   |                   | 1447              |                   |               | 1447         | 03/25/22        | 05/06/22          |
| 06/08/22 | 10:15 | unknown                   | unknown          |       | 72                                | North/Northeast 3-<br>8mph | unknown             | Odor complaint called in to Chrin Landfill (not received by PADEP).<br>Chrin followed-up on 6/8/22.  |                   | 1458              | <br>              |               | 1458         | 06/08/22        | 07/05/22          |
| 07/15/22 | 13:34 | Morvale Rd., Easton       | 0.194            |       | 81                                | Norhteast 3-6mph           | Residence           | Want to report a sour smell in my yard. The smell is coming from Chrin Bros. landfill. It's a sour, putrid smell. I can smell it in my yard and in my house. |                   | 1412              |                   | :<br> -<br> - | 1412         | 07/15/22        | 08/09/22          |
| 09/20/22 | 9:38  | Spring Valley Rd., Easton | unknown          |       | 69                                | West/Northwest 1-<br>6mph  | unknown             | Odor complaint called in to Williams Twp. (not received by PADEP) "The smell is unbearable from the dump." Chrin followed up on 9/20/22.                     |                   | 1611              | i<br>i            |               |              | 09/20/22        | 09/26/22          |

| 2022                    | Daily | Total<br>Week | Month<br>Average | Day  | Total<br>Month | Total<br>Quarter |
|-------------------------|-------|---------------|------------------|------|----------------|------------------|
| August                  | Duny  |               | Average          | Day  | Wolfen         | Quarter          |
| 1                       | 695.6 |               | 695.6            | 1    | 695.6          | 16,015.0         |
| 2                       | 804.0 |               | 749.8            | _ 2  | 1,499.6        | 16,819.0         |
| 3                       | 644.7 |               | 714.8            | - 3  | 2,144.3        | 17,463.7         |
| 4                       | 663.7 |               | 702.0            | 4    | 2,808.0        | 18,127.4         |
| 5                       | 663.2 |               | 694.2            | 5    | 3,471.2        | 18,790.6         |
| 6                       | 83.7  |               | 592.5            | 6    | 3,554.9        | 18,874.3         |
| 7                       |       | 3,554.90      |                  |      | 3,554.9        | 18,874.3         |
| 8                       | 663.3 |               | 602.6            | 7    | 4,218.2        | 19,537.6         |
| 9                       | 684.4 |               | 612.8            | 8    | 4,902.6        | 20,222.0         |
| 10                      | 611.8 |               | 612.7            | 9    | 5,514.4        | 20,833.8         |
| 11                      | 649.7 |               | 616.4            | 10   | 6,164.1        | 21,483.5         |
| 12                      | 584.9 |               | 613.5            | 11   | 6,749.0        | 22,068.4         |
| 13                      | 88.7  |               | 569.8            | 12   | 6,837.7        | 22,157.1         |
| 14                      |       | 3,282.80      |                  |      | 6,837.7        | 22,157.1         |
| 15                      | 679.8 |               | 578.3            | 13   | 7,517.5        | 22,836.9         |
| 16                      | 717.9 |               | 588.2            | 14   | 8,235.4        | 23,554.8         |
| 17                      | 633.3 |               | 591.2            | 15   | 8,868.7        | 24,188.1         |
| 18                      | 648.1 |               | 594.8            | 16   | 9,516.8        | 24,836.2         |
| 19                      | 574.3 |               | 593.6            | 17   | 10,091.1       | 25,410.5         |
| 20                      | 86.0  |               | 565.4            | 18   | 10,177.1       | 25,496.5         |
| 21                      |       | 3,339.40      |                  |      | 10,177.1       | 25,496.5         |
| 22                      | 845.7 |               | 580.1            | 19   | 11,022.8       | 26,342.2         |
| 23                      | 772.9 |               | 589.8            | 20   | 11,795.7       | 27,115.1         |
| 24                      | 662.5 |               | 593.2            | 21   | 12,458.2       | 27,777.6         |
| 25                      | 695.4 |               | 597.9            | _ 22 | 13,153.6       | 28,473.0         |
| 26                      | 654.6 |               | 600.4            | 23   | 13,808.2       | 29,127.5         |
| 27                      | 73.4  |               | 578.4            | 24   | 13,881.6       | 29,200.9         |
| 28                      |       | 3,704.45      |                  |      | 13,881.6       | 29,200.9         |
| 29                      | 720.0 |               | 584.1            | 25   | 14,601.6       | 29,920.9         |
| 30                      | 662.3 |               | 587.1            | 26   | 15,263.9       | 30,583.2         |
| 31                      | 694.0 |               | 591.0            | 27   | 15,957.9       | 31,277.2         |
| Month Total<br>15,957.9 |       |               |                  |      |                |                  |

| 2022          | Daily   | Total<br>Week | Month<br>Average | Day | Total<br>Month | Total<br>Quartei |
|---------------|---------|---------------|------------------|-----|----------------|------------------|
| September     |         |               | Tiverage         |     |                |                  |
| 1             | 577.0   |               | 577.0            | 1   | 577.0          | 31,854.2         |
| 2             | 660.7   |               | 618.9            | 2   | 1,237.7        | 32,514.9         |
| 3             | 117.5   |               | 451.7            | 3   | 1,355.2        | 32,632.4         |
| 4             | -       | 3,431.50      |                  | j   | 1,355.2        | 32,632.4         |
| 5             | HOLIDAY |               |                  |     | 1,355.2        | 32,632.4         |
| 6             | 890.4   |               | 561.4            | 4   | 2,245.6        | 33,522.8         |
| 7             | 830.8   |               | 615.3            | 5   | 3,076.4        | 34,353.6         |
| 8             | 770.7   |               | 641.2            | 6   | 3,847.1        | 35,124.3         |
| 9             | 689.3   |               | 648.1            | 7   | 4,536.4        | 35,813.6         |
| 10            | 195.7   |               | 591.5            | 8   | 4,732.1        | 36,009.3         |
| 11            |         | 3,376.90      |                  |     | 4,732.1        | 36,009.3         |
| 12            | 741.3   |               | 608.2            | 9   | 5,473.4        | 36,750.6         |
| 13            | 736.9   |               | 621.0            | 10  | 6,210.3        | 37,487.5         |
| 14            | 728.2   |               | 630.8            | 11  | 6,938.5        | 38,215.7         |
| 15            | 714.0   |               | 637.7            | 12  | 7,652.5        | 38,929.7         |
| 16            | 652.4   | 1000          | 638.8            | 13  | 8,304.9        | 39,582.1         |
| 17            | 103.4   |               | 600.6            | 14  | 8,408.3        | 39,685.5         |
| 18            |         | 3,676.20      |                  |     | 8,408.3        | 39,685.5         |
| 19            | 845.7   |               | 616.9            | 15  | 9,254.0        | 40,531.2         |
| 20            | 826.2   |               | 630.0            | 16  | 10,080.2       | 41,357.4         |
| 21            | 704.4   |               | 634.4            | 17  | 10,784.6       | 42,061.8         |
| 22            | 662.1   |               | 635.9            | 18  | 11,446.7       | 42,723.9         |
| 23            | 658.9   |               | 637.1            | 19  | 12,105.6       | 43,382.8         |
| 24            | 67.8    |               | 608.7            | 20  | 12,173.4       | 43,450.6         |
| 25            |         | 3,765.10      |                  |     | 12,173.4       | 43,450.6         |
| 26            | 770.2   |               | 616.4            | 21  | 12,943.6       | 44,220.8         |
| 27            | 720.4   |               | 621.1            | 22  | 13,664.0       | 44,941.2         |
| 28            | 524.4   |               | 616.9            | 23  | 14,188.4       | 45,465.6         |
| 29            | 727.6   |               | 621.5            | 24  | 14,916.0       | 46,193.2         |
| 30            | 641.5   |               | 622.3            | 25  | 15,557.4       | 46,834.7         |
|               |         | 3,384.03      |                  |     |                |                  |
| Month Total   |         |               |                  | i a |                |                  |
| 15,557.4      |         |               |                  |     |                |                  |
| Quarter Total |         |               |                  |     |                |                  |
| 46,834.7      |         |               |                  |     |                |                  |

# **Chrin Brothers Sanitary Landfill 2022 Leachate Flow Summary**

# Leachate

| Reading    | Month    | Reading    | Monthly     | Gallons  | GPD      | Qua         | rterly Flow | /S     |
|------------|----------|------------|-------------|----------|----------|-------------|-------------|--------|
| Date       |          |            | Flow        | Per Day  | Per Acre | Flow        | Gal/Day     | GPD/Ac |
| 12/31/2021 | DEC      | 18,970,844 | 1,205,254   |          |          |             |             |        |
| 1/31/2022  | JAN      | 327,946    | 913,112     | 29,455   | 279      |             |             |        |
| 2/28/2022  | FEB      | 2,010,076  | 1,682,130   | 60,076   | 569      |             |             |        |
| 3/31/2022  | MAR      | 4,003,208  | 1,993,132   | 64,295   | 609      | 4,588,374   | 50,982      | 483    |
| 4/30/2022  | APR      | 6,449,176  | 2,445,968   | 81,532   | 772      |             |             |        |
| 5/31/2022  | MAY      | 8,938,336  | 2,489,161   | 80,296   | 760      |             |             |        |
| 6/30/2022  | JUN      | 10,447,837 | 1,509,501   | 50,317   | 476      | 6,444,629   | 70,820      | 671    |
| 7/31/2022  | JUL      | 11,536,727 | 1,088,890   | 35,125   | 333      |             |             |        |
| 8/31/2022  | AUG      | 12,872,583 | 1,335,856   | 43,092   | 408      |             |             |        |
| 9/30/2022  | SEP      | 14,427,679 | 1,555,096   | 51,837   | 491      | 3,979,842   | 43,259      | 410    |
| 10/31/2022 | OCT      | 0          | -14,427,679 | -465,409 | -4,407   |             |             |        |
| 11/30/2022 | NOV      | 0          | 0           | 0        | 0        |             |             |        |
| 12/31/2022 | DEC      | 0          | 0           | 0        | 0        | -14,427,679 | -156,823    | -1,485 |
| Total Yea  | rly Flow |            | 1,790,420   | 4,905    | 46       |             |             |        |

<sup>1.</sup> There are 105.6 acres of area contributing to the leachate flows, 30 acres of the old unlined landfill and 75.6 acres of lined landfill.

<sup>2.</sup> Chrin changed flowmeters and the sewer discharge location to MH-2 on April 7, 2014.

## Faulch, Amy

From: Faulch, Amy

Sent: Tuesday, August 23, 2022 9:36 AM

**To:** Joe Klobusicky

**Subject:** RE: [External] storm issues

Thank you Joe for the notice.

Amy E. Faulch | Solid Waste Supervisor

Department of Environmental Protection | Waste Management

Bethlehem District Office

4530 Bath Pike | Bethlehem, PA 18017 Phone: 610.509.8988 | Fax: 610.861.2072

www.depweb.state.pa.us

From: Joe Klobusicky <jklobusicky@chrin.org>
Sent: Tuesday, August 23, 2022 7:55 AM
To: Faulch, Amy <afaulch@pa.gov>
Subject: [External] storm issues

**ATTENTION:** This email message is from an external sender. Do not open links or attachments from unknown senders. To report suspicious email, use the Report Phishing button in Outlook.

Hi Amy,

Some pretty strong storms came through here late yesterday / last night.

We experienced some erosion issues, road washout (east end exit road).....these are being addressed as of early this morning.

Joe k

## Faulch, Amy

From: Joe Klobusicky <jklobusicky@chrin.org>
Sent: Wednesday, August 24, 2022 11:16 AM

**To:** Faulch, Amy

**Subject:** RE: [External] FW: odor on Spring Valley Rd.

Your welcome.

We put two additional mister trucks above 9A/B area also today.....

From: Faulch, Amy <afaulch@pa.gov>

**Sent:** Wednesday, August 24, 2022 11:13 AM **To:** Joe Klobusicky < jklobusicky@chrin.org>

Subject: RE: [External] FW: odor on Spring Valley Rd.

OK, thank you Joe for the follow-up.

## Amy E. Faulch | Solid Waste Supervisor

Department of Environmental Protection | Waste Management

Bethlehem District Office

4530 Bath Pike | Bethlehem, PA 18017 Phone: 610.509.8988 | Fax: 610.861.2072

www.depweb.state.pa.us

From: Joe Klobusicky < <u>iklobusicky@chrin.org</u>>
Sent: Wednesday, August 24, 2022 8:05 AM

To: Faulch, Amy <a faulch@pa.gov>

**Subject:** [External] FW: odor on Spring Valley Rd.

**ATTENTION:** This email message is from an external sender. Do not open links or attachments from unknown senders. To report suspicious email, use the Report Phishing button in Outlook.

Hi Amy,

Here is Tom's response.....

From: Tom McMonigle <<a href="mailto:tmcmonigle@chrin.org">tmcmonigle@chrin.org</a>
Sent: Wednesday, August 24, 2022 7:09 AM
To: Joe Klobusicky <<a href="mailto:jklobusicky@chrin.org">jklobusicky@chrin.org</a>
Subject: RE: odor on Spring Valley Rd.

I didn't get anything, but I was up in that area around 2:00 pm.

## Tom McMonigle, PE

Chrin Brothers, Inc. 1225 Industrial Drive Easton, PA 18042

484-546-2579 (Office)

# 215-983-2244 (Mobile)

tmcmonigle@chrin.org

From: Joe Klobusicky <<u>jklobusicky@chrin.org</u>>
Sent: Tuesday, August 23, 2022 4:53 PM
To: Tom McMonigle <<u>tmcmonigle@chrin.org</u>>
Subject: Fwd: odor on Spring Valley Rd.

Hi Tom, Did you get anything on the end of day patrol?

Joe k

Get Outlook for Android

From: Faulch, Amy <a faulch@pa.gov>
Sent: Tuesday, August 23, 2022 3:00:00 PM
To: Joe Klobusicky <a href="mailto:jklobusicky@chrin.org">jklobusicky@chrin.org</a>

Subject: odor on Spring Valley Rd.

Hi Joe,

I was just out this afternoon on an odor patrol, and got a very light, but detectable, garbage odor at the end of Spring Valley Rd. You may have already done the end of the day odor patrol, but if not, could someone follow-up in this area?

Thank you Joe,

Amy E. Faulch | Solid Waste Supervisor Department of Environmental Protection | Waste Management Bethlehem District Office 4530 Bath Pike | Bethlehem, PA 18017 Phone: 610.509.8988 | Fax: 610.861.2072 www.depweb.state.pa.us

## Faulch, Amy

From: Joe Klobusicky <jklobusicky@chrin.org>

**Sent:** Friday, August 26, 2022 7:46 AM

**To:** Faulch, Amy; Katie Faubert; Melody Ernst; Mikal Sabatine **Subject:** [External] odor on Industrial Drive this morning............

**Importance:** High

**ATTENTION:** This email message is from an external sender. Do not open links or attachments from unknown senders. To report suspicious email, use the <u>Report Phishing button in Outlook.</u>

FYI – A trash truck (Berger #434) was leading liquid on Industrial Drive and onsite as it came in to dump this morning (6:30am). The liquid had a strong odor to it on Industrial Drive and onsite. We utilized a water truck with odor neutralizer and the odor started to dissipate around 7:30am.

Please let me know if you have any questions. Thank you.

Sincerely,

Joe Klobusicky

## Faulch, Amy

From: Joe Klobusicky <jklobusicky@chrin.org>
Sent: Tuesday, September 20, 2022 1:00 PM

To: Katie Faubert; 'black.joe@rcn.com'; Mikal Sabatine; Faulch, Amy

**Cc:** Tom McMonigle; Charlie R Chrin; Gregchrin@aol.com

**Subject:** [External] RE: odor complaint

**ATTENTION:** This email message is from an external sender. Do not open links or attachments from unknown senders. To report suspicious email, use the <u>Report Phishing button in Outlook.</u>

I did an odor patrol and there were no odors on Spring Valley Road / Cell tower area at 12:40pm

From: Joe Klobusicky

Sent: Tuesday, September 20, 2022 10:56 AM

To: Katie Faubert <kfaubert@williamstwp.org>; 'black.joe@rcn.com' <black.joe@rcn.com>; Mikal Sabatine

<MSabatine@williamstwp.org>; Faulch, Amy <afaulch@pa.gov>

Cc: Tom McMonigle <tmcmonigle@chrin.org>; Charlie R Chrin <charliec@chrin.org>; Gregchrin@aol.com

Subject: RE: odor complaint

FYI – we will monitor throughout the day.

Odor patrol summary:

\*Weis market load at the working face approx. 9:30 – 9:45am

- Leave landfill 9:44am no odor along Industrial Drive
- Arrive on Spring Valley Road Cell tower at 9:53am no odor along Spring Valley Road
- Light intermittent working face odor at the cell tower 9:58am
- Odor starting to dissipate at the cell tower approx. 10:10am
- Leave Spring Valley Road 10:20am
- Arrive at Landfill working face 10:27am (odor noted directly at working face)
- Water truck operating at the working face
- Perimeter misters also operating.

## Tuesday, September 20, 2022

| Time    | Temperature    | Dew Point     | Humidity | Wind | Speed          | Gust           |
|---------|----------------|---------------|----------|------|----------------|----------------|
| 9:04 AM | <b>69.1</b> °F | 0.0 °F        | 0 %      | WNW  | <b>1.7</b> mph | <b>4.6</b> mph |
| 9:09 AM | <b>69.3</b> °F | <b>0.0</b> °F | 0 %      | NW   | <b>0.9</b> mph | <b>6.0</b> mph |
| 9:14 AM | <b>69.6</b> °F | <b>0.0</b> °F | 0 %      | NW   | <b>0.8</b> mph | <b>6.0</b> mph |
| 9:19 AM | <b>69.8</b> °F | <b>0.0</b> °F | 0 %      | NNW  | <b>1.6</b> mph | <b>7.3</b> mph |
| 9:24 AM | <b>69.9</b> °F | <b>0.0</b> °F | 0 %      | WNW  | <b>1.1</b> mph | <b>9.0</b> mph |
| 9:29 AM | <b>70.0</b> °F | <b>0.0</b> °F | 0 %      |      | <b>3.1</b> mph | <b>9.0</b> mph |
| 9:34 AM | <b>69.9</b> °F | <b>0.0</b> °F | 0 %      | NNW  | <b>2.2</b> mph | <b>6.2</b> mph |
| 9:39 AM | <b>69.9</b> °F | <b>0.0</b> °F | 0 %      | WNW  | <b>1.3</b> mph | <b>6.0</b> mph |

<sup>\*</sup>Additional mister / water truck added downwind of the working face towards Spring Vallely road / cell tower area.

| 9:44 AM  | <b>70.1</b> °F | <b>0.0</b> °F | 0 % |     | <b>1.5</b> mph | <b>6.0</b> mph |
|----------|----------------|---------------|-----|-----|----------------|----------------|
| 9:49 AM  | <b>70.4</b> °F | <b>0.0</b> °F | 0 % | NNW | <b>1.3</b> mph | <b>6.0</b> mph |
| 9:54 AM  | <b>70.7</b> °F | <b>0.0</b> °F | 0 % | NNW | <b>2.2</b> mph | <b>6.0</b> mph |
| 9:59 AM  | <b>70.8</b> °F | <b>0.0</b> °F | 0 % |     | <b>1.8</b> mph | <b>6.0</b> mph |
| 10:04 AM | <b>70.9</b> °F | <b>0.0</b> °F | 0 % | NNW | <b>2.6</b> mph | <b>5.2</b> mph |
| 10:09 AM | <b>70.9</b> °F | <b>0.0</b> °F | 0 % | NNW | <b>1.9</b> mph | <b>8.0</b> mph |
| 10:14 AM | <b>70.9</b> °F | <b>0.0</b> °F | 0 % |     | <b>3.6</b> mph | <b>8.0</b> mph |
| 10:19 AM | <b>70.9</b> °F | <b>0.0</b> °F | 0 % | WNW | <b>1.9</b> mph | <b>8.0</b> mph |
| 10:24 AM | <b>71.2</b> °F | <b>0.0</b> °F | 0 % | NNW | <b>2.1</b> mph | <b>8.0</b> mph |
| 10:29 AM | <b>71.5</b> °F | <b>0.0</b> °F | 0 % |     | <b>1.3</b> mph | <b>8.3</b> mph |
| 10:34 AM | <b>71.8</b> °F | <b>0.0</b> °F | 0 % | NNW | <b>1.6</b> mph | <b>5.0</b> mph |
| 10:39 AM | <b>71.9</b> °F | <b>0.0</b> °F | 0 % | NNW | <b>2.1</b> mph | <b>5.0</b> mph |

From: Katie Faubert < <a href="mailto:kfaubert@williamstwp.org">kfaubert@williamstwp.org</a> Sent: Tuesday, September 20, 2022 9:37 AM

To: 'black.joe@rcn.com' <<u>black.joe@rcn.com</u>>; Joe Klobusicky <<u>jklobusicky@chrin.org</u>>; Mikal Sabatine

< MSabatine@williamstwp.org>

Subject: odor complaint

# Good morning,

I received a phone call to the Municipal Office: odor complaint from Spring Valley Road this morning at 9:38am. "The smell is unbearable from the dump" was the caller's exact words.

## Katie

Katherine Faubert, Administrative Assistant Williams Township 655 Cider Press Road, Easton, PA 18042 T: 610-258-6788 | F: 610-258-6080

www.williamstwp.org

## Faulch, Amy

From: Joe Klobusicky <jklobusicky@chrin.org>
Sent: Friday, September 30, 2022 10:25 AM

**To:** Faulch, Amy; Madden, Christopher; Glogowski, Matthew **Subject:** [External] Sept 26th surface monitoring follow-up

Attachments: IMG\_2119.JPG; September 2022 DEP Inspection Follow Ups.xlsx; surface monitoring field

notes september 26 2022.pdf

**ATTENTION:** This email message is from an external sender. Do not open links or attachments from unknown senders. To report suspicious email, use the <u>Report Phishing button in Outlook.</u>

FYI – attached is the initial follow-up readings for the exceedances noted on Monday, September 26<sup>th</sup>. Also attached is a photo of the 3D capping area prep. We have been rolling / prepping the area for cap to being on Monday, October 3<sup>rd</sup>. The capping crew is onsite and preparing sandbags today.





# **DEP INSPECTION 9/26 FOLLOWUP**

CHRIN BROTHERS SANITARY LANDFILL SURFACE MONITORING EXCEEDENCE TRACKING FORM

Initial Exceedence Date: 9/26/2022

|                              |                 | 10-Day   | 20-Day   | 30-Day   |
|------------------------------|-----------------|----------|----------|----------|
|                              | Initial Reading | Followup | Followup | Followup |
|                              | (PPM)           | (PPM)    | (PPM)    | (PPM)    |
| onitoring Technition Initial |                 |          |          |          |
| Monitoring Date:             | 9/27/2022       |          |          |          |
| Background:                  | 0               | 0        |          | 0        |
| EW09                         | 365.1           |          |          |          |
| DR98                         | 45.8            |          |          |          |
| GW147                        | 1406            |          |          |          |
| EW08                         | 76.8            |          |          |          |
| GW139                        | 101.5           |          |          |          |
| EW07                         | 102.8           |          |          |          |
| HW36                         | 40.8            |          |          |          |
| WELL UPSLOAP OF EW09         | 40              |          |          |          |
| EW NEW                       | 321.1           |          |          |          |
| EW11                         | 5053            |          |          |          |
| EW06                         | 88              |          |          |          |
| HW38                         | 378.5           |          |          |          |
| EW15                         | 508.7           |          |          |          |
| GW203                        | 43.6            |          |          |          |
| GW205                        | 69.5            |          |          |          |
| DR97                         | 30.8            |          |          |          |
| HEAD JUST S OF DR96          | 108             |          |          |          |

| DR96 | 153.5 |  |  |
|------|-------|--|--|
| DR95 | 18.5  |  |  |
|      |       |  |  |
|      |       |  |  |
|      |       |  |  |
|      |       |  |  |
|      |       |  |  |
|      |       |  |  |
|      |       |  |  |
|      |       |  |  |
|      |       |  |  |
|      |       |  |  |
|      |       |  |  |
|      |       |  |  |
|      |       |  |  |
|      |       |  |  |
|      |       |  |  |
|      |       |  |  |
|      |       |  |  |
|      |       |  |  |
|      |       |  |  |

# Faulch, Amy

| From: | Joe Klobusicky < jklobusicky@chrin.org > |
|-------|--|
| Sent: | Wednesday, October 12, 2022 8:10 AM      |

**To:** Faulch, Amy; Madden, Christopher; Glogowski, Matthew

**Subject:** [External] capping update photos

**Attachments:** 3D cap 10 12 2022.pdf

**ATTENTION:** This email message is from an external sender. Do not open links or attachments from unknown senders. To report suspicious email, use the <u>Report Phishing button in Outlook.</u>

Hello,
Attached are photos of the 3D/3E capping ......

Joe k

Capping 3D/3E Area – Lower slopes









## File Distribution:

PA DEP NERO WM File-thru A. Faulch

Facility-sent via Email PDF

Williams Township- sent via Email PDF

R. Bellas/D. Ritter (email PDF)

AQ: C. Madden /M. Bardzilouskas (email PDF)

M. Glogowski (email PDF)

R. Malizia (email PDF)

A. Faulch (PDF)

Chrin: Joseph Klobusicky jklobusicky@chrin.org

Williams Township: Melody Ernst

mernst@williamstwp.org