Appendix A, Submittal Forms
Form A-1
Facility Questionnaire

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6. DISPOSAL FACILITY EXPANSION PLANS

Are any pending expansion plans under development?

✓ Yes ☐ No

If yes, please provide the following:

1. Additional Capacity Under Expansion:
   LCRMS is currently permitted with enough capacity through approximately 2034. LCRMS is in the process of preliminary site assessments that will provide additional expansions for the next 50 years. In addition, LCRMS is in the process of purchasing an additional 1062 acres of neighboring property from the Federal Bureau of Prisons. Deposits have been made to escrow accounts as good faith for this sale and it is anticipated the transaction will be finalized by June 2023. This transaction sets the facility up for an undeterminable life that will span generations of regional residents.

I hereby certify that the information above is correct. I have examined the Request for Proposals (RFP), including the Municipal Waste Disposal Capacity Agreement (Agreement). I have completed the Municipal Waste Disposal Services Submittal Forms, including the Non-Collusion Affidavit and the Facility Questionnaire. This response is genuine and not made in the interest of or on behalf of any undisclosed person, firm, or corporation. Respondent has not directly or indirectly induced or solicited any other Respondent to submit a false submittal. Respondent has not sought by collusion to obtain for itself or to provide any other Respondent any advantage over any other Respondent, Mifflin County, Juniata County, or the MCSWA.

BY: _____ **DATED:** 4/6/23

TITLE: Chairman

County of Lycoming

Appendix A, Submittal Forms
Form A-2
Proposed Rate Schedule

Name of facility: Lycoming County Resource Management Services

Waste Permit # 100963

Proposed tipping fees shall include all State and local fees as part of the Proposer's maximum, not to exceed, per ton disposal fee provided for each year of the 10-year Disposal Capacity Agreement. Proposers and persons completing Rate Schedule information acknowledge that the costs provided shall reflect an anticipated Disposal Capacity Agreement with the initial year January 01, 2025, through December 31, 2034. The costs per ton shall be shown using either an escalation rate **OR** a fixed cost per year.

A. For disposal of MSW, excluding C&D and Sludge, as specified herein:

1) First-year (2025) $ 75.00 per ton, and the annual escalation factor (for a maximum of ten [10] years) 5% percent. Please explain the escalation methodology.

With 5% increases through 2025 at our current highest rate, we arrive at $75 per ton. LCMRS is committed to keeping pricing as low as possible but also has to prepare for worst case inflationary factors

OR

2) Specify fixed cost or proposed method of rate escalation for each year of the contract:

Year 2025	$_____	Year 2030	$_____
Year 2026	$_____	Year 2031	$_____
Year 2027	$_____	Year 2032	$_____
Year 2028	$_____	Year 2033	$_____
Year 2029	$_____	Year 2034	$_____

B. For disposal of C&D wastes:

1) First-year (2025) $ 75 per ton, and the annual escalation factor (for a maximum of ten [10] years) 5% percent. Please explain the escalation methodology.

See Above

OR

2) Specify fixed cost or proposed method of rate escalation for each year of the contract:

Year 2025	$_____	Year 2030	$_____
Year 2026	$_____	Year 2031	$_____
Year 2027	$_____	Year 2032	$_____

Appendix A, Submittal Forms
Form A-2
Proposed Rate Schedule

Year 2028	$_____	Year 2033	$_____
Year 2029	$_____	Year 2034	$_____

C. For disposal of Sludge:

1) First-year unit cost (2025) $ 75 per ton, and the annual escalation factor (for a maximum of ten [10] years) 5% percent. Please explain the escalation methodology.
See above

OR

2) Specify fixed unit cost or proposed method of rate escalation for each year of the contract:

Year 2025	$_____	Year 2030	$_____
Year 2026	$_____	Year 2031	$_____
Year 2027	$_____	Year 2032	$_____
Year 2028	$_____	Year 2033	$_____
Year 2029	$_____	Year 2034	$_____

3) Specify the adjustment in unit cost for variations in Sludge characteristics (if applicable):

D. Please identify any other municipal solid waste types, including recyclable materials you are willing to accept (e.g., yard waste, electronics, HHW, etc.), and identify the processing location and tipping fee rate structure or processing fee structure that would be used (first-year cost, escalation rates or future year fixed costs, annual price schedule, gate rate, etc.).

Single Stream Recycling $55 per ton with a 5% annual escalator

Tires $135 to $625 per done depending on size with a 5% annual escalator

Clean Wood $35 Per ton with 5% annual escalator

Clean Soils Price varies

Contaminated Soils Price varies

Appendix A, Submittal Forms
Form A-3
In-Kind Services Request

A. BACKGROUND INFORMATION & ILLEGAL DUMPING

The Mifflin County Solid Waste Authority (MCSWA) and its regional solid waste management program involving Mifflin and Juniata Counties support an integrated waste management system. The comprehensive management of wastes and recyclables aims to conserve resources, protect the environment, and avoid costs and harms associated with managing waste and commodities diverted from disposal. The Mifflin-Juniata Regional Municipal Waste Management Plan (Plan) establishes the goals and alternatives for proper disposal of solid wastes and recovery of recyclable commodities to advance waste diversion and meet Pennsylvania's 35 percent recycling goal.

The Pennsylvania Environmental Council (affiliate of Keep PA Beautiful (KPB)) estimates that it costs $2,947 for each dumpsite cleanup or an average of $619/ton to remove and properly dispose illegally dumped waste. As part of this Plan Update and implementation over the next 10 years, the MCSWA, in coordination with municipalities from both counties, will continue its comprehensive recycling programs, strive to divert recyclables from disposal, and serve as an alternative to illegal dumping and other forms of improper disposal.

B. IN-KIND SERVICES & CONTRIBUTIONS

Through this RFP to secure disposal capacity, the MCSWA seeks support from Respondents to avoid costs typically associated with managing municipal solid wastes. Respondents are requested to offer in-kind services as a cooperative measure to strengthen public and private partnerships, support the private waste industry, and benefit Mifflin and Juniata Counties, their residents, and businesses in the shared objectives to strengthen businesses, conserve resources, and protect the environment including land and property values. In rural Mifflin and Juniata Counties, most local governments impacted by improper disposal do not have the equipment, staff, or resources to manage certain materials. The MCSWA expects to coordinate with its municipalities for roadside litter and illegal dump prevention and cleanup activities.

1. Is this Facility willing to donate disposal capacity for roadside litter and illegally dumped, non-hazardous municipal wastes?

   ✓ Yes

   ☐ No

   1a. If "yes," please list the accepted materials and clarify exclusions or unacceptable materials:
   Roadside waste will be accepted provided groups are registered under the Great American Cleanup / Keep PA Beautiful sponsored by DEP each April

   1b. If "yes," what is the maximum total tons per year to be donated (a minimum of 50 tons per year is requested) Donated disposal up to 50 tons per year is acceptable

Appendix A, Submittal Forms
Form A-3
In-Kind Services Request

2. Please review and complete the **In-Kind Services Table** below to describe the in-kind services and contributions you may provide to support municipal waste management in Mifflin and Juniata Counties. As needed, please include additional pages of narrative and/or supplemental information. In-kind services shall be incorporated within executed Disposal Capacity Agreements.

Material	Donated Disposal/ Processing (Yes/No)[1]	Comments
Illegally Dumped Waste	Yes	
Household Hazardous Waste	No	
Tires	No	
Bulk Items	No	
Whitegoods/Appliances with Freon	No	
Whitegoods/Appliances without Freon	No	
Clean Scrap Metal	Yes	
Residential C&D	Yes	
Auto Parts	Yes	
Electronics	Yes	
Other Material (Specify):_____		

[1] "Yes" indicates that at least some disposal/processing capacity will be provided at no cost for the material.

3. Please describe any other in-kind services that may be offered (e.g., staging containers for illegal dump waste, recovery of scrap metal or other recyclable materials, and/or hauling containers for illegal dump wastes and/or other recyclable materials). Please indicate the annual frequency and/or limits of these services.

None Noted

4. Please describe financial contributions and amounts that may be offered to support illegal dumping prevention/cleanup, including special collections targeting the recovery of hard-to-recycle items like electronics and household hazardous wastes. Avoiding costs, including illegal dumping and cleanup of hard-to-recycle materials, would benefit the Counties. Other illegal dumping costs that may be incurred may include supplies for volunteers, education, and costs for equipment, containers, and hauling services. Please clarify the details and/or limits of financial contributions on an annual basis.

None Noted

Appendix A, Submittal Forms
Form A-4
Company Experience and Operation History

A. **Lawsuits, Regulatory Actions and Compliance History** - Provide information on past or pending lawsuits and regulatory actions which may have a material impact on the Proposer's ability to perform under this contract. List any Notification of Voliations (NOVs), fines and/or penalties imposed by the PADEP or Federal and other State agencies on the proposed permitted solid waste facility over the past five (5) years (attach separate sheets, if necessary).

No Lawsuits or Regulatory actions noted. Please see attached permit for NOV History

1) Has the prosed facility been shut down for any duration due to regulatory non-compliance within the last 5 years> NO

B. **Strength of Commitments and Contingency Plans** – Provide information on the following matters (attach separate sheets or include additional documents for the response, if necessary).

1) Confirmation of available disposal capacity and confirmation the facility will maintain its required permits through the contract period. **Please See Attachment #1**

2) Confirmation that the facility can receive truckloads including transfer trailers at the disposal facility. **Please See Attachment #2**

3) Confirmation of the financial strength of the facility or company to support disposal facility operations anticipated under the Disposal Capacity Agreement included in this solicitation. **Please See Attachment #3**

4) Contingency plans such as alternative disposal facilities for continued disposal of waste in the event of an emergency or other reduction in waste disposal capacity that interferes with the disposal service obligations established under the Disposal Capacity Agreement. **Please See Attachment #4**

5) Ability and willingness of the proposed facility to accept variations quantities and rates of waste deliveries from Mifflin County and Juniata County sources. **Please See Attachment #5**

C. **Deviations or Exceptions to Contract Specifications** - A standard Disposal Capacity Agreement is provided. The County does not intend to deviate significantly from the Standard Disposal Capacity Agreement, except to clarify in-kind services that may be offered by each disposal facility. The Proposer must cite exceptions to the Disposal Capacity Agreements below (attach separate sheets, if necessary).

This is agreeable.

D. Annual Municipal Waste Operations Report – Attach Proposer's most recent Annual Municipal Waste Operations Report.

Appendix A, Submittal Forms
Form A-5
Consideration and Terms of RFP

To: **Mifflin County Solid Waste Authority**
P.O. Box 390
Lewistown, PA 17044
Attn: **Lisa Smith**

Date: _____

From:

Lycoming County Resource Management Services (Name of Firm)

PO Box 187,447 Alexander Drive, Montgomery, PA 17752 (Mailing Address)

Jason Yorks, Director (Contact Person)

570.547.1870 (Telephone Number)

A. The undersigned, having carefully read and considered the terms and conditions of the Contract specifications and other documents contained in the RFP package, and being familiar with the local conditions affecting the cost of the work, does hereby propose to furnish all labor, equipment, materials, tools, insurance, permits, supervision, and all other items necessary to provide integrated waste management services in accordance with the Contract Agreement under the conditions and rates hereinafter set forth.

B. In submitting this proposal, it is understood that the Mifflin County SWA reserves the right to reject any or all proposals, to waive any informalities in any proposal or the solicitation process, and to negotiate final contract provisions based on the proposals submitted.

C. In submitting this proposal, the undersigned agrees that no Price Proposal may be withdrawn for a period of twelve (12) months after the date for receipt of Proposals and that all Price Proposals shall be valid for this entire period, subject to cost escalation adjustment as identified unless advance written consent for such withdrawal is granted by the Mifflin County SWA.

Date: 4/6/23

Lycoming County Resource Management Services

By: _____

ATTEST: Title: Chairman

AFFIX CORPORATE SEAL

_____
Director of Administration

Appendix A, Submittal Forms
Form A-6
Proposal Bond

To: **Mifflin County Solid Waste Authority**
P.O. Box 390
Lewistown, PA 17044
Attn: **Lisa Smith**

Date: _____

PROPOSER: Lycoming County Resource Management Services
PO Box 187
447 Alexander Drive
Montgomery, PA 17752

SECTION NOT APPLICABLE

Appendix A, Submittal Forms
Form A-6
Proposal Bond

Date:_____ $_____

SECTION NOT APPLICABLE

Appendix A, Submittal Forms
Form A-7
Non-Collusion Affidavit

STATE OF PENNSYLVANIA:

: S.S.

COUNTY OF LYCOMING:

I state that I am Chairman of the County of Lycoming (Name of Firm) and that I am authorized to make this Affidavit on behalf of my firm and its owners, directors, and officers. I am the person responsible in my firm for the price(s) and the amount of this Proposal.

I state that:

1. The price(s) and tonnages contained in this Proposal have been arrived at independently and without consultation(s), communication(s), or agreement(s) with any other contractor, Proposer, or potential Respondent.

2. Neither the price(s) nor the tonnages contained in this Proposal and neither the approximate price(s) nor approximate tonnages of the Proposal have been disclosed to any other firm or person who is a Proposer or potential Respondent, and they will not be disclosed before Proposal opening.

3. No attempt has been made or will be made to induce any firm or person to refrain from proposing on this contract, submit a Proposal higher than this Proposal, or submit any intentionally high or noncompetitive Proposal or another form of complementary Proposal.

4. The Proposal of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive Proposal.

5. County of Lycoming (Name of my firm), its affiliates, subsidiaries, officers, directors, and employees are not currently under investigation by any governmental agency and have not in the last five (5) years been convicted or found liable for any act prohibited by state or federal law in any jurisdiction involving conspiracy or collusion with respect to proposing on any public contract except as follows: None Noted

I state that the County Of Lycoming (Name of my firm) understands and acknowledges that the above representations are material and important and will be relied on by the Mifflin County Solid Waste Authority (MCSWA), and Juniata County, in awarding the contract(s) for which this Proposal is submitted. I understand, and my firm understands, that any misstatement in this Affidavit is, and shall be treated as, fraudulent concealment of the true facts relating to the submission of proposals for this contract. I understand, and my firm understands, that any fraudulent concealment will allow the Mifflin County Solid Waste Authority (MCSWA), and Juniata County, to pursue all applicable remedies at law or equity, including, but not limited to, the right to reject this Proposal.

Sworn to and subscribed before me
this 6 day of APRIL, 2024.

William Michael McMunn
Notary Public

My Commission Expires: 04/29/2025

Commonwealth of Pennsylvania - Notary Seal
William Michael McMunn, Notary Public
Lycoming County
My commission expires April 29, 2025
Commission number 1394988
Member, Pennsylvania Association of Notaries

Signed

Chairman
Company Position

Attachment #1

Confirmation of available disposal capacity and confirmation the facility will maintain its required permits through the contract period.

Lycoming County Resource Management Services is currently permitted through April, 2030. The existing life of fully developed waste cells is estimated to last until 2034. LCRMS is currently working on plans for additional expansions within its existing footprint that will last at least another 50 years. We also anticipate closing on an additional 1067 acres of neighboring property within the next 60 days. This will provide disposal for literally generations of families within our region.

Attachment #2

Confirmation that the facility can receive trucklaads including transfer trailers at the disposal facility

The LCRMS facility provides disposal for 100 plus certified waste haulers, most of which use our facility daily. We receive waste in many various forms of transportation including packer trucks, roll off type trucks, transfer trailers, walking floor trailers, and dump trailers. We keep our working face large enough that there is ample space for customers to dump and turn around times at our facility are minimal.

Attachment #3

Confirmation of the financial strength of the facility or company to support disposal facility operations anticipated under the Disposal Capacity Agreement included in this solicitation.

Please see the Balance Sheet Section below from Lycoming County's most recent Annual Comprehensive Financial Statement. LCRMS assets exceed $139 Million with a Total Net Position in excess of $64 Million. LCRMS is a Department within the government of the County of Lycoming. As such the full financial strength of the County Supports the operations of the landfill. The most recent Comprehensive Financial Report discloses that Standard and Poor's has assigned the County with an A+ /Stable Long-Term Bond Rating.

COUNTY OF LYCOMING, PENNSYLVANIA
STATEMENT OF NET POSITION
ENTERPRISE FUNDS
DECEMBER 31, 2021

	Resource Management Services	Recreation Authority	Total Enterprise Funds
ASSETS			
Current assets			
Cash and cash equivalents	$ 11,943,945	$ 407,900	$ 12,351,845
Investments at cost	17,691,865	-	17,691,865
Investments at fair value	26,231,908	-	26,231,908
Receivables (net of allowances)			
Accounts receivable - trade	2,664,044	-	2,664,044
Accrued interest receivable	797,433	-	797,433
Due from other governments	5,730	-	5,730
Intra-entity guarantee receivable	-	280,000	280,000
Inventory	-	47,388	47,388
Prepaid expenses	-	20,219	20,219
Total current assets	59,334,925	755,507	60,090,432
Noncurrent assets			
Net pension asset	3,741,482	-	3,741,482
Prepaid bond insurance	216,204	-	216,204
Restricted assets			
Cash and cash equivalents	4,005,452	6	4,005,458
Investments at cost	5,209,603	-	5,209,603
Investments at fair value	16,505,839	-	16,505,839
Intra-entity guarantee receivable	-	2,140,000	2,140,000
Total restricted assets	25,720,894	2,140,006	27,860,900
Capital assets, net	50,054,001	756,696	50,810,697
Total noncurrent assets	79,732,581	2,896,702	82,629,283
Total assets	139,067,506	3,652,209	142,719,715
DEFERRED OUTFLOWS OF RESOURCES			
Changes in actuarial assumptions on OPEB plan	1,698,472	-	1,698,472
Difference between expected and actual experience on pension plan	543,211	-	543,211
Difference between expected and actual experience on OPEB plan	1,933,511	-	1,933,511
Changes in actuarial assumptions on pension plan	151,860	-	151,860
Unamortized refunding charges	793,679	-	793,679
Total deferred outflows of resources	5,120,733	-	5,120,733

(Continued)

COUNTY OF LYCOMING, PENNSYLVANIA
STATEMENT OF NET POSITION
ENTERPRISE FUNDS
DECEMBER 31, 2021
(CONTINUED)

	Resource Management Services	Recreation Authority	Total Enterprise Funds
LIABILITIES			
Current liabilities			
Accounts payable	$ 2,074,586	$ 20,159	$ 2,094,745
Payroll and related payables	71,483	7,170	78,653
Due to primary government	-	3,253,743	3,253,743
Unearned revenues	-	312,681	312,681
Compensated absences payable	112,762	-	112,762
Current interest payable	269,812	360,080	629,892
Long term debt	776,307	68,425	844,732
Lease payable	-	1,787,939	1,787,939
Other accrued liabilities	-	23,762	23,762
Total current liabilities	3,304,950	5,833,959	9,138,909
Long term liabilities			
Compensated absences payable	57,351	-	57,351
Post employment benefits	18,251,575	-	18,251,575
Estimated reclamation cost for field and final closure	29,082,730	-	29,082,730
Long term debt, net	26,496,963	1,731,921	28,228,884
Total long term liabilities	73,888,619	1,731,921	75,620,540
Total liabilities	77,193,569	7,565,880	84,759,449
DEFFERED INFLOWS OF RESOURCES			
Difference between projected and actual earnings on pension plan	2,619,047	-	2,619,047
Total deferred inflows of resources	2,619,047	-	2,619,047
NET POSITION (DEFICIT)			
Net investment in capital assets	23,138,248	(1,043,650)	22,094,598
Restricted for:			
Employee pension	1,817,506	-	1,817,506
Closure requirements	42,264,109	-	42,264,109
Debt service	-	6	6
Unrestricted (deficit)	(2,844,240)	(2,870,027)	(5,714,267)
Total net position (deficit)	$ 64,375,623	$ (3,913,671)	$ 60,461,952

See Notes to Financial Statements

Attachment #4

Contingency plans such os alternotive disposal facilities for continued disposal of waste in the event of an emergency or other reduction in waste disposal capacity that interferes with the disposal service obligations established under the Disposal Capacity Agreement.

LCRMS has an agreement with a nearby landfill (Clinton County Solid Waste Authority Wayne Township Landfill) to serve as a backup disposal site in the case of emergency. In addition LCRMS has a Crisis Management Plan.

Attachment #5

Ability and willingness of the proposed facility to accept variations quantities and rates of waste deliveries from Mifflin County and Juniata County sources.

LCRMS is flexible with quantities and pricing provided in this RFP is our highest gate rates for each type of waste with an inflationary factor. Pricing for all waste received would default to our current price sheets or the pricing in this RFP whichever is lower. We offer lower pricing for certified waste haulers and certified waste haulers are entitled to a volume discount. Example, our current highest gate rate for municipal waste price is $67.30 per ton but certified waste haulers pay as low as $40.85 with their full volume discount. It can be expected that certified waste haulers with waste from Mifflin and Juniata Counties will pay a lower rate than our highest gate rate.

Attachment #6

Permit

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

Permit
For
Solid Waste Disposal and/or Processing Facility
FORM NO. 8

Permit No. 100963
Date Issued April 1, 2020
Date Expires April 1, 2030

Under the provisions of the Pennsylvania Solid Waste Management Act of July 7, 1980, Act 97, a permit for a solid waste disposal and/or processing at (municipality) Brady Township in the County of Lycoming is granted to (applicant) County of Lycoming (address) Courthouse, 48 West Third Street Williamsport, PA 17701

This permit is applicable to the facility named as and Lycoming County Landfill and described as:

360.1 Acres
Latitude 41° 09' 05"
Longitude -76° 55' 07"

This permit is subject to modification, amendment and supplement by the Department of Environmental Protection and is further subject to revocation or suspension by the Department of Environmental Protection for any violation of the applicable laws or the rules and regulations adopted thereunder, for failure to comply in whole or in part with the conditions of this permit and the provisions set forth in the application no. 100963 which is made a part hereof, or for causing any condition inimical to the public health, safety or welfare.

See attachment for waste limitations
and/or special conditions

/s/ Patrick Brennan
FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

Permit
For
Solid Waste Disposal and/or Processing Facility
FORM NO. 8

Permit No.	100963
Date Issued	April 1, 2020
Date Expires	April 1, 2030

Standard Provisions

1. This permit renewal and modifications are being issued pursuant to the Pennsylvania Solid Waste Management Act of July 7, 1980 and the Municipal Waste Management Regulations most recent effective version. This permit is issued for:

   - the renewal of the construction and operation of 360.1 acres of landfill, of which 123.1 acres are permitted Fields 1 through 12, within the existing permitted area,
   - modification of the final cap system including a cap installation specific CQA/QC plan,
   - the modification for the installation of seventeen additional horizontal gas collection wells, pursuant to, and including, the Applications for Municipal or Residual Waste Permit listed as:

   Application for Solid Waste Permit Renewal
   - Application received - March 29. 2019
   - Amendment/Technical Deficiency Response received - March 6. 2020
   - Amendment/Form I – E&S Control Plan received - March 10, 2020
   - Amendment/Groundwater Monitoring Plan received - March 12, 2020
   - All other related submissions/correspondence

   Permit Modification for Final Cap System
   - Application received - December 19, 2019
   - Supplemental information received - February 4, 2019 and April 25, 2019
   - All other related submissions/correspondence

   Permit Modification for Addition of Horizontal Gas Wells
   - Application received – October 23, 2019
   - Supplemental information received - February 24, 2020
   - All other related submissions/correspondence

2. The permittee shall comply with all applicable requirements listed in 25 PA Code, Article VIII, Municipal Waste. Failure to comply with the Department rules, regulations and special conditions may result in enforcement actions by the Department.

3. The permittee shall comply with all applicable requirements of the Bureau of Air Quality Control, Bureau of Water Quality Management, Bureau of Watershed Management, and Bureau of Mining and Reclamation.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

Permit
For
Solid Waste Disposal and/or Processing Facility
FORM NO. 8

Permit No.	100963
Date Issued	April 1, 2020
Date Expires	April 1, 2030

4. A copy of the complete Waste Management permit application, including all updates and revisions, shall be retained on site.

5. Permit modifications, other than equivalency approvals, granted for this facility will be listed in Appendix D, of this permit. The specific permit conditions for each of these permit modifications will be included in Attachment 1 of Appendix D. Appendix D will be updated for any new permit modifications approved after the date of this permit.

Permit Documents

6. The permittee shall update all appropriate maps and drawings to comply with the requirements of permit application Forms 2 and 3 and to reflect current site conditions. Updated maps and drawings shall include but not be limited to those listed in the permit application Form 3 narrative response. Updated maps and drawings shall be submitted to the NCRO Waste Management Program within 6 months of the permit issuance.

7. The current Form E, Contractual Consent of Landowner, allows for the operation of a landfill until December 31, 2025 at which point Lycoming County would have access for monitoring and maintenance only. The permittee must submit a new fully executed Form E to the Department, which spans the permit term for the facility allowing for continued operation, at least 6 months prior to the current consent expiration date.

General Provisions / Daily Operations

8. The permitted operating hours for the facility are 24 hours per day, seven (7) days per week for all operations not involving waste receiving. The permitted days and hours of operation for waste activities are from 6:00 am to 5:00 pm, Monday through Friday and 6:00 am to 2:00 pm on Saturdays, or such other hours as the host municipality may set by ordinance, pursuant to Section 304 (b)(2) of Act 101, the Municipal Waste Planning, Recycling and Waste Reduction Act, 53 P.S. Section 4000.304(b)(2). For purposes of calculation of average and daily waste volumes; each partial day shall be counted as one day.

9. No more than 2,000 tons of solid waste may be received at this facility for disposal on any single operating day. This figure represents the maximum daily volume of the facility, pursuant to Section 1112 of Act 101, the Municipal Waste Planning, Recycling and Waste

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

Permit
For
Solid Waste Disposal and/or Processing Facility
FORM NO. 8

Permit No.	100963
Date Issued	April 1, 2020
Date Expires	April 1, 2030

Reduction Act, 53 P.S. Section 4000.1112, which section also provides that a mandatory civil penalty of $100 per ton applies to any excess volume received for disposal at this facility for any reason.

10. No more than 1,600 tons of solid waste may be received at this facility for disposal on an average daily volume basis over the standard calendar year quarter. This figure represents the maximum daily volume of the facility, pursuant to Section 1112 of Act 101, the Municipal Waste Planning, Recycling and Waste Reduction Act, 53 P.S. Section 4000.1112 and has been set after consideration of weather, seasonal variations, community cleanup days and other factors. Section 1112 applies to any excess waste received for disposal at this facility for any reason. The Department shall calculate any penalty after determining the total tonnage of solid waste received for disposal at this facility during the calendar year quarter, divided by the number of permitted operating days that the facility is permitted to accept waste for disposal during that quarter.

11. Any increase in the average or maximum daily waste disposal amount will require a major permit modification to be submitted to the Northcentral Regional Office (NCRO) Waste Management Program for review. Written approval for an increase in daily waste amounts is required.

12. Litter shall be collected at least weekly from fences, roadways, trees and tree line barriers and other barriers and disposed of in the working face.

13. Litter shall not be allowed to be blown or otherwise deposited off-site.

14. Fences or other barriers sufficient to control blowing litter shall be constructed in the immediate operating area and all other areas necessary.

15. Approved Alternate Daily Cover (ADC) meeting the requirements of 25 PA Code § 273.232 may be used as a daily cover material. No more than a five (5)-day supply of alternate daily cover material shall be maintained on site at any time.

16. All waste transportation using the LCRMS shall be monitored for compliance with Act 90. The Waste Transportation Safety Program (WTSP) of Act 90 requires owners of waste

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

Permit
For
Solid Waste Disposal and/or Processing Facility
FORM NO. 8

Permit No.	100963
Date Issued	April 1, 2020
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transportation vehicles (trucks registered for more than 17,000 pounds and trailers registered for more than 10,000 pounds) that regularly transport municipal or residual waste to a processing or disposal facility in the Commonwealth of PA to obtain written authorization from the Department. Act 90 additionally prohibits municipal or residual processing facilities from accepting waste after December 26, 2002 from vehicles that do not have a valid authorization sticker.

17. The permittee shall prevent trucks exiting the facility from tracking mud and other contaminants such as debris, litter, solid waste and leachate onto the public highway.

Reporting

18. The permittee shall submit to the Department's Rachel Carson State Office Building, a quarterly operation report as required by 25 Pa. Code § 273.312. The report shall be submitted on or before the 20th day of April, July, October and January for the three (3) months ending the last day of March, June, September, and December. The report shall be submitted on forms supplied by the Department.

19. The permittee shall submit to the NCRO Waste Management Program, an annual operations report on or before June 30 of each year in accordance with the requirements of 25 Pa. Code § 273.313.

20. The permittee is required to complete a daily operational record as required by 25 Pa. Code § 273.311. The daily operational record shall be recorded on a form supplied by the Department and shall be maintained on a daily basis and must be available at all times for review by the Department employees or their authorized representatives.

21. The permittee shall submit along with the annual report a summary of the status of mitigation and benefits as outlined in the Environmental Assessment (from the Field 11 & 12 Expansion) as approved by the Department. These measures include but are not limited to:
    a. Increased litter pickup
    b. Free sludge disposal to West Branch Regional Authority for the period that the landfill is receiving solid waste
    c. Educational tours
    d. Host agreement benefits

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Water Quality Monitoring and Protection

22. The water quality monitoring system includes the following groundwater monitoring points:

Upgradient monitoring wells:
M-1, M-2B
Downgradient monitoring wells:
M-3B, M-4B, M-5B, M-6B, M-7B, M-8C, M-10B, M-20B, M-24

23. The permittee shall not cause or allow water pollution within or outside of the permitted facility. Pollution, as defined in 25 Pa. Code § 271.1, for the purposes of this condition shall not be limited to groundwater but shall also include surface water. Degradation at any of the monitoring points dedicated to the facility shall be reported to the NCRO Waste Management Program in accordance with 25 Pa. Code § 273.286. The permittee must initiate a groundwater assessment plan in accordance with 25 Pa. Code § 273.286 to determine the source of the contamination at the monitoring point. Based on the results of the groundwater assessment plan, an abatement plan, in accordance with 25 Pa. Code § 273.287, shall be submitted to the NCRO Waste Management Program as required.

24. All monitoring point sample sheets, whether from quarterly or annual samples, shall include, at a minimum the following information, which shall be measured in the field at the time of sampling:

- water level depth
- sampling depth
- water temperature
- pH
- specific conductance

25. Quarterly chemical analysis reports of all monitoring points must be submitted to the NCRO Waste Management Program within 60 days of sampling or 15 days after completion of the chemical analysis, whichever is sooner in accordance with 25 Pa. Code § 273.285. The data analysis shall be accompanied by a data evaluation to determine groundwater or surface water degradation.

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26. Annual chemical analysis reports of all monitoring points must be submitted to the NCRO Waste Management Program within 60-days of sampling or 15-days after completion of the chemical analysis, whichever is sooner in accordance with 25 Pa. Code § 273.285. The data analysis shall be accompanied by a data evaluation to determine groundwater or surface water degradation.

27. If groundwater samples cannot be obtained from any of the monitoring well(s), the NCRO Waste Management Program shall be notified and the well(s) shall be re-drilled or relocated so as to obtain water for sampling groundwater. The permittee shall notify and obtain written approval from the Department prior to drilling and reconstructing any new monitoring wells.

28. All monitoring wells shall be pumped at a rate so as not to cause excessive turbidity. If turbidity values exceed 10 NTU, all metals shall be tested for dissolved values to be included with the quarterly and annual chemical analysis reports.

29. All monitoring points, groundwater and surface water, shall be numbered for identification with a label capable of withstanding field conditions. Reasonable access shall be maintained to all monitoring points.

Construction / Liner System

30. The permittee shall submit to the NCRO Waste Management Program, on a form provided by the Department, certification by a Pennsylvania Registered Professional Engineer of site construction in accordance with the approved plans and 25 Pa Code § 273.203. Each phase of the landfill construction shall be certified.

31. The following information, included in the permit application liner installation plan, shall be submitted to the NCRO Waste Management Program. This shall be done prior to the construction of the liner system for each landfill cell. Written approval from the NCRO Waste Management Program must be received by the permittee prior to beginning construction of the liner system including the subbase. The information to be submitted for any liner installation company shall include, but not be limited to, the following:

    a. Methods of installation
    b. Time required

c. Panel layouts
d. procedures for inclement weather
e. Procedures for material delivery
f. Procedures for deploying all liner system materials
g. Procedures for handling wrinkles in the liner
h. Plans for laying out the entire liner system and covering as work progresses
i. Identification (including resumes) and number of work crews

32. The geosynthetics listed in Appendix A, of this permit, are approved for installation in the liner system for this facility. These geosynthetic materials listed in Appendix A have been shown to be compatible with the expected leachate from this facility and have been demonstrated to have acceptable engineering properties for use in the liner system. The list of geosynthetics in Appendix A may be amended by the permittee by permit modification. However, as a condition of this approval, any additional liner material not on the list shall be evaluated for leachate compatibility in accordance with Permit Condition 32, below, and shall be demonstrated to have acceptable engineering properties including interface friction angles for use in the liner system. Written approval must be received from NCRO Waste Management Program prior to using the alternate geosynthetic in the liner system.

33. Except for the geosynthetics already approved and which are listed in Appendix A, leachate compatibility testing shall be performed on all geomembranes, geonets, and geotextiles to be used in the liner system per 25 Pa. Code § 273.161. For geomembranes, the compatibility test procedure shall be based on USEPA or ASTM guidelines approved by the Department. For geonets and geotextiles, the test procedures listed below are required. The test results and evaluation of the test results for the compatibility tests must be submitted for review. Written approval must be received by the permittee from the NCRO Waste Management Program prior to using the specific geosynthetic in the liner system. These test procedures may be modified based on test developments by ASTM Committee D-35.

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Geonets

Property (unit)	Test Procedure
a. Mass per unit area	Direct measure (sample size >1 sq. ft.)
b. Volatiles	Procedure for determination of volatile of exposed and unexposed FML_1
c. Extractables	Procedure for determination of extractables content of exposed and unexposed FML_1
d. Thickness (mils)	ASTM D1777-96 (part 32)
e. Dimensions of configuration	Direct measure machine and cross machine (CM) direction
f. Specific gravity or density	ASTM D792-13 Method A or ASTM D1505-18 (dry sample before test)
g. CBR Puncture	Geosynthetic Research Institute (GRI) Test Method GS1 "CBR Puncture Strength"
h. Strip Tensile Strength	Alternative Strip Tensile Test Method for Geonets
i. Transmissivity (or flow rate)	ASTM D4716/D4716M-14 [All laboratory testing for transmissivity of geonets shall be conducted at the site conditions, including: (i) gradient at site (minimum and maximum), (ii) identical representation of geosynthetic layers].
j. Compression Behavior of Geonets	GRI Test Method GN1 "Compression Behavior of Geonets"

Footnote 1. Lining of Waste Containment and Other Impoundment Facilities: EPA; Sept. 1988; EPA 600/2-88-052.

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Geotextiles

Property (units)	Test Procedure
a. Thickness (mils)	ASTM D1777-96 (part 32)
b. Mass per unit area (oz/sq. yd.)	ASTM D3776/D3776M
c. Dimension (cm)	Direct measure machine and cross machine direction
d. Grab Tensile strength/ elongation	ASTM D4632/D4632M-15a
e. Trapezoidal tear resistance	ASTM D4533/ D4533M-15
f. Hydraulic burst strength	ASTM D3786/ASTM D 3786
g. Puncture resistance	ASTM D3787-16
h. Permittivity	ASTM D4491/D4491M-17

34. Upon receipt of the liner system geonets and geomembranes to the construction site, conformance testing shall be conducted on each type of material prior to installation. The following physical properties shall be tested:

Property	Test Procedure
a. Density (minimum)	ASTM D –1505-18
b. Melt Flow Index (maximum)	ASTM D-1238-13 Condition E
c. Percent Crystallinity	Differential Scanning Calorimeter

The frequency of the above tests shall be one set of tests for each truckload of material delivered to the site. Testing shall be conducted by the third-party QA Laboratory.

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35. Samples of all geosynthetic materials received shall be retained for future verification. The frequency of sampling shall be one sample for every truckload delivered.

36. All sample results from each layer of the liner system's preparation, construction and/or installation shall be submitted to the NCRO Waste Management Program for review. Waste may not be disposed of in an area until the following have been met:

    e. A Certification of Facility Construction Activity (Form 37) has been completed and received by the NCRO Waste Management Program.

    f. A field Quality Assurance report for each specific liner system layer's construction is submitted with the Form 37. At a minimum, this report shall include:

        i. Personnel involved with the project.
        ii. Scope of work.
        iii. QA and QC methods and activities.
        iv. Test results
        v. Problems encountered during construction and resolution of these problems.
        vi. Field drawings signed and sealed by a Pennsylvania registered professional engineer.

    g. Written approval has been received by the permittee from the NCRO Waste Management Program for construction of each specific layer.

37. Upon completion of each layer of the liner system, the permittee shall notify the NCRO Waste Management Program that the liner layer construction activity is ready for inspection.

38. For all liner system layers, construction or installation of the next layer of the liner system may not take place until the Department has conducted an inspection of the previous liner system construction activity, all the approved minimum specifications for that specific previous layer have been met, and written approval has been received by the permittee from the NCRO Waste Management Program for construction of that specific previous layer.

39. All Quality Assurance reports shall be available for review upon request by the NCRO Waste Management Program or their representatives.

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40. There shall be at least one third-party QA monitor for each distinct work crew during the liner system construction and installation.

41. Previously approved Equivalency Review Requests have been included in the Renewal Application and remain in effect. Any future approved Equivalency Review Requests for this facility will be listed in Appendix B, of this permit. The specific permit conditions for each of these equivalency approvals will be included in Attachment 1 of Appendix B.

Construction / Final Cap System

42. Alternative installation methods not approved in this CQA/QC plan must be approved by the Department prior to implementation.

43. Geomembrane seaming performed at sheet temperatures above or below those specified in this CQA/QC plan must follow an industry standard method approved by the Department prior to implementation.

44. Specifications for seaming of nonwoven geotextiles must be submitted and approved by the Department prior to implementation.

45. A cap panel layout plan must be submitted and approved by the Department prior to any placement of geomembrane.

46. LCRMS shall provide a closure schedule for the landfill cells, including phased portions of landfill cells that have reached final permitted contours (within 0 to 3 feet) in order to comply with 25 Pa. Code §273.234 (b). The schedule should also outline a timeline which addresses the remainder of the landfill footprint as the final permitted contours are reached. This schedule must be submitted to the Department within 6 months following issuance of this permit.

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Stormwater Management

47. Precipitation collected in a disposal field may be handled by a sedimentation basin only if no wastes have been placed in that specific disposal field and no run-off from any other disposal field is occurring. Once waste is placed in a disposal field or run-off from other disposal areas is occurring, all water that is collected in the specific disposal field must be handled by the leachate collection system. Exceptions will be made only if tarps are used to divert stormwater and the stormwater is collected in sumps without contact with waste or leachate.

48. All erosion and sedimentation control structures including diversion and collection ditches, sedimentation basins and traps, silt fences, culvers and discharge structures shall be installed in accordance with the approved plans, 25 Pa. Code Chapter 102 and 25 Pa. Code § 273.151 and § 273.242 to § 273.244. All buried culverts and discharge pipes shall be installed such that they are protected from yielding, buckling and cracking.

49. Erosion and sedimentation control structures must be inspected on a regular basis during operation, closure and post closure periods. Inspections shall be conducted at least monthly and after each storm event as described in the Maintenance Program Section of Form I of the permit application. Any required maintenance shall be conducted immediately after the inspection.

Leachate

50. Records shall be kept on the amount of leachate recirculated, problems encountered due to pipe collapse or clogging, leachate outbreaks and leachate short circuiting and the method of correction of any problems. The records shall be kept on a monthly basis and retained at the facility for the life of the facility. These records shall be available for inspection by the Department or its representative upon request. Should the Department determine that leachate recirculation is creating environmental or operational issues, the Department may revoke leachate recirculation at this facility.

51. The leachate storage volume includes a 5.5 million-gallon leachate storage tank (once certified) and two leachate impoundments (1.05 million gallons and 1.125 million gallons). The collected raw leachate flow via a transmission main to either the West Branch Regional Authority or the Gregg Township Municipal Authority where the leachate will be treated.

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The leachate storage volume is to be utilized in accordance with 25 Pa. Code Chapter 273.275 (b). The operation of the site in regard to capping and open fields shall be in compliance with this utilization. This is to be evaluated by the permittee in conjunction with the Annual Report and submitted to the Department under separate cover.

52. Upon the total leachate storage capacity reaching or exceeding the 25% capacity per 25 Pa. Code §273. 275 (b), LCRMS must immediately notify the Department. Additionally, should LCRMS need to haul leachate in an emergency situation, written approval from the Department must be received by the permittee prior to trucking leachate.

Limits of Authorization

53. This authorization does not relieve the applicant from applying for and obtaining any additional permits or approvals from local, state or federal agencies required for this project. If any other permits are required for this project, they must be issued prior to undertaking the activities described in those permit applications.

54. Nothing in this permit shall be construed to supersede, amend or authorize violation of the provisions of any valid and applicable local law, ordinance or regulation provided that said local law, ordinance or regulation is not preempted by the Pennsylvania Solid Waste Management Act, the Act of July 7, 1980, P.L. 380, No. 97, 35 P.S. § 6018.101, et seq.

55. As a condition of this permit, and of the permittee's authority to conduct the activities authorized by this permit, the permittee hereby authorizes and consents to allow authorized employees or agents of the Department, without advance notice or a search warrant, upon presentation of appropriate credentials, and without delay, to have access to and to inspect all areas on which solid waste management activities are being or will be conducted. The authorization and consent shall include consent to collect samples of waste, water or gases, to take photographs, to perform measurements, surveys and other tests, to inspect any monitoring equipment, to inspect methods of operation, and to inspect and/or copy documents, books or papers required by the Department to be maintained. This permit condition is referenced in accordance with Section 608 and 610(7) of the Solid Waste Management Act, 35 P.S.§§ 6018.608 and 6018.610(7). This condition in no way limits any other powers granted under the Solid Waste Management Act.

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56. Any alterations or additions to the permitted facility constitute major or minor modifications and the applicable documents must be provided. Any alterations or additions must be approved in writing as a permit modification by the Department prior to the change taking place. All future approved modifications will be listed in Appendix D and their respective conditions will be listed in the Attachment 1 to Appendix D.

57. All submissions required under this permit to the NCRO Waste Management Program shall be sent to the following address:

Department of Environmental Protection
Northcentral Regional Office Waste Management Program
208 West Third St., Suite 101
Williamsport, Pa. 17701

58. The activities authorized by this permit shall not harm or present a threat of harm to the health, safety, or welfare of the people or the environment of this Commonwealth. The Department may modify, suspend, revoke, or reissue the authorization granted in this permit if it deems such action is necessary to prevent harm or a threat of harm to the public or the environment, or if the activities cannot be adequately regulated under the conditions of this permit.

59. Approval of any plans or facility herein refers to functional design but does not guarantee stability or operational efficiency. Failure of the measures and facility herein approved to perform as intended, or as designed, or in compliance with the applicable Rules and Regulations of the Department, for any reason, shall be grounds for the revocation or suspension of this permit. Failure of the permittee to comply with the terms of the permit or conditions, or failure of the permittee to construct or operate the proposed facility in conformity with the approved plans shall be grounds for the revocation or suspension of this permit.

Waste Stream

60. No hazardous or toxic wastes or waste characteristic as identified in 25 Pa. Code Chapter 261a, may be managed or disposed of at this facility.

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61. No lead acid batteries shall be placed into mixed waste at this facility, discarded, or otherwise disposed of at this facility.

62. The Form R Waste Analysis and Classification Plan that specifies the conditions for accepting Form U and Form-FC-1 waste, in addition to the generic residual and special handling residual waste streams is contained in Appendix C of this permit.

63. The Lycoming County Landfill is hereby authorized to accept the generic residual or special handling waste streams as specified in Table R-1, Table R-2, Table R-3, Table R-4 and Attachments in Appendix C of this permit, and with the following specific conditions for accepting wastes for disposal:

    h. All wastes for acceptance shall be consistent with the requirements stated Form R of the permit application, Waste Analysis and Classification Plan.

    i. Submittals for the initial acceptance of individual generator wastes, identified in Table R-1, shall contain all information required by the respective forms and a signature of the official certifying the results for the generator.

    j. Submittals for the initial acceptance shall include all applicable Form U parameters unless the absence of parameters is certified in writing by the generator. Absence of parameters refers to absence in leaching and not total concentration. Generator certifications of absence of specific parameters shall be based on generator knowledge or known chemical composition of the waste.

    k. The minimum analytical requirements for initial waste characterization and reanalysis are designated in Table R-2. The results of the reanalysis shall be received by the permittee on or before the anniversary date of the Form U approval and shall be maintained at the permittee's site for five (5) years from the date the results were received. The results shall be made available to the Department upon request.

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l. All waste will be analyzed by a Department accredited laboratory using the most recently promulgated test method updates. Test methods will be either EPA methods or other methods acceptable to the Department.

m. Waste acceptance limits shall be as designated in Table R-4.

n. Total analyses, in mg/kg, may be reported in lieu of leaching analyses for metals or organics, provided that the results for the total concentration do not exceed twenty (20) times the 80% warning limits for waste acceptance as shown in Table R-4.

o. The NCRO Waste Management Program shall be notified when the 80% warning limits of Table R-4 are met or exceeded, to review increased monitoring frequency and/or additional test parameters. If toxicity parameters are met or exceeded, the reanalysis may be a statistical treatment of the data.

p. Additional analytical requirements for initial characterization and waste stream reanalysis shall be determined according to the procedures set forth in this permit.

q. The NCRO Waste Management Program shall be notified immediately if a waste is accepted which is chemically incompatible with a waste already received at the facility. The permittee shall review with the NCRO Waste Management Program abatement alternatives for implementation. The permittee shall receive written approval from the NCRO Waste Management Program prior to implementation of any abatement alternatives.

r. Mixing residual wastes from the same or different generator is acceptable, provided the permittee maintains proper records and can demonstrate waste stream tracking from the generation sources and complies with the Waste Management regulations. Commingling special handling wastes with other waste types and with other generator's wastes is acceptable only as specifically provided by Department regulations. Waste stream analyses must be performed prior to mixing.

s. Form U's shall include separate residual waste code lists to identify Incidental/Small Quantity Process Waste.

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t. Cement kiln residue (RWC212) from generators burning hazardous waste fuels or using waste as raw materials shall be evaluated on a case-by-case basis by the Department for acceptance and monitoring.

u. In the event leachate treatment capability is reduced or more restrictive leachate discharge limitations are imposed by the Department or treatment facility, the permittee shall submit for review and written approval a permit modification application for the Form R leachate treatability to the NCRO Waste Management Program.

v. If the permittee wants to modify the acceptance limit concentrations or chemical test parameters, a minor permit modification must be submitted to the NCRO Waste Management Program for review and written approval.

w. Modifications of residual waste codes (RWC's), for acceptance of wastes for disposal not approved in the Waste Analysis and Classification Plan included in the permit application, or this permit, shall be a major permit modification, per 25 Pa. Code § 271.144.

x. Written requests for minor permit modifications to accept or modify the acceptance of large quantity (>2,200 lb./mo.) residual or special handling waste, shall be submitted to the NCRO Waste Management Program on forms supplied by the Department, including Source Reduction Strategy.

y. These written requests must be received by the NCRO Waste Management Program, through Greenport or by other acceptable means agreed up by the Department. If not acted upon by the Department, the requested waste may be accepted for disposal fifteen (15) Departmental working days after receipt of the written request.

If it is determined after the fifteen (15) Departmental working day period that waste accepted was not consistent with this Waste Analysis and Classification Plan or the design of the landfill site, the permittee shall be subject to any and all applicable enforcement actions of the Solid Waste Management Act or the Department's rules and regulations promulgated thereunder. The absence of an action by the

Department during or after the waiting period does not constitute an approval or final action of the Department.

z. The permittee shall not accept residual or special handling waste from any generator who has not provided a Form 26R to the permittee. Submittal of Form 26R to the permittee shall comply with the timetable established under 25 Pa. Code § 287.54(b).

aa. The Form 26R shall include written documentation that the waste is not a hazardous waste per 25 Pa. Code § 271.1, and written documentation that the waste continues to meet the landfill's Form R waste acceptance criteria.

bb. Form 26R analysis or certification required under 25 Pa. Code § 287.54 shall be maintained at the permittee's site for five (5) years from date of receiving the form and shall be made available to the Department upon request.

cc. The permittee shall receive annually from small quantity residual waste generators and large quantity generators of small quantity waste types, written documentation that their waste is not hazardous waste under 25 Pa. Code § 261a, and written documentation that their waste continues to meet the landfill's Form R waste acceptance criteria. This documentation shall be maintained at the facility for five (5) years from the date of receiving the forms and shall be made available to the Department upon request. If documentation is not supplied to the permittee by the generator, the facility must no longer accept that waste until such time as the generator supplies it.

dd. All Form U and special-handling waste Department forms, Form 25R, Form FC-1, and Form U-CS documents must be maintained at the facility for five (5) years from the date of receiving the forms and shall be made available to the Department upon request per 25 Pa. Code § 271.621.

ee. The most recent sampling methods, analysis methods, Department forms and policies, shall be utilized at all times.

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ff. Each laboratory analytical report shall be maintained at the permittee's site or submitted to the NCRO Waste Management Program in compliance with this permit and shall include the following information:

i. Chain-of-custody form for each sample shipment
ii. Name, signature, and title identifying sampler on chain-of-custody form
iii. Description of the field sampling
iv. Proper analytical units on laboratory reports
v. Extraction, digestion, and analytical methods of all required parameters on laboratory reports
vi. Instrument detection/reporting limits for all required parameters on laboratory reports
vii. Sample collection date, laboratory sample received date, date of laboratory analysis for all individual parameters, to verify holding times, on laboratory reports
viii. Signature and title of the responsible laboratory representative on the laboratory reports

gg. Acceptance limits for waste excluded from regulation as hazardous waste under 25 Pa. Code § 261.4(b) shall be based on limiting factors of applicable toxicity parameters, liner compatibility, leachate treatability, and waste-to-waste chemical compatibility.

hh. The NCRO Waste Management Program shall be notified immediately when the permittee is aware of any of the following:

i. waste is rejected
ii. waste failed on-site screening has been disposed
iii. unapproved waste has been accepted and disposed

Appendix A

Approved Geosynthetics For Lycoming County Landfill Liner System[2]

100 mil High Density Polyethylene (HDPE) Geomembranes

AGRU America HDPE Smooth Liner, manufactured by AGRU America.
AGRU America HDPE Micro Spike Liner, manufactured by AGRU America.
Solmax HDPE Smooth Liner, manufactured by Solmax international.
Solmax HDPE Textured DS, manufactured by Solmax International.
GSE HDPE Coextruded White and Black both Smooth and Textured material, manufactured by GSE Lining Technology, Inc.
GSE HD, manufactured by GSE Technology, Inc.
GSE HD Textured, manufactured by GSE Technology, Inc.
Poly Flex Smooth HDPE Geomembrane, manufactured by Poly-Felt, Inc.
Ploy Flex Textured HDPE Geomembrane, manufactured by Poly-Felt, Inc.

Geomembrane Tank Liner

GSE Studliner 200 mil HDPE, manufactured by GSE Technology, Inc.

Geonet

CETCO[1] Texdrain 200, manufactured by CETCO[1] Lining Technologies
AGRU America Geonet, manufactured by AGRU America
SKAPS Transnet 220, manufactured by SKAPS Industries
GSE PermaNet, manufactured by GSE lining Technology, Inc.
GSE Hypernet, manufactured by GSE Technology, Inc.

Geotextiles

CETCO[1] Geotex 1291 (12 oz/yd2), manufactured by Propex, Inc.
CETCO[1] Geotex 1071 (10 oz/yd2), manufactured by Propex, Inc.
CETCO[1] Geotex 1701 (16 oz/yd2), manufactured by Propex, Inc.
SKAPS GE-112 (12 oz/yd2), manufactured by SKAPS Industries
SKAPS GE-110 (10 oz/yd2), manufactured by SKAPS Industries
SKAPS GE-112 (16 oz/yd2), manufactured by SKAPS Industries
US Fabrics US-300NW (12 oz/yd2), manufactured by US Fabrics, Inc.
US Fabrics US-270NW (10 oz/yd2), manufactured by US Fabrics, Inc.
US Fabrics US-380NW (16 oz/yd2), manufactured by US Fabrics, Inc.
Amoco Types 4510, 4512 and 4516, polypropylene non-woven geotextile, manufactured by Amoco Fabrics and Fiber Company
Spunbond 1135, 1142 and 1155, manufactured by Johns-Manville Corporation

Geosynthetic Clay Liner

BentoLiner NS, manufactured by GSE Lining Technology, Inc.
NAUX Bentofix manufactured by Naue Fasertechnik
Bentomat ST, manufactured by CETCO[1]
Claymax, manufactured by Clem Environmental Corporation

Notes:

[1]CETCO - Colloid Environmental Technologies Company

[2]Any geosynthetics that are approved for use in the liner system which are either no longer manufactured or the parent company is found to be no longer in business or merged with another company, prior to use of the new geosynthetic, the permittee must show that the new product is technically equivalent (physical, chemical, mechanical and thermal - refer to Form 24 Liner System – Phase II, 2540-PM-BWM0150).

Appendix B

List of Approved Equivalency Requests for the Lycoming County Landfill

Attachment 1 to Appendix B

Related Conditions for Equivalency Review Requests for the Lycoming County Landfill

(This attachment is reserved for conditions of future Equivalency Requests.)

Appendix C

Form R Tables
Waste Analysis and Classification Plan for Lycoming County Landfill
Waste Acceptance Tables and Attachments

- Table R-1: Approved Residual Waste Codes
- Table R-2: Waste Code Testing/Reporting Frequency and Analytical Requirements
- Table R-3: Basis of Waste Acceptance Criteria
- Table R-4: Waste Acceptance Criteria
- Testing Reduction/Elimination Certification
- Non-Hazardous Waste Certification
- Contaminated Soil Sampling Protocol
- Contaminated Soil: Table 1: Residual Waste Categories and Abbreviated Testing Requirements
- Field Oversight for Contaminated Soil Characterization
- Contaminated Soil Pile or In-Situ Sampling

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Table R-1
Residual Waste Codes

LYCOMING COUNTY LANDFILL

RWCs	Residual Waste Code (RWC) Description
001	Coal-derived bottom ash
002	Coal-derived fly ash
003	Flue gas desulfurization residue (Fgd)
004	Incinerator bottom ash
005	Incinerator fly ash
006	Incinerator mixed ash
007	Other ash (to be further specified)
101	Foundry sand
102	Slag
103	Refractory material
104	Grindings, shavings
105	Ferrous baghouse dust
106	Non-ferrous baghouse dust
107	Ferrous scrap, including auto recycle
108	Non-ferrous scrap
109	Sandblast abrasive and residue
110	Air emission control dust
111	Lubricating soaps
201	Water treatment sludge/sediment
203	Industrial wastewater treatment sludge, including acid mine drainage sludge
204	Metallurgical sludge
205	Food processing sludge
206	Paint, coating sludge and scale
207	Tank bottoms
208	Still bottoms (non-hazardous)
209	Oily sludge, petroleum derived
210	Air Emission control sludge (excluding FGD sludge and gypsum)
211	Other industrial sludge (to be further specified)
212	Lime/cement kiln scale, residue
213	Lime-stabilized spent pickle liquor
214	Cooling tower sediment/sludge
215	Flue Gas Desulfurization (FGD) sludge (including FGD gypsum)
301	Acidic chemicals (pH < 6)
302	Basic chemicals (pH > 8)
303	Combustible chemicals (non-hazardous)

RWCs	Residual Waste Code (RWC) Description
304	Chemical salts
305	Spent activated carbon (e.g., decoloring, filtering) For carbon/graphite scrap, see RWC 481
306	Surface coatings (e.g., solid/semi-solid paints, polishes, adhesives, inks, cans of hardened paint) For paint filters, see RWC 473
307	Filter media/aids (e.g., diatomaceous earth, ion exchange resins, silica gels, silica bead desiccant)
308	Spent dyes
310	Detergents, cleaning agents
311	Off-specifications products, intermediates (non-hazardous, further describe)
312	Pharmaceutical, biological wastes (manufacturing and lab wastes)
313	Wax, paraffin
318	Photographic chemicals (non-hazardous)
401	Leather wastes (for Cr tannery process sludges, see RWC 211)
402	Rubber, elastomer wastes, Latex
403	Wood wastes (scrap lumber, pallets, particle board)
404	Paper, cardboard wastes, laminated paper
405	Textile wastes including yarn, fabric, fiber, elastic
406	Glass wastes (cullet), excluding industrial refractory material
407	Polyethylene, polystyrene, polyurethane, and other non-halogenated plastics
408	Glass reinforced plastics
409	Halogenated plastics (e.g. PVC, Teflon, CPE)
410	Electronic component wastes (e.g. off-spec semiconductors, circuit boards)
411	Agricultural wastes (e.g. fertilizers, pesticides[1], feed, feed supplements)
412	Photographic wastes (e.g. film, photographic paper)
413	Asphalt (bituminous), asphalt shingles
414	Ceramic wastes
415	Linoleum wastes
416	Thermal insulation wastes (cellulose, glass, wool)
417	Wiring, conduit, electrical insulation
418	Sawdust, including wood shavings/turnings
419	Empty containers, metallic and non-metallic drums and pails. (For containers with contents, choose appropriate waste code for contents)
424	Treated wood, railroad ties
430	Food waste (for food processing wastewater treatment sludges, see RWC 205)
440	Resins, (Epoxy waste)
450	Polymers (other than 407, 409)
460	Vinyl (sheet, upholstery)
470	Spent filters - air/gas

RWCs	Residual Waste Code (RWC) Description
471	Spent filters - aqueous
472	Spent filters- non-hazardous fuel, oil, solvent
473	Paint filters, other cloth/paper filters, supersacs
474	Grease
480	Refractory (furnace, boiler), other than RWC 103
481	Carbon/graphite residue/scrap
482	Baghouse dust, other than RWC's 105 and 106
483	Blasting abrasive/residue, other than RWC 109
484	Gypsum plaster molds
501	Asbestos-containing waste (e.g. insulation, brake lining, etc.)
502	PCB-containing waste
503	Oil-contaminated waste (e.g. spent absorbent, oily rags)
505	Spent catalysts
506	Contaminated soils/debris/spill residues (nonpetroleum), dredged material, water intake debris and sediment, coal mill rejects
507	Waste petroleum material contaminated soil/debris
508	Virgin petroleum fuel contaminated soil and debris
510	Waste Tires (excluding whole tires, except as provided in Act 190)
701	Pumping, piping, vessels, instruments, storage tanks
702	Scrap materials from maintenance, product turnaround
703	Batteries[1] - non-hazardous (excluding lead acid batteries per §273.201(h))
704	Grinding wheels, sanding disks, polishing belts, welding rods, broken tools
710	Plant trash
801	Non-oil and Gas Well Drilling Waste – includes drilling fluids, residuals, and drill cuttings from monitoring well and drinking water well construction.
802	Produced Fluid – includes flow-back, brine and any other formation fluids recovered from the wellbore. Flow-back is defined as fracturing/stimulation fluids, including any colloidal and suspended solids within the fluid, recovered from the wellbore after injection into the wellbore.
803	Drilling Fluid Waste (oil & gas drilling mud, other drilling fluids other than fracking fluid and spent lubricant)
804	Wastewater Treatment Sludge – sludge and solids generated during the processing of any oil and gas-related wastewater including any sediment generated during storage of oil and gas-related wastewater. Mixed loads of wastewater treatment sludge with other waste for disposal purposes, such as filter socks (RWC 812), will be coded as RWC 804.
805	Unused Fracturing Fluid Waste - oil and gas fracturing/stimulation fluid waste and fracturing sand waste that has not been injected into a wellbore.
806	Synthetic Liner Materials – includes well site liners, liners used in pits or other approved storage structures, freshwater impoundments, centralized impoundments, or used in conjunction with primary containers.

RWCs	Residual Waste Code (RWC) Description
807	Sediment from Production Storage – sediment from storage of marketable oil and gas products. Does not include sediment from oil and gas related wastewater storage.
808	Servicing Fluid – oil and gas production well maintenance/work over fluids, oil/water-based mud and foam and well cellar cleanout waste after drilling operation shave been completed. Does not include well cellar cleanout waste covered under existing RWCs, well cellar fluids that are recycled/reused, or rainwater that is collected in a well cellar that has not been mixed with a residual waste.
809	Spent Lubricant Waste (spent oil & gas drilling lubricants, spent plug drilling lubricants)
810	Drill Cuttings (oil & gas drill cuttings using a drilling mud formula)
811	Soil Contaminated by oil and Gas-related Spills – Soil contaminated by spills of RWCs 802, 803, 805, 807, 808, 809 and 810. Soils contaminated by spills of RWC 804 will be coded using RWC 804. Soil contaminated by spills of RWC 812 will be coded using RWC 812.
812	Filter Socks – Filters, filter socks and other media used to filter any oil and gas-related wastewater. Does not include filter socks mixed with RWC 804 for disposal purposes. Except where filter socks are mixed with RWC 804 and coded as RWC 804, mixed loads of RWC 812 with other waste for disposal purposes, such as drill cuttings, will be coded as RWC 812.
899	Other Oil and Gas Wastes – all remaining oil and gas wastes other than those already covered under existing RWCs. Includes containment water. Does not include rainwater that is collected in a containment area that has not been mixed with residual waste.
901	Auto shredder "fluff"
902	Non-hazardous residue from treatment of hazardous waste, other than RWC 203. (Treated hazardous waste residue should include land ban certification as required.)
35	Processed infectious/chemotherapeutic waste
36	Municipal waste incinerator ash
43	Sewage sludge

[1] Unless acceptance is restricted by the Universal Waste Rule.

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Table R-2
Waste Code Testing/Reporting Frequency and Analytical Requirements

LYCOMING COUNTY LANDFILL

RW	CHAR		RCRA TOXICITY				NON-RCRA TOXICITY			ASTM LEACH	TOTALS					Freq
Code	Ign	Free Liq	Metals	Vols	Semi Vols	Herb Pest	Metals	Vols	Semi Vols	Corr pH	TOX[1]	or TOX[1]	CN S	PCB	O&G TPH	Retest[5]
001	X			X	X	X		X	X		X	X		X	X	I
002	X			X	X	X		X	X		X	X		X	X	I
003	X			X	X	X		X	X		X	X		X	X	I
004	X			X	X	X		X	X		X	X		X	X	I
005	X			X	X	X		X	X		X	X		X	X	I
006	X			X	X	X		X	X		X	X		X	X	I
007	X			X	X	X		X	X		X	X		X	X	I
101	X	X		X	X	X		X	X					X		I
102	X	X		X	X	X		X	X					X		I
103	X	X		X	X	X		X	X					X		I
104	X	X		X	X	X		X	X					X		I
105		X		X	X	X		X	X					X		I
106		X		X	X	X		X	X					X		I
107	X	X		X	X	X		X	X					X		I
108	X	X		X	X	X		X	X					X		I
109	X	X		X	X	X		X	X					X		II
110		X		X	X	X		X	X					X		I
111				X	X	X		X	X					X		I
201	X			X	X	X		X	X					X		I

Table R-2

Waste Code Testing/Reporting
Lycoming County Landfill

RW	CHAR		RCRA TOXICITY				NON-RCRA TOXICITY			ASTM LEACH	TOTALS				Freq
Code	Ign	Free Liq	Metals	Vols	Semi Vols	Herb Pest	Metals	Vols	Semi Vols	Corr pH	TOX[1] or TOX[1]	CN S	PCB	O&G TPH	Retest[5]
203	X				X	X			X				X		I
204	X			X	X	X		X	X				X		I
205	X			X	X	X		X	X				X		I
206					X	X			X				X		I
207					X	X			X				X		I
208					X	X			X				X		I
209					X	X			X				X		I
210	X	X		X	X	X		X	X				X		I
211					X	X			X				X		I
212	X	X		X	X	X		X	X				X		I
213	X			X	X	X		X	X				X		I
214	X			X	X	X		X	X				X		I
215	X	X		X	X	X		X	X				X		I
301				X	X	X		X	X				X		I
302				X	X	X		X	X				X		I
303				X	X	X		X	X				X		I
304				X	X	X		X	X				X		I
305				X	X	X		X	X				X		I
306					X	X			X				X		I
307					X	X		X	X				X		I
308					X	X			X				X		I

Table R-2

Waste Code Testing/Reporting
Lycoming County Landfill

RW	CHAR		RCRA TOXICITY				NON-RCRA TOXICITY			ASTM LEACH		TOTALS				Freq
Code	Ign	Free Liq	Metals	Vols	Semi Vols	Herb Pest	Metals	Vols	Semi Vols	Corr pH	TOX[1]	or TOX[1]	CN S	PCB	O&G TPH	Retest[5]
310				X	X	X		X	X					X		I
311				X	X	X		X	X					X		I
312				X	X	X		X	X					X		I
313		X	X	X	X	X	X	X	X				X	X		I
318				X	X	X		X	X					X		I
401	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	I
402	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	I
403	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	I
404	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	I
405	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	I
406	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	I
407	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	I
408	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	I
409	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	I
410	X	X		X	X	X		X	X	X			X	X	X	I
411	X	(Pest)	(Pest)	X	X	(Pest)	(Pest)	X	Phenols (Pest)		(Pest)	(Pest)	(Pest)	X	(Pest)	I
412				X	X	X		X	X					X		I
413																
414	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	I
415	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	I
RW	CHAR		RCRA TOXICITY				NON-RCRA TOXICITY			ASTM LEACH		TOTALS				Freq

Table R-2

Waste Code Testing/Reporting
Lycoming County Landfill

Code	Ign	Free Liq	Metals	Vols	Semi Vols	Herb Pest	Metals	Vols	Semi Vols	Corr pH	TOX[1]	or TOX[1]	CN S	PCB	O&G TPH	Retest[5]
416	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	I
417	X	X		X	X	X	X	X	X	X	X	X	X	X	X	I
418	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	I
419	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	I
424	X	X	Cr, As if pre-served	X	PCP – if pre-served	X	Cu – if pre-served	X	X	X	X	X	X	X	TPH – if pre-served	I
430	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	I
440				X	X	X		X	X					X		I
450				X	X	X		X	X					X		I
460	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	I
470		X		X	X	X		X	Phenols					X		I
471				X	X	X		X	Phenols					X		I
472				X	X	X		X	Phenols					X		I
473					X	X		ETX	X					X		I
474				X	X	X		X	X				X	X		I
480	X	X		X	X	X		X	X					X		I
481				X	X	X		X	X					X		I
482		X		X	X	X		X	X					X		I
483	X	X		X	X	X		X	X					X		II
484	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	I
501																

Table R-2

Waste Code Testing/Reporting
Lycoming County Landfill

RW	CHAR		RCRA TOXICITY				NON-RCRA TOXICITY			ASTM LEACH	TOTALS					Freq
Code	Ign	Free Liq	Metals	Vols	Semi Vols	Herb Pest	Metals	Vols	Semi Vols	Corr pH	TOX[1]	or TOX[1]	CN S	PCB	O&G TPH	Retest[5]
502	X					X		ETX	X		X	X	X			III
503	Use Most Recent Form U-CS & Attachment I Procedures for RWC 503															IV
505				X	X	X		X	Phenols					X		I
506	Use Most Recent Form U-CS & Attachment I Procedures for RWC 506															IV
507	Use Most Recent Form U-CS & Attachment I Procedures for RWC 507															IV
508	Use Most Recent Form FC-1 & Procedures for RWC 508															IV
510																
701	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	I
702	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	I
703	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	I
704	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	I
710																V
801	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	VI
802[2,3]						X	+ Sr	Diesel range short list[4]	Diesel range short list[4]	+ Cl				X	O&G + Diesel TPH	II
803						X	+ Sr	Diesel range short list[4]	Diesel range short list[4]	+ Cl				X		II
804						X	+ Sr	Diesel range short list[4]	Diesel range short list[4]	+ Cl				X	O&G + Diesel TPH	VII VIII IX, X XI
RW	CHAR		RCRA TOXICITY				NON-RCRA TOXICITY			ASTM LEACH	TOTALS					Freq

Table R-2

Waste Code Testing/Reporting
Lycoming County Landfill

Code	Ign	Free Liq	Metals	Vols	Semi Vols	Herb Pest	Metals	Vols	Semi Vols	Corr pH	TOX[1] or TOX[1]	CNS	PCB	O&G TPH	Retest[5]
805						X							X		II
806															II
807						X	+ Sr	Diesel range short list[4]	Diesel range short list[4]	+ Cl			X	O&G + DieselTPH	II
808						X	+ Sr	Diesel range short list[4]	Diesel range short list[4]	+ Cl			X	O&G + Diesel TPH	II
809						X	+ Sr	Diesel range short list[4]	Diesel range short list[4]	+ Cl			X	O&G + Diesel TPH	II
810						X	+ Sr	Diesel range short list[4]	Diesel range short list[4]	+ Cl			X	O&G + Diesel TPH	IX X XI
811						X	+ Sr	Diesel range short list[4]	Diesel range short list[4]	+ Cl			X	O&G + Diesel TPH	II
812						X	+ Sr	Diesel range short list[4]	Diesel range short list[4]	+ Cl			X	O&G + Diesel TPH	II
899						X	+ Sr	Diesel range short list[4]	Diesel range short list[4]	+ Cl			X	O&G + Diesel TPH	II
901				X	X	X		X	Phenols				X		I

Table R-2

Waste Code Testing/Reporting
Lycoming County Landfill

RW	CHAR		RCRA TOXICITY				NON-RCRA TOXICITY			ASTM LEACH	TOTALS				Freq
Code	Ign	Free Liq	Metals	Vols	Semi Vols	Herb Pest	Metals	Vols	Semi Vols	Corr pH	TOX[1] or TOX[1]	CN S	PCB	O&G TPH	Retest[5]
902			(if treated for)	(if treated for)	(if treated for)	(if treated for)		X	Phenols				(if treated for)		I
35	Forms 40 and 44 for incineration, Form 40 for autoclaving														XII
36	Form 41 Parameters (No certifications in lieu of testing. This is considered a variable wastestream)														XIII
43	Form 43 Parameters														

KEY:

X	INITIAL CHARACTERIZATION TESTING OR GENERATOR CERTIFICATION: Initial waste stream characterization may be certified in writing through generator knowledge in lieu of testing. Certification may be made if the process by which the waste was generated is known, the process has not changed, the waste's composition is known, and has not changed. Certification based on known composition must either be for absence of the parameter or absence of its leaching in the waste stream.
	INITIAL CHARACTERIZATION TESTING WITH LIMITED GENERATOR CERTIFICATION. ROUTINE MONITORING TESTING REQUIRED UNLESS GENERATOR CERTIFICATION: Initial Generator Certifications are restricted to known composition and must either be for absence of the parameter in the waste stream or absence of parameter leaching in the waste stream. Routine monitoring generator knowledge would be based on known composition, certification that the process and waste stream composition have not changed.

(I) A complete Form U reanalysis is required once every five years to verify certifications, due on or before the anniversary date of original Form U approval. This is not required for parameters at or below 30% of Form R acceptance limiting criteria, if waste generating process is certified as not having changed. Results shall be filed at your facility and be made available upon request.

(II) Tested per disposal event, per generator location.

(III) Tested per disposal event, per generator location. If the waste is PCB-contaminated soil, follow RWC 506 for sampling and chemical monitoring requirements.

(IV) Contaminated soils are to be tested per clean-up event, per generator location.

(V) Form U approval for plant trash generated from oil & gas industry operations is required to be submitted for approval minimally on a countywide basis as the generation source.

(VI) Test parameters depend on contaminants in groundwater. Initial characterization parameters may be reduced or dropped for monitoring well and potable water well drilling residues.

(VII) Oil & gas industry hydro-fracture water is tested per well, per generator.

(VIII) Flow-back hydro-fracture water treatment sludge is tested monthly from fixed treatment generators and per disposal event from mobile treatment generators. This treatment sludge is to be tested for TENORM parameters. Monthly reporting to the Department may be required once sludge is approved.

(IX) Oil & gas drill cuttings and hydro-fracture flow-back sands are tested per well pad, per generator.

(X) Test samples of drill cuttings and hydro-fracture flow-back sands shall be from within the geologic formation for oil/gas extraction and which utilize lubricants and other additives in the drilling mud. Samples shall be representative of the deepest horizontal drilling/fracturing or deepest vertical drilling/fracturing if horizontal drilling is not performed.

(XI) For chemical characterization of drill cuttings and hydro-fracture flowback sands as new waste types, initial analytical testing shall be of that first well pad. Requests for these wastestreams at the second well pad shall include submittal of the chemical characterization analytical testing from the first well pad. Subsequent wastestream requests shall continue in this manner, submitting the chemical characterization analytical testing for the most recent previous well pad as the characterization analytical with the current well pad wastestream request. Simultaneous development of multiple well pads could result in multiple analytical reports in subsequent requests or multiple requests based on a single previous analysis, as long as analytical representing all well pads is received once and promptly. Sample results for these wastes from the final well pad constructed by the generator, or from a well pad submittal that has gone beyond ninety days without a subsequent well pad development, shall be submitted to the Department within thirty days after Department determination of their disposal request. Unacceptable analytical chemistry for wastestream characterization requests shall require wastestream chemical characterization retesting at the previous well pad where analytical was obtained and used for temporary certification, and chemical characterization analytical testing shall be required at the pending well pad being requested, all prior to Department approval, unless there is no activity at the previous well pad. In that event, retesting and submitting there shall occur prior to removing these wastestreams resulting from future drilling there.

(XII) For incinerator ash, test ash chemistry annually on Form 44. For incinerator ash microbiological, test quarterly on Form 40. For autoclaving, test microbiological every forty (40) hours on Form 40.

(XIII) You are required to receive quarterly monitoring chemistry from the ash generator, following Form 41 parameters. For start-up resource recovery facilities, sampling must meet the EPA's Guidance for *The Sampling and Analysis of Municipal Waste Combustion Ash for the Toxicity Characteristic*, June 1995. The ash generator must supply your disposal facility with the plan they follow for sampling their ash for disposal at your facility.

Endnotes

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[1] Organic scans for TCLP halogens may be used to certify "known composition" of the TOX indicator parameter. This is allowed because TOX is not a required parameter for wastestream characterization but may be required as an indicator parameter for monitoring. Analysis for TOX may be performed using the ASTM Leach or Total TOX test methods.

[2] Specific wastestreams excluded as hazardous solid waste per 261.4(b)(5) may be characterized by total analysis rather than TCLP leach analysis.

[3] For releases to soil or water of the environment, see Attachment I - Non-hazardous Contaminated Soil, 506 Contaminated Soil/Debris/Spill Residue (Non-Petroleum) From Non-Hazardous Spills Containing (from RWC 800).

[4] See Department Storage Tank Program diesel range short list. Use most current list.

[5] An updated Form U must be submitted to the Department for approval for any change in characterization of the waste stream, including process changes. For an existing Form U to remain in effect, all sampling and reporting requirements of §297.54 must be met.

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Table R-3
Basis of Waste Acceptance Criteria

LYCOMING COUNTY LANDFILL

Waste Characteristics

Corrosivity		pH > 2[1]			1,6
Free Liquids		No Free Liquids			1
Ignitability		Non-Ignitable Non-Oxidizer			1,2 1,2
Reactivity	• Sulfide • Cyanide	500 mgH_2S/kg 250 mgHCN/kg			1,2,5 1,2,5

Toxicity Characteristic Inorganics

Arsenic	<5.00	15.00[2]	0.26	2
Barium	<100.00	120.00		2
Cadmium	<1.00	540.00[3]	0.09	2
Chromium	<5.00	11.00	7.44	2
Lead	<5.00	3.00	1.04	2
Mercury	<0.20	540.00[4]	0.10	2
Selenium	<1.00	15.00[5]	0.19	2
Silver	<5.00	12.00[6]		2

Inorganics[7]

Aluminum		540.00[8]		
Antimony		15.00		
Beryllium		120.00[9]		
Boron		540.00[10]		
Cobalt		25.00[11]		
Copper		12.00	10.57	4
Iron		3,600.00		
Manganese		120.00		
Molybdenum		3.00		
Nickel		25.00	2.60	4
Thallium		3.00[12]		
Tin		3.00[13]		
Vanadium		11.00[14]		
Zinc		540.00	19.73	4

Toxicity Characteristic Volatile Organics

Benzene	<0.50	0.78		2
Carbon Tetrachloride	<0.50	0.40		2
Chlorobenzene	<100.00	18.00		2
Chloroform	<6.00	6.90		2
1,2-Dichloroethane	<0.50	16.00		2
1,1-Dichloroethene	<0.70	16.00[15]		2

Parameters	Toxicity Limits (mg/L)	Liner Compatibility Limits (mg/L)	Leachate Treatability Limits (mg/L)	Basis
Methyl Ethyl Ketone	<200.00	13.00		2
Tetrachloroethene	<0.70	0.55		2
Trichloroethene	<0.50	0.70		2
Vinyl Chloride	<0.20	16.00[16]		2
Volatile Organics				
Acetone		14.00		3
Chloromethane		0.12		3
bis(Chloromethyl)ether		0.045[17]		3
1,2-Dibromoethane (Ethylene dibromide)		16.00[18]		3
Dibromomethane		14.00[19]		3
1,1-Dichloroethane		10.40		3
cis-1,2-Dichloroethene		0.36		3
trans-1,2-Dichloroethene		0.68		3
cis-1,3-Dichloropropene		16.00[20]		3
Ethylbenzene		2.50		3
Heptane		0.06		3
Hexane		0.06		3
2-Hexanone		13.00[21]		3
Isopropylbenzene (Cumene)		2.50[22]		3
Methylene Chloride		14.00		3
4-Methyl-2-pentanone		13.00[23]		3
Methyl-tert-butyl ether (MTBE)		13.00[24]		3
Octane		0.05		3
1-Propanol		0.10[25]		3
2-Propanol		0.10[26]		3
Styrene		0.16		3
Tetrachloroethane		0.50		3
Tetrahydrofuran		0.080[27]		3
Toluene		15.00		3
1,1,1-Trichloroethane		1.28		3
1,1,2-Trichloroethane		0.43		3
1,2,3-Trichloropropane		1.20[28]		3
1,2,4-Trimethylbenzene		2.50[29]		
1,3,5-Trimethylbenzene		2.50[30]		
Xylenes		0.26		3

Parameters	Toxicity Limits (mg/L)	Liner Compatibility Limits (mg/L)	Leachate Treatability Limits (mg/L)	Basis
Toxicity Characteristic Semi-volatile Organics				
Cresol	<200.00	0.68		3
o-Cresol	<200.00	0.68		3
m-Cresol	<200.00	0.68		3
p-Cresol	<200.00	0.68		3
1,4-Dichlorobenzene	<7.50	0.80		2
2,4-Dinitrotoluene	<0.13	0.08		2
Hexachlorobenzene	<0.13	0.20		2
Hexachlorobutadiene	<0.50	0.42		2
Hexachloroethane	<3.00	0.60		2
Nitrobenzene	<2.00	0.56		2
Pentachlorophenol	<100.00	0.40		3
Pyridine	<5.00	0.64		2
2,4,5-Trichlorophenol	<400.00	0.30		3
2,4,6-Trichlorophenol	<2.00	0.30		2
Semi-volatile Organics				
Acenaphthene		0.11		3
Anthracene		0.05		3
Benzo (a) anthracene		0.03		3
Benzo (a) pyrene		0.05		3
Benzo (b) fluoranthene		0.03		3
Benzo (g,h,i) perylene		0.05[31]		3
Butylbenzyl Phthalate		0.23		3
Chrysene		0.04		3
bis (2-Ethylhexyl)phthalate		0.89		3
Fluoranthene		0.05		3
Fluorene		0.05		3
Indeno (1,2,3-cd) pyrene		0.03[32]		3
Isophorone		5.00		3
Naphthalene		0.28		3
di-n-Octyl Phthalate		0.35[33]		3
Phenanthrene		0.06		3
Phenol		14.00		3
Pyrene		0.05[34]		3
Toxicity Characteristic Pesticide Organics				
Chlordane	<0.03	0.01		2

Parameters	Toxicity Limits (mg/L)	Liner Compatibility Limits (mg/L)	Leachate Treatability Limits (mg/L)	Basis
2,4-D	<10.00	0.01[35]		2
Endrin	<0.02	0.01		2
Heptachlor	<0.008	0.05		2
Lindane	<0.40	0.01		2
Methoxychlor	<10.00	0.05[36]		3
Toxaphene	<0.50	0.05		2
2,4,5-TP (Silvex)	<1.00	0.01		2
Pesticide Organics				
4,4'-DDT		0.01		3
Water Leaching Tests[37]				
Ammonia-Nitrogen		700.00		
Chloride		7,500.00		
Fluoride		460.00		
Nitrate		1.00		
Nitrite		1.00		
Oil and Grease		400.00[38]		
Organic Halogen (TOX)				
PCBs			0.006[39]	4
Petroleum Hydrocarbons (TPH)		135.00[40]		
Solids, Suspended (TSS)				4
Sulfate		2,400.00		
Total Analyses				
Cyanides				
Oil and Grease		120,000.00 mg/kg[41]		3
Organic Halogen (TOX)				
PCBs	< 50.00 mg/kg			1,2
Petroleum Hydrocarbons (TPH)		120,000.00 mg/kg[42]		3
Sulfides				

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Table R-3
Basis of Waste Acceptance Criteria

LYCOMING COUNTY LANDFILL

Basis:

1. Regulatory Requirements.
2. Toxicity Limit.
3. (Liner Compatibility Limit) x (Dilution Attenuation Factor of 100).
4. (Leachate Treatability Limit) x (Dilution Attenuation Factor of 100).
5. Safety Limits, found in SW-846 analytical methods
6. Waste of extreme pH must be chemically compatible with other waste disposed at the landfill.

---

[1] Hazardous Waste Regulation 261.22 does not apply for solid wastes that are not aqueous. Therefore, an upper pH limit of 12.5 is not appropriate. However, maintaining a lower pH limit is appropriate, due to corrosive characteristic of strong acids, compatibility problems with more alkaline wastes, and leachability of metals at low pH.
[2] Liner compatibility value for arsenic is based on antimony.
[3] Liner compatibility value for cadmium is based on zinc.
[4] Liner compatibility value for mercury is based on zinc.
[5] Liner compatibility value for selenium is based on antimony.
[6] Liner compatibility value for silver is based on copper.
[7] Liner compatibility limits for inorganics were not included in acceptance limits for Table R4 since the Department's worst-case leachate list does not include inorganics. Inorganics are not known to degrade landfill liner systems.
[8] Liner compatibility value for aluminum is based on zinc.
[9] Liner compatibility value for beryllium is based on barium.
[10] Liner compatibility value for boron is based on zinc.
[11] Liner compatibility value for cobalt is based on nickel.
[12] Liner compatibility value for thallium is based on lead.
[13] Liner compatibility value for tin is based on lead.
[14] Liner compatibility value for vanadium is based on chromium.
[15] Liner compatibility value for 1,1-dichloroethene is based on 1,2-dichloroethane.
[16] Liner compatibility value for vinyl chloride is based on 1,2-dichloroethane.
[17] Liner compatibility value for bis(Chloromethyl)ether is based on bis(2-chloroisopropyl)ether.
[18] Liner compatibility value for 1,2-dibromoethane is based on 1,2-dichloroethane.
[19] Liner compatibility value for Dibromomethane is based on Methylene chloride.
[20] Liner compatibility value for cis-1,3-dichloropropene is based on 1,2-dichloroethane.
[21] Liner compatibility value for 2-hexanone is based on MEK.
[22] Liner compatibility value for Cumene is based on Ethylbenzene.
[23] Liner compatibility value for 4-methyl-2-pentanone is based on MEK.
[24] Liner compatibility value for MTBE is based on MEK.
[25] Liner compatibility value for 1-Propanol is based on Isopropyl alcohol.
[26] Liner compatibility value for 2-Propanol is based on Isopropyl alcohol.
[27] Liner compatibility value for Tetrahydofuran is based on Ethyl ether.
[28] Liner compatibility value for 1,2,3-Trichloropropane is based on Dichloropropane.
[29] Liner compatibility value for 1,2,4-Trimethylbenzene is based on ethylbenzene.
[30] Liner compatibility value for 1,3,5-Trimethylbenzene is based on ethylbenzene.
[31] Liner compatibility value for benzo (g,h,i) perylene is based on benzo (a) pyrene.
[32] Liner compatibility value for indeno (1,2,3-cd) pyrene is based on benzo (b) fluoranthene.
[33] Liner compatibililty value for di-n-Octyl phthalate is based on Diethyl phthalate.
[34] Liner compatibility value for pyrene is based on benzo (a) pyrene.
[35] Liner compatibility value for 2,4-D is based on 2,4,5-TP LOQ.
[36] Liner compatibility value for methoxychlor is based on heptachlor LOQ.
[37] Liner compatibility limits for inorganic indicator parameters were not included in acceptance limits for Table R4 since the Department's worst-case leachate list does not include inorganic indicator parameters. Inorganic indicator parameters are not known to degrade landfill liner systems.
[38] Exceeds solubility limit of BTEX in water. Therefore, regulate Oil & Grease by total analysis.
[39] A 100X DAF results in a concentration of 0.6 mg/L. This exceeds the solubility limit of PCB's in water. Regulate by PCB total concentration limit.
[40] Approximate solubility limit of BTEX in water. A 100x DAF results in a limit that well exceeds the solubility limit of BTEX in water, therefore regulate TPH by total analysis.
[41] Exceeding 12% content in waste could approach ignitability of a solid
[42] Exceeding 12% content in waste could approach ignitability of a solid

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Table R-4
Waste Acceptance Criteria

LYCOMING COUNTY LANDFILL

Parameter		Warning Limits (mg/L)	Acceptable Limits (mg/L)
Waste Characteristics			
Corrosivity		pH < 3	pH > 2
Free Liquids			No Free Liquids
Ignitability			Non-Ignitable, Non-Oxidizer
Reactivity	• Sulfide	400 mgH_2S/kg	500 mgH_2S/kg
	• Cyanide	200 mgHCN/kg	250 mgHCN/kg
Toxicity Characteristic Inorganics			
Arsenic		4.00	<5.00
Barium		80.00	<100.00
Cadmium		0.80	<1.00
Chromium		4.00	<5.00
Lead		4.00	<5.00
Mercury		0.16	<0.20
Selenium		0.80	<1.00
Silver		4.00	<5.00
Inorganics			
Copper		845.60	1,057.00
Nickel		208.00	260.00
Zinc		1,578.40	1,973.00
Toxicity Characteristic Volatile Organics			
Benzene		0.40	<0.50
Carbon Tetrachloride		0.40	<0.50
Chlorobenzene		80.00	<100.00
Chloroform		4.80	<6.00
1,2-Dichloroethane		0.40	<0.50
1,1-Dichloroethene		0.56	<0.70
Methyl Ethyl Ketone		160.00	<200.00
Tetrachloroethene		0.56	<0.70
Trichloroethene		0.40	<0.50
Vinyl Chloride		0.16	<0.20
Volatile Organics			
Acetone		1,120.00	1,400.00
Chloromethane		9.60	12.00
bis(Chloromethyl)ether		3.60	4.50
1,2-Dibromoethane (Ethylene		1,280.00	1,600.00

Parameter	Warning Limits (mg/L)	Acceptable Limits (mg/L)
dibromide)		
Dibromomethane	1,120.00	1,400.00
1,1-Dichloroethane	832.00	1,040.00
cis-1,2-Dichloroethene	28.80	36.00
trans-1,2-Dichloroethene	54.40	68.00
cis-1,3-Dichloropropene	1,280.00	1,600.00
Ethylbenzene	200.00	250.00
Heptane	4.80	6.00
Hexane	4.80	6.00
2-Hexanone	1,040.00	1,300.00
Isopropylbenzene (Cumene)	200.00	250.00
Methylene Chloride	1,120.00	1,400.00
4-Methyl-2-pentanone	1,040.00	1,300.00
Methyl-tert-butyl ether (MTBE)	1,040.00	1,300.00
Octane	4.00	5.00
1-Propanol	8.00	10.00
2-Propanol	8.00	10.00
Styrene	12.80	16.00
Tetrachloroethane	40.00	50.00
Tetrahydrofuran	6.40	8.00
Toluene	1,200.00	1,500.00
1,1,1-Trichloroethane	102.40	128.00
1,1,2-Trichloroethane	34.40	43.00
1,2,3-Trichloropropane	96.00	120.00
1,2,4-Trimethylbenzene	200.00	250.00
1,3,5-Trimethylbenzene	200.00	250.00
Xylenes	20.80	26.00
Toxicity Characteristic Semi-volatile Organics		
Cresol	54.40	68.00
o-Cresol	54.40	68.00
m-Cresol	54.40	68.00
p-Cresol	54.40	68.00
1,4-Dichlorobenzene	6.00	<7.50
2,4-Dinitrotoluene	0.10	<0.13
Hexachlorobenzene	0.10	<0.13
Hexachlorobutadiene	0.40	<0.50
Hexachloroethane	2.40	<3.00

Parameter	Warning Limits (mg/L)	Acceptable Limits (mg/L)
Nitrobenzene	1.60	<2.00
Pentachlorophenol	32.00	40.00
Pyridine	4.00	<5.00
2,4,5-Trichlorophenol	24.00	30.00
2,4,6-Trichlorophenol	1.60	<2.00
Semi-volatile Organics		
Acenaphthene	8.80	11.00
Anthracene	4.00	5.00
Benzo (a) anthracene	2.40	3.00
Benzo (a) pyrene	4.00	5.00
Benzo (b) fluoranthene	2.40	3.00
Benzo (g,h,i) perylene	4.00	5.00
Butylbenzyl Phthalate	18.40	23.00
Chrysene	3.20	4.00
bis (2-Ethylhexyl)phthalate	71.20	89.00
Fluoranthene	4.00	5.00
Fluorene	4.00	5.00
Indeno (1,2,3-cd) pyrene	2.40	3.00
Isophorone	400.00	500.00
Naphthalene	22.40	28.00
di-n-Octyl Phthalate	28.00	35.00
Phenanthrene	4.80	6.00
Phenol	1,120.00	1,400.00
Pyrene	4.00	5.00
Toxicity Characteristic Pesticide Organics		
Chlordane	0.024	<0.03
2,4-D	0.80	1.00
Endrin	0.016	<0.02
Heptachlor	0.006	<0.008
Lindane	0.32	<0.40
Methoxychlor	4.00	5.00
Toxaphene	0.40	<0.50
2,4,5-TP (Silvex)	0.80	<1.00
Pesticide Organics		
4,4'-DDT	0.80	1.00
Water Leaching Tests		
Organic Halogen (TOX)[1]	>100.00 mg/L	

Parameter	Warning Limits (mg/L)	Acceptable Limits (mg/L)
pH	pH < 3	pH > 2
Solids, Suspended (TSS)	32,000.00	40,000.00
Total Analyses		
Cyanides[2]	>50.00 mg/kg	
Metals[3]	20 x 80% "trigger" values	
Oil and Grease[4]	96,000.00	120,000.00
Organic Halogen (TOX)[5]	>100.00 mg/kg	
PCBs	40.00 mg/kg	< 50.00 mg/kg
Pesticides[6]	20 x 80% "trigger" values	
Petroleum Hydrocarbons(TPH)[7,8]	96,000.00	120,000.00
Semi-Volatiles[9]	20 x 80% "trigger" values	
Sulfides[10]	>100.00 mg/kg	
Volatiles[11]	20 x 80% "trigger" values	

[1] Exceeding 100 mg/L TOX on any waste shall "trigger" organic scans. On a case-by-case basis, additional test parameters may include volatile and semi-volatile scans.
[2] Exceeding 50 mg/kg total CN on any waste shall "trigger" reactive cyanide testing.
[3] "Triggering" for any waste requires leaching of the eight RCRA metals. Additional metals should be extracted dependent on suspected contaminant.
[4] Exceeding 120,000 mg/kg Oil & Grease on any waste requires TPH analysis.
[5] Exceeding 100 mg/kg TOX on any waste shall "trigger" organic scans. On a case-by-case basis, additional test parameters may include volatile and semi-volatile scans.
[6] "Triggering" for any waste requires leachable pesticide testing.
[7] Total TPH exceeding 120,000 mg/kg for any waste will be evaluated on a case-by-case basis. Additional test parameters may include Ignitability of Solids Test, volatile, and semi-volatile scans.
[8] Total TPH is to be measured on a dry weight basis.
[9] "Triggering" for any waste requires leachable semi-volatile testing.
[10] Exceeding 100 mg/kg total S^{-2} on any waste shall "trigger" reactive sulfide testing.
[11] "Triggering" for any waste requires leachable volatile testing.

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TESTING REDUCTION/ELIMINATION CERTIFICATION

Check (X) all applicable

Generator: _____

Waste: _____

Disposal Facility: _____

The generator hereby certifies that the Form R chemical parameters, not shown as tested in this application for our above-named waste, are being certified in lieu of analysis, on the following bases:

I. INITIAL WASTESTREAM CHARACTERIZATION:

1. Generator Knowledge:

☐ The chemicals are not used in our production process. There is no reason to expect presence of these parameters in the waste. This certification is based on our knowledge of the production process and review of MSDS's for the raw materials used in the part of our process generating this waste. This certification is limited to the levels of accuracy for any instrumentation used and reporting requirements for MSDS's required of the manufacturers of our raw materials by the State and Federal governments.

2. Known Chemical Composition:

☐ The parameters are of known chemical concentrations or are leaching N/D, based on recent chemical analyses performed on _____. This wastestream is of known composition and remains acceptable for disposal at the above-named facility.

II. APPROVED WASTESTREAM MONITORING:

1. Generator Knowledge. (Pertains to parameters on Table R-2 of the permit):

☐ The chemicals are not used in our production process. There is no reason to expect presence of these parameters in the waste. This certification is based on our knowledge of the production process and review of MSDS's for the raw materials used in the part of our process generating this waste. This certification is limited to the levels of accuracy for any instrumentation used and reporting requirements for MSDS's required of the manufacturers of our raw materials by the State and Federal governments.

☐ The chemical parameters have not changed in concentration from the original chemical characterization performed on _____. We know this because the process by which the above-named waste was generated has not changed since the original wastestream chemical characterization.

2. Known Chemical Composition. (Pertains to parameters on Table R-2 of the permit):

☐ The chemical parameters are of known chemical concentrations or are leaching N/D, based on recent chemical analyses performed on _____. This wastestream is of known composition and remains acceptable for disposal at the above-named facility.

III. ONCE EVERY FIVE-YEAR REANALYSIS TO VERIFY CERTIFICATIONS:

1. Parameters N/D Leaching or Within 30% of Form R Limiting Criteria

☐ Untested chemical parameters remain within 30% of the named disposal facility's approved Form R limiting criteria and need not undergo reanalysis at this time. We know this because the parameters were certified N/D or tested within 30% of the named disposal facility Form R limiting criteria at the time of last analysis on _____, and the process generating the waste has not changed since then.

Name of Generator's Certifying Official: _____

Title of Generator's Certifying Official: _____

Signature of Generator Official: _____

Date: _____

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NON-HAZARDOUS WASTE CERTIFICATION

Check (X) all applicable

Generator: _____

Waste: _____

Waste Code: _____

Disposal Facility: _____

1. **Generator Knowledge:**

☐ The generator hereby certifies that the _____ is non-hazardous. This certification is based on our knowledge of the production process and review of MSDS's for the raw materials used in the part of our process generating this waste. This certification is limited to the levels of accuracy for any instrumentation used and reporting requirements for MSDS's required of the manufacturers of our raw materials by the State and Federal governments.

2. **Known Chemical Composition:**

☐ The generator hereby certifies that the _____ is non-hazardous. This certification is based on review of pertinent MSDS's, "spec" sheets, and/or testing. The waste is of known composition. TCLP metals, ZHE volatile or semi-volatile organics, herbicides, pesticides, or PCB's are not present from sources, or at levels that would make the above wastestream a listed or characteristic hazardous waste.

Name of Generator's Certifying Official: _____

Title of Generator's Certifying Official: _____

Signature of Generator Official: _____

Date: _____

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Contaminated Soil Sampling Protocol
PCB-Containing Waste – Soil/Debris (RWC 502)
Non-hazardous Chemical (RWC 506)
Waste Petroleum (RWC 507)
Virgin Petroleum Fuel (RWC 508)

LYCOMING COUNTY LANDFILL

Regardless of the sampler, the following procedures are to be used in collecting Non-hazardous Contaminated Soil samples:

1. Notification for release of regulated substances, (1-gal or greater) shall be documented in the Form U-CS or Form FC-1 by identifying the Department staff involved in oversight of the soil cleanup.
2. Before collecting the sample, the sampler will verify the quantity of contaminated soil by measuring the pile and performing the most suitable mathematical computation. A form for reporting this information shall be provided by the Landfill.
3. Each PADEP Form contains specific directions on the minimum number of required samples, both with and without field screening.
4. To assure the protection of the sample, the sampler shall wear protective gloves and other personal protective equipment as needed and utilize standard EPA and Department sampling techniques and sampling tools to obtain the sample.
5. Composite sampling shall not be used to determine volatile organics.
6. A composite sample must originate from no less than four grab samples.
7. Volatiles are to be collected per SW-846 method 5035 to prevent loss of the volatile.
8. Analysis is waived for 25 tons or less of FC-1 soil, but not for U-CS soil.
9. Contaminated soil resulting from a sudden and unplanned event such as a fire, spill, or accident, as described in §287.103, will be handled as follows:
    a. Virgin fuel, hydraulic fluid, motor oil, and antifreeze via the Form FC-1.
    b. Hydraulic fluid, motor oil, and antifreeze alone, less than 25 tons, notification of disposal via a letter or email to the Department.
10. Complete Form U-CS testing may be appropriate initially to characterize the contaminants of concern. Abbreviated Form R testing requirements for Form U-CS wastes apply to known contamination.
11. Samples are to be analyzed by a PA DEP accredited environmental testing laboratory.
12. Appropriate holding time limitations for testing shall be met and verified by the laboratory in the submittal.
13. Chain-of-custody for all samples shall be documented in the submittal.
14. The bulk density that will be used to convert from yd^3 volume to tonnage is 1.4 tons/yd^3.

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Contaminated Soil
Table 1 - Residual Waste Categories and Abbreviated Testing Requirements

LYCOMING COUNTY LANDFILL

502	PCB-Containing Waste
Form U-CS. Minimum testing requirements are: Three test samples for API Diesel Range TPH, PCB's, 1,2,4-TMB, and 1,3,5-TMB.	

	PCB-Contaminated Soil, mineral insulating oil release to soil

503	Petroleum-Containing Waste
Form U-CS. Minimum testing requirements are: One test sample for TPH and TOX is required per 30-40 cubic yard waste container where absorbent volumes exceed 25 gallons per 30-40 cubic yard waste container.	

	Petroleum-contaminated absorbent, petroleum-contaminated rags from clean-up.

506	Contaminated Soil/Debris/Spill Residue (Non-Petroleum) From Non-Hazardous Spills Containing:
Form U-CS. Minimum testing requirements are: pH; the known contaminant(s) of concern; TPH and TOX for organic contamination; plus appropriate darker-shaded parameters or other monitoring instructions from Form R, Table R-2. Includes contaminated paper, plastic, wood, and vegetation from clean-up.	

(from RWC 000)	Combustion Residues. Coal-derived bottom ash, coal-derived fly ash, flue gas desulfurization residue (FGD), incinerator bottom ash, incinerator fly ash, incinerator mixed ash, other specified non-coal derived ash, coal fly ash, coal bottom ash, flue gas desulfurization residue FGD.
(from RWC 100)	Metallurgical Process Residue. Foundry sand, slag, refractory other than RWC 480 boiler furnace refractory, grindings, shavings, ferrous baghouse dust, non-ferrous baghouse dust, ferrous scrap, non-ferrous scrap, sandblast abrasive/residue, air emission control dust, lubricating soaps. (Soil contaminated with mill scales and heat treat scales are excluded. Low temperature metal dross and dross skims from Sn, Pb, Zn, and Al are excluded.)
(from RWC 200)	Sludges, Scales. Water treatment plant sludge/sediment, industrial wastewater treatment sludge/sediment including acid mine drainage sludge, metallurgical sludge, food processing sludge, paint coating sludge and scale, non-hazardous tank bottoms, non-hazardous still bottoms, air emission control sludge, other specified industrial sludge, lime/cement kiln scale and residue, lime-stabilized spent pickle liquor, cooling tower sediment/sludge, oil & gas drilling treated hydrofracture water sludge.

506 contd	**Contaminated Soil/Debris/Spill Residue (Non-Petroleum) From Non-Hazardous Spills Containing:**
(from RWC 300)	Chemical Waste. Acidic chemicals (pH < 6), basic chemicals (pH > 8), non-hazardous combustible chemicals, chemical salts, spent activated carbon, surface coatings, solid/semi-solid paints, polishes, adhesives, inks, cans of hardened paint, filter media/aids, diatomaceous earth, ion exchange resins, silica gels, non-hazardous spent dyes, detergents, cleaning agents, off-specification products and intermediates, non-infectious pharmaceutical and biological manufacturing and lab wastes, wax, paraffin, photographic chemicals. Includes soil contaminated with alcohols, solvents, glycols/antifreeze, machine coolants, and nonhazardous spent plating baths.
(from RWC 400)	Generic Manufacturing Wastes. Leather, rubber, elastomer, Latex, wood, scrap lumber, pallets, particle board, laminated paper, cardboard, textile, yarn, fabric, fiber, elastic, glass, cullet, polyethylene, polystyrene, polyurethane, other non-halogenated plastics, glass reinforced plastic, PVC, Teflon, CPE, other halogenated plastic, electronic components, off-specification semiconductors, circuit boards, agricultural fertilizers, agricultural pesticides, agricultural feed, agricultural feed supplements, photographic film, photographic paper, bituminous asphalt, ceramic, linoleum, thermal insulation cellulose, thermal insulation glass, thermal insulation wool, wiring, conduit, electrical insulation, sawdust, wood shavings, wood turnings, empty containers, chemically treated wood, railroad ties, metallic/non-metallic drums and pails, food waste, resins, polymers other than RWC 407 and 409, vinyl sheet, upholstery, spent air/gas filters, spent aqueous filters, spent non-hazardous fuel/oil/solvent filters, paint filters, cloth filters, paper filters, supersacs, grease, boiler furnace refractory other than RWC 103, carbon/graphite residue/scrap, baghouse dust other than RWC 105 and RWC 106, blasting abrasive/residue other than RWC 109, gypsum plaster molds, and drywall. Includes soil contaminated by nonhazardous process wastewaters, oil & gas drilling hydrofracture water, contaminated non-contact cooling waters, oil/water emulsions, oily wastewaters, landfill leachate, treated wood, and railroad ties.
(from RWC 500)	Special Handling Wastes. Asbestos-containing waste, asbestos-containing insulation, asbestos-containing brake lining, paints, spent catalysts, dredge material, water intake debris, water intake sediment, coal mill rejects. (Tires should be segregated from soil and excluded from disposal as whole tires.)
(from RWC 700)	Industrial Equipment, Maintenance Scrap. Pumps, piping, vessels, instruments, storage tanks, maintenance scrap, product turn-around scrap, nonhazardous batteries, grinding wheels, sanding disks, polishing belts, welding rods, broken tools, and plant trash. (Pb-acid batteries in soil should be segregated and excluded.)

506 cont'd	**Contaminated Soil/Debris/Spill Residue (Non-Petroleum) From Non-Hazardous Spills Containing:**

(from RWC 800)	RWC 801 drilling fluids, hydrofracture water, drilling residuals, drill cuttings, invert cuttings, and drilling residuals with bulking agents released to soil or water of the environment.
(from RWC 900)	Miscellaneous. Auto shredder fluff and treated hazardous waste residue. (Treated hazardous waste residue in soil should include land ban certification as required.)
Form 35	Processed infectious/chemotherapeutic waste
Form 36	Municipal waste incinerator ash
Form 43	Sewage sludge

507	**Waste Petroleum Material Contaminated Soil/Debris**
Form U-CS. Minimum testing requirements are: the known metal contaminant(s) of concern, pH, TPH, TOX.	

	Hydraulic oil/fluid, lubricating oil, lubricating greases (including non-petroleum based), machining and cutting oil, electrical transformer oil, automotive transmission oil, petroleum-derived oily sludge, oil/water emulsions, oily wastewaters, drilling fluid residues. Includes petroleum-contaminated paper, plastic, wood, and vegetation from clean-up.

508	**Virgin Petroleum Fuel Contaminated Soil/Debris**
Form FC-1. Follow the Policy and Procedure For the Disposal of Fuel-Contaminated Soils	

	Fuel oil, diesel fuel, aviation fuel, kerosene, or gasoline spilled to soil from traffic accidents, tanks, drums or other containers, drilling fluid residues. Includes petroleum-contaminated paper, plastic, wood, and vegetation from clean-up.

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Field Oversight for Contaminated Soil Characterization

The Department forms, FC-1 and U-CS are used by regulated disposal facilities for requesting acceptance of virgin petroleum fuel contaminated soil and waste petroleum/chemically contaminated soil, respectively. Generators or contractors for the generators supply the sampling and analytical information that gets attached to these forms for submittal to the Department's regional chemists for review.

The Department's Fill Policy is used by generators to evaluate soil for use as fill rather than disposal.

Both of the Department disposal request forms and the fill policy require a minimum number of samples, tested for specific applicable parameters. Parameters are dictated by the forms and/or by the landfill's Form R, Waste Analysis and Classification permit amendment to their operating permit. Minimum number of samples is dictated by the forms and the policy.

1. **To ensure that the minimum number of samples are collected in the field and to verify proper sampling:**

   a. Refer sample collectors to the appropriate Department form or policy.
   b. Refer sample collectors to the two-sheet guide: Pile or *In-Situ* Sampling For Form FC-1, Form U-CS or Fill Policy Contaminated Soil Characterization with Field Screening For Volatiles and Compositing for Metals. This guide compares sampling requirements of the two disposal forms and the fill policy and indicates the minimal requirements to meet all three criteria, in the event that the generator wants to evaluate the soil for clean fill or disposal with the same analytical.

Both Department disposal request forms require a diagram of the sample collection area. With *in-situ* sampling, this is often overlooked.

2. **To ensure that a diagram of the sample collection area is made to document the sampling:**

   a. Refer sample collectors to directions for the appropriate Department disposal request form.
   b. Refer sample collectors to the one-sheet guide: Diagram of Sample Collection Area. The sampler can mark samples on the guide sheet and use it as their diagram submittal.

3. **Other important points to be aware of:**

- Compositing cannot be used for volatile organic compounds, due to potential loss of volatiles.
- A composite sample must originate from no less than four grab samples.
- The Department must pre-approve visual screening to reduce number of samples and field screening other than PID or immunoassay. Refer samplers to Department regional chemists.
- Samples collected for volatiles must meet EPA SW-846 Method 5035. Soil collection options are: (<200 ppb) 5-g sample weighed in the field w sodium bisulfate preservative in vial. (>200 ppb) ~5-g sample in Encore or preweighed vial containing methanol. (>200 ppb oily wastes) Encore, diluted methanol method or Method 3585 n-hexadecane solvent for oily wastes insoluble in water-miscible solvents.
- Piles must be sampled no shallower than one foot from the surface of the pile.
- Encourage an extra sample beyond the minimum, especially for *in situ* samples, to avoid coming-up short at the landfill scales. Sampling is based on yd3 volume and is checked at the landfill scales by weight and a bulk density conversion, recorded in NCRO landfill Form R amendments.
- Analysis is waived for 25 tons or less of FC-1 soil, but not for U-CS soil.
- Abbreviated Form R testing requirements for Form U-CS wastes apply to known contamination. Complete Form U-CS testing may be appropriate initially to characterize the contaminants of concern prior to utilizing this abbreviated testing scheme.
- Applicable Residual Waste Codes (RWCs) for disposal requests are:
  - RWC 506 Contaminated soils/debris/spill residues (nonpetroleum) Use Form U-CS
  - RWC 507 Waste petroleum material contaminated soil/debris Use Form U-CS
  - RWC 508 Virgin petroleum fuel contaminated soil and debris Use Form FC-1

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Pile or *In-Situ* Sampling
For Form FC-1, Form U-CS or Fill Policy Contaminated Soil Characterization with Field Screening for Volatiles and Compositing for Metals

Tank Short List Volatiles including BTEX + TPH[1] & TOX[2], or any volatiles that can be screened by PID[3]

Soil Volume[4]	Fill Policy		Fill Policy w PID Screen or EPA Method 4030 Immunoassay[5]		Form FC-1		Form U-CS		Forms FC-1 or U-CS w PID Screen[6]		Total Min # PID Screens	Total Min # of Screen Grab Samples
yd^3	Grab Frequency	# Grab Samples	Screen[7] Frequency	# Screened Samples	Grab[8] Frequency	# Grab Samples	Grab Frequency	# Grab Samples	Screen Frequency	# Screened Samples[9]		
10	8/125	8	8/125	2	1/50+1	2	1/250	1	1/25	2	8	2
25	8/125	8	8/125	2	1/50+1	2	1/250	1	1/25	2	8	2
50	8/125	8	8/125	2	1/50+1	2	1/250	1	1/25	2	8	2
75	8/125	8	8/125	2	1/50+1	3	1/250	1	1/25	2	8	2
100	8/125	8	8/125	2	1/50+1	3	1/250	1	1/25	2	8	2
125	8/125	8	8/125	2	1/100+2	3	1/250	1	1/25	2	8	2
140	12/3,000	12	12/3,000	3	1/100+2	3	1/250	1	1/25	2	12	3
175	12/3,000	12	12/3,000	3	1/100+2	3	1/250	1	1/25	2	12	3
250	12/3,000	12	12/3,000	3	1/100+2	4	1/250	2	1/25	2	12	3
350	12/3,000	12	12/3,000	3	1/100+2	5	1/250	2	1/25	2	14	3
500	12/3,000	12	12/3,000	3	1/100+2	7	1/250	2	1/25	2	20	3
550	12/3,000	12	12/3,000	3	1/100+2	7	1/250	2	1/25	3	22	3
600	12/3,000	12	12/3,000	3	1/100+2	8	1/250	2	1/25	3	24	3
750	12/3,000	12	12/3,000	3	1/100+2	9	1/250	3	1/25	3	30	3
1,000	12/3,000	12	12/3,000	3	1/100+2	12	1/250	4	1/25	4	40	4
1,500	12/3,000	12	12/3,000	3	1/100+2	17	1/250	6	40+1/100	6	45	6
3,000	12/3,000	12	12/3,000	3	1/100+2	32	1/250	12	40+1/100	12	60	12
3,500	12/3,000	24	12/3,000	6	1/100+2	37	1/250	14	40+1/100	14	65	14
6,500	12/3,000	36	12/3,000	9	1/100+2	67	1/250	26	40+1/100	26	95	26
10,000[10]	12/3,000	48	12/3,000	12	1/100+2	102	1/250	40	40+1/100	40	130	40
10,200	12/3,000	48	12/3,000	12	1/100+2	104	1/250	40	40+1/100	41	132	41

[1] A PID reads the volatile components of gasoline, #2 diesel fuel or home heating oil as a single component.
[2] Halogenated solvents that can not be detected by PID do not qualify for PID-screening to reduce number of samples. With a 10.6 eV lamp, PID's will detect TCE and PCE, but not TCA. An 11.7 eV lamp is required to detect TCA by PID. Consult table of electron volt ionization potentials for photo ionization detection capability.
[3] Complete Form U testing may be appropriate initially to characterize the contaminants of concern prior to utilizing this abbreviated testing scheme.
[4] When determining soil volume in-situ, use coefficient of expansion for the appropriate class of soil to allow for % increase in soil volume when soil is excavated for disposal. This will allow assurance of sufficient minimum number of samples being taken, since number of samples in these tables are taken from policies that generally applied to soil piles rather than *in-situ*. This should only be a significant issue on very large contaminated soil cases.
[5] Other screening methods or visual screening must be pre-approved by the Department. Contact a regional chemist.
[6] Locations of highest PID readings.
[7] or fraction thereof
[8] or fraction thereof, in the first 100 yd^3.
[9] Locations of highest PID readings.
[10] 10,000 yd^3 = 100vd x 100 vd x 3' depth.

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Pile or *In-Situ* Sampling
For Form FC-1, Form U-CS or Fill Policy Contaminated Soil Characterization
with Field Screening for Volatiles and Compositing for Metals

Total Pb/TCLP Pb, other metals of known concern[11]

Soil Volume	Fill Policy		Fill Policy w Composite		Form FC-1		Form FC-1 w Composite		Form U-CS	Form U-CS w Composite	Total Minimum # Composite Samples
yd^3	Grab Frequency	# Grab Samples	Composite Frequency	# Composite Samples	Grab Frequency	# Grab Samples	Composite Frequency	# Composite Samples	Grab & Composite Frequency[12]	# Grab or Composite Samples	
10	8/125	8	2/125	2	0	0[13]	0	0[13]	1/250	1	2
25	8/125	8	2/125	2	1/50+1	2	4/250	1	1/250	1	2
50	8/125	8	2/125	2	1/50+1	2	4/250	1	1/250	1	2
75	8/125	8	2/125	2	1/50+1	3	4/250	1	1/250	1	2
100	8/125	8	2/125	2	1/50+1	3	4/250	1	1/250	1	2
125	8/125	8	2/125	2	1/100+2	3	4/250	1	1/250	1	2
140	12/3000	12	3/3000	3	1/100+2	3	4/250	1	1/250	1	2
175	12/3000	12	3/3000	3	1/100+2	3	4/250	1	1/250	1	3
250	12/3000	12	3/3000	3	1/100+2	3	4/250	1	1/250	1	3
350	12/3000	12	3/3000	3	1/100+2	4	4/250	1	1/250	1	3
500	12/3000	12	3/3000	3	1/100+2	5	4/250	1	1/250	1	3
550	12/3000	12	3/3000	3	1/100+2	7	4/250	2	1/250	2	3
600	12/3000	12	3/3000	3	1/100+2	7	4/250	2	1/250	2	3
750	12/3000	12	3/3000	3	1/100+2	8	4/250	2	1/250	2	3
1,000	12/3000	12	3/3000	3	1/100+2	9	4/250	3	1/250	3	3
1,500	12/3000	12	3/3000	3	1/100+2	12	4/250	4	1/250	4	4
3,000	12/3000	12	3/3000	3	1/100+2	17	4/250	6	1/250	6	6
3,500	12/3000	24	6/6000	6	1/100+2	32	4/250	12	1/250	12	12
6,500	12/3000	36	9/9000	9	1/100+2	37	4/250	14	1/250	14	14
10,000	12/3000	48	12/12000	12	1/100+2	67	4/250	26	1/250	26	26
10,200	12/3000	48	12/12000	12	1/100+2	102	4/250	40	1/250	40	40
						104		40		40	

[11] Complete Form U testing may be appropriate initially to characterize the contaminants of concern prior to utilizing this abbreviated testing scheme.
[12] No advantage to composite sampling for Form U-CS.
[13] Per the Form FC-1 Policy of July 23, 1993, NCRO waives analytical reporting requirements for 25 tons or less. Use the bulk density for the soil (generally >1 ton/yd^3 but <2 ton/yd^3) to determine the minimum volume of soil that is expected to exceed 25 tons and require analytical. The bulk density that the disposal facilities in the NCRO agree to use for soil calculations is included in their Form R permits.

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Appendix D

List of Approved Permit Modifications for the Lycoming County Landfill
(See Attachment 1 for Conditions)

1. **Minor Modification for Additional Gas Wells to the Existing Gas Collection System – Approved September 2, 2021**

   a) Installation of eighty (80) additional vertical gas wells on a 100 ft. x 100 ft. grid pattern to increase the efficiency of gas recovery and liquids management within the waste mass.

2. **Minor Modification for the New Final Closure Cap under the Phase I Closure of approximately 22 acres - Approved August 30, 2022**

   a) Installation of new LFG knockout drums behind Field 9/10 pump station and on gas collection lines in the southwest corner of Field 11. Installation of additional gas collection wells (V267 through V282) with associated condensate drain and air supply lines.

   b) Changes in stormwater design which includes bench grading, side slope diversion swales and vertical down chutes with rip rap protection. Change benches to an alternating design. First bench design remains unchanged, with the exception that a wearing surface is added to access LFG wells. The second bench is sloped inward and will now convey stormwater to lined downchutes. Downchutes have energy dissipaters at the lower end, which can either be riprap filled gabion mattress infill or Hydroturf liner system.

   c) The cap, in sections of Fields 5,6,7,and 11, consist of (from the bottom to the top) removal of topsoil and regrading, a composite geonet drain to collect gas and leachate, an HDPE geomembrane system, a composite geonet drainage above the cap to facilitate drainage, 18-inches of soil, and 6-inches of top soil. The cap will also include a toe drain around the perimeter and will be connected to the base HDPE liner in most sections.

   d) Reconstruction of Pump Station 6 leachate structures and final elevation correction and piping modifications to Pump Stations 7 and 8

   e) Complete Field 12 stormwater drain removal and liner repair

   f) Repairs to site stormwater system behind maintenance building

   g) Modifications to utilities in and around Field 6 Pump Station including gas and leachate piping, including relocation of LFG and leachate lines behind the maintenance building

   h) Installation of Control Station 11C

3. **Minor Modification for the Installation of a tertiary liner system in the leachate tank - Approved August 30, 2022**

COMPLIANCE HISTORY - FORM C

COUNTY OF LYCOMING
RESOURCE MANAGEMENT SERVICES
Permit # 100963/Client ID 3242

B. General Information Regarding "Related Parties"

1. a,b,c. N/A

2. Scott L. Metzger, Chairman — (570) 320-2124
Lycoming County Commissioners
48 West Third Street
Williamsport, PA 17701

Tony R. Mussare, Vice Chairman — (570) 320-2124
Lycoming County Commissioners
48 West Third Street
Williamsport, PA 17701

Richard Mirabito, Secretary — (570) 320-2124
Lycoming County Commissioners
48 West Third Street
Williamsport, PA 17701

Matthew A. McDermott, Chief Clerk — (570) 320-2124
Lycoming County Court House
48 West Third Street
Williamsport, PA 17701

Mr. Jason Yorks, Director — (570) 547-2470
Lycoming County Resource Management Services — (800) 326-9571
P.O. Box 187
Montgomery, PA 17752-0187

U. S. Department of Justice - Land Owner
Bureau of Prisons — Tax I.D.: N/A Tax Exempt
101 Indiana Avenue, N.W. — per Code PA 6132.22
Washington, D.C. 20537 — Regulation 206

Complex Warden
U. S. Penitentiary — (570) 547-1990
Allenwood Federal Prison
P.O. Box 3500
White Deer, PA 17887

3. Same as #2 above.

B. General Information Regarding "Related Parties" cont'd:

4. U. S. Department of Justice
   Bureau of Prisons
   101 Indiana Avenue, N.W.
   Washington, D.C. 20537

   Complex Warden (570) 547-1990
   U. S. Department of Justice
   Allenwood Federal Prison
   P.O. Box 3500
   White Deer, PA 17887

5. U.S. Bureau of Prisons

C. Specific Information Regarding the Applicant and Its Related Parties

1. Lycoming County Landfill (Brady Township)
   P.O. Box 187
   Montgomery, PA 17752-0187

2. **Permits:**

PERMIT #	DESCRIPTION	DATE ISSUED/ EXPIRES
WASTE MANAGEMENT		
WMGR038NC007	WASTE TIRE STORAGE AND PROCESSING FACILITY Issued 02/06/02 - Expired 08/24/06 - Reissued 12/27/06 - Expired 08/10/2016	Reissued 08/10/16 **EXPIRES 08/10/2026**
WMGM016	PROCESSING AND BENEFICIAL USE OF CLEAN WOOD (I.E. TREES, TREE STUMPS, LIMBS, CLEAN PALLETS, UNTREATED AND UNPAINTED SCRAP LUMBER, PACKING CRATES AND BRUSH) Issued 04/22/03 – Expired 04/21/13	Reissued 03/28/13 **EXPIRES 03/28/2023**
100963	ELIMINATION OF REDUNDANT VERTICAL GAS WELLS (V31, V36, V38, V39, V40, V44, V45 AND V46) AND AN INCREASE IN THE WARNING LEVEL FOR THE TOX (ORGANIC HALOGEN) PARAMETERS IN TABLE R-4.	03/24/08
100963	TARPS AS ALTERNATIVE DAILY COVER – THIS MODIFICATION APPROVES THE MAXIMUM TIME TARPS MAY BE USED TO SEVEN DAYS AND THE ADDITION OF FIVE NEW TARP GEOMEMBRANES	11/17/08
100963	REPLACEMENT OF THREE GROUNDWATER MONITORING WELLS WITH FOUR NEW GROUNDWATER WELLS – M-4B, M-6B, M-10B AND M-24	08/18/09
100963	REPLACEMENT OF THE EXISTING GROUNDWATER MONITORING WELL M-8B WITH A NEWLY CONSTRUCTED WELL, M-8C. INSTALLATION OF FIVE GROUNDWATER MONITORING WELLS M-2B, M-3B, M-5B, M-7B AND M-20B	12/04/09
100963	LANDFILL OPERATING PERMIT	04/01/10 EXPIRED 04/01/20
100963	CO PRODUCT SOIL AMENDMENT FOR USE AS INTERMEDIATE AND FINAL COVER – CHEROKEE PHARMACEUTICALS – DANVILLE	04/19/10
100963	(12/17/10) REVISED LANDFILL OPERATING PERMIT w/appendices: Appendix A – list of approved geosynthetics; Appendix B – list of approved permit modifications – Attachment 1 to Appendix B – conditions for future approved permit modifications; Appendix C – Form R – waste analysis and classification plan	04/01/10 EXPIRED 04/01/20
100963	REPLACEMENT FORM R TABLES TO LANDFILL OPERATING PERMIT ISSUED 4/1/10	01/06/11
100963	APPROVAL OF ADDITIONAL GEOSYNTHETIC MATERIALS – SKAPS Transnet 300 geo-nets; SKAPS Transnet 300-1-10 Geo-composite (The SKAPS Transnet 300 geo-net is proposed for use as a single layer in the leachate detection zone and in the leachate collection zone of the liner system. The SKAPS Transnet 300-1-10 Geo-composite is proposed for use in the leachate detection zone. This composite has a 10 oz/sy geo-textile fused to one surface and the geo-textile has already been approved for use in the landfill liner system.	04/07/11

100963	Approval to substitute a separate SKAPS Transnet 300 geo-net and SKAPS GE-112 (12 oz/sy) geo-textile for two rolls, approximately 6,000 square feet, instead of the approved geo-composite consisting of SKAPS Transet 300 and SKAPS GE100 (10 oz/sy) geo-composite in the Field 11 construction.	10/18/11
100963	Landfill gas extraction system: abandonment of existing gas wells V1 through and including V43, V47, V48, V59 and V83; installation of new gas wells V147 through and including V187 and all related equipment, piping and appurtenances.	01/13/12
100963	Field 11 Material and Construction Certification (approval to begin accepting waste in Field 11)	02/28/12
Permit by rule	Mechanical processing of uncontaminated block and concrete. Processing is limited to 50 tons per day and operated in accordance with all other permits	06/13/13
100963	Acceptance, storage, segregation, and shipping of plastic geotextile, liner, and piping materials from natural gas industries for recycling	09/12/13
100963	Gas Well Additions with Laterals – addition of 9 new gas collection wells with laterals to help make the collection of the landfill gas more efficient and reduce power consumption to the gas skid.	01/23/14
100963	Liner Installation Plan – Field 1 to 4 Cap – approved	05/06/14
100963	Leachate Tank & Gas Wells – operational changes to the leachate storage tank, addition of six new gas collection wells w/laterals and the temporary hauling of leachate for recirculation	10/29/14
100963	a) Addition of 5 new horizontal gas wells in Fld 11 at elevation 820 to improve gas collection efficiency b) Addition of 5 anchor trench drains at low points in the liner anchor trench and at two locations along the anchor trench c) Addition of optional temporary storm drain pipes in Flds 11 and 12 to improve handling of storm water run-off of the plateau portion on the operating lift d) An update to the flare yard blowers and piping layout e) Addition of a new section of leachate force main and modification to the leachate pumping station interior piping to allow pumping leachate from existing 3" and 6" leachate force main near the entrance to the facility at the north terminal end of the Brady Twp southern public sewer system	12/08/16
100963	Staging of candidate waste awaiting Form U or other similar approval for disposal	11/28/17
100963	Fields 1-4 Cap Replacement Modification	09/26/18
100963	LANDFILL OPERATING PERMIT	04/01/20 **Expires 04/01/30**
100963	Phase I Closure Install new LFG knockout drums behind Fld 9/10 pump station and sw corner of Fld 11; changes in stormwater design; final closure cap Fld 5,6,7,11; reconstruct pump station 6; complete Fld 12 stormwater drain removal; repairs to site stormwater system behind maintenance building; modification to utilities in and around Fld 6 pump station; install control station 11C	08/30/22
100963	Installation of the Tertiary Liner System – Leachate Tank	08/30/22

100963	Site Utility Improvements -change in location of the Gregg Twp. MA force main to adjacent path along existing WBRA and removal and replacement of existing gas headers - grouting of abandoned in-place HDPE leachate force main at east and west end of Fld11	03/14/23
Permit By Rule	Residual Waste Permit by Rule for Wood Grinding	03/27/23
TRANSFER STATION PERMITS		
PAR504809	NPDES STORM WATER Issued 02/01/03 – Expired 01/31/08 – Revised 09/01/07 – Expired 08/13/12 (Covered under PAG-03 General Permit Storm water Discharge)	**Revised 10/01/12 EXPIRED 09/30/17**
101125	TRANSFER STATION - OPERATING PERMIT RENEWAL Issued 11/16/04 – Expired 11/16/14	**Renewed 06/04/2014 EXPIRES 06/04/24**
101125	TRANSFER STATION – MINOR MODIFICATION (Modification of Saturday operating hours – hour are Monday – Saturday 8:00 a.m. – 9:00 p.m; allowance for storage over 3-day weekends; change of portal radiation equipment check frequency; modification to no longer require spray washing during freezing conditions)	05/05/10
101125	Form 13-A Modification to permit issued on 5/5/10 - correcting operating hours to 8:00 a.m. – 9:00 p.m. Monday through Saturday	08/17/16
101125	Form 13-A Modification to permit issued on 5/5/10 - correcting operating hours to 7:00 a.m. – 9:00 p.m. Monday through Saturday.	08/24/16
	Back-up generator approval not requiring a Plan Approval - Conditions of approval: - John Deer backup generator T04039T355340 shall not operate more than 500 hours in any 12 months - Shall be equipped with a non-resettable hour meter - Shall be operated in accordance with the application submitted on 8/15/17 as well as manufacturers specs and maintenance recommendations - Shall comply with all applicable requirements pertaining to those specified in 40 CFR Part 63 Subpart ZZZZ for back-up generator	
AIR QUALITY PERMITS		
GP-3-41-00025A	GENERAL PLAN APPROVAL/OPERATING PERMIT – Authorization to operate the Screen Machines Industries, Inc model JXT portable jaw crushing plant for Portable Nonmetallic Mineral Processing Plants Included in **TVOP 41-00025**	05/25/10 Expired 05/24/2015
GP-9-41-00025A	GENERAL PLAN APPROVAL/OPERATING PERMIT – Authorization to construct and operate a 300 brake-horsepower Caterpillar Model C9 DITA diesel engine Included in **TVOP 41-00025**	05/25/10 Expired 05/24/2015
	PLAN APPROVAL – for the expansion of the landfill to include Fields 11 and 12. It is also for the constructions of a John Zink model ZULE enclosed flare and a back-up open flare to replace the two existing candlestick flares. **1/27/12** – Amendment letter received from DEP amending condition #003, Section B of plan approval. #003 This plan approval authorizes temporary operation of the source(s) covered by this plan approval provided conditions listed are met. Expiration date was also amended from 1/2012 to 7/24/2013. **7/23/13** – Amendment to condition #3 to read: temporary operation of the source is authorized to facilitate the shakedown of sources and air cleaning devices, to permit operations pending the issuance of a permit or to permit the	

PA-41-00025C	evaluation of the air contaminant aspects of the source. Condition authorized temporary operation for a period of 180 days from the end of the previous temporary operating period July 24, 2013. **1/21/14** - Amendment to extend expiration date for 180 days from the end of the previous temporary operating period 01/20/14. New date 07/19/14. **07/08/14** – Amendment to condition #0003 – authorized temporary operation of the sources covered for a period of 180 days from the end of the previous temporary operating period July 19, 2014 **12/30/14** – Amendment to condition #003 – authorizes temporary operation of sources(s) for a period of 180 days from the end of the previous temporary operating period, January 15, 2015, expiring on July 14, 2015 06/04/15 – Amendment issued extending plan approval extension expiration date from 7/14/15 to 01/10/2016 12/18/15 – Amendment issued extending plan approval extension expiration date from 1/10/16 to 7/9/16 07/07/16 – Amendment issued extending plan approval extension expiration date from 7/9/16 to 01/05/17 12/22/16 – Amendment issued extending plan approval expiration date from 1/05/17 to 07/05/17 6/30/17 – 180 day extension from the previous temporary operating period expiration of 7/5/17 12/22/17 – 180 day extension from the previous temporary operating period expiration of 01/02/18 – exp 7/1/18 06/29/18 – 180 day extension – expiration 12/28/2018 12/24/18 – 180 day extension – exp 6/26/19 12/23/19 – 180 day extension – exp 06/22/20 6/22/20 – 180 day extension – exp 12/19/20 12/18/20 – 180 day extension – exp 06/08/21 6/17/21 – 180 day extension – exp 12/15/21 12/14/21 180 day extension – exp 6/14/22 6/13/2022 180 day extension – exp 12/11/22	Extension Issued Expired 12/11/2022
TVOP 41-00025	TITLE V OPERATING PERMIT RENEWAL ISSUANCE	12/16/2013 EXPIRED 12/18/2018 Issued 06/18/2019 EXPIRES 06/17/2024
TVOP 41-00025	Revision No. 1 – to include Fields 11 and 12	**12/9/2022 Expires 6/17/2024**
WATER QUALITY PERMITS		
PAR504801	NPDES PERMIT – UNT TO BLACK RUN (Landfill site including recycling mulch processing facility (formerly PAR604838); shale pit borrow area (formerly PAR103957) and Unt to Black – WWF – Southside stockpile (formerly PAG2004106007) Issued 07/01/03 – Reissued 12/27/06 – Expired 06/30/08 – Reissued 03/01/08 - Expired 02/28/2013 - **now covered under PAG-03 General Permit Storm Water Discharge**	REISSUED 12-01-2012
E41-591	WATER OBSTRUCTION AND ENCROACHMENT PERMIT – REMOVE 64' OF EXISTING METAL CULVERT AND CONSTRUCT AND MAINTAIN 136' OF 60" BY 38" REINFORCED CONCRETE CULVERT – PROJECT PROPOSES TO IMPACT 0.90 ACRES OF JURISDICTIONAL WETLANDS AND REPLACE WITH 1.57 ACRES OF JURISDICTIONAL WETLANDS TO BE DEBITED FROM AN EXISTING WETLAND BANK	11/12/08 EXPIRED 12/31/11
GP074109508	STREAM CROSSING – UNT TO BLACK RUN - TRIP	08/27/09

PAG2004109008	NPDES PERMIT FOR DISCHARGE OF STORM WATER FROM CONSTRUCTION ACTIVITIES – TRIP SOIL BORROW & STOCKPILE PROJECT	09/18/09
4112201	Field 11 & 12 Expansion project: Construction of a new 6" HDPE force main to the Montgomery Water and Sewer Auth treatment plant and the addition of a new pump to the existing leachate pump station **4112201 A-1 (Amendment No 1. Issued 01/27/2020)** – Addition of one additional pump to the leachate pump station and construction of an approximately 1,000 foot force main extension to connect to the Gregg Township Municipal Authority waste water treatment plant	12/20/12
PAG104848	NPDES Permit to discharge hydrostatic test water from a new tank to unnamed tributary to Black Run	07/05/16 EXPIRED 7/10/2020
GP054118504	2018 6/10 Force Main Project	09/05/18

3. None

4. None

D. 1. COMPLIANCE HISTORY

a. See Below:

DATE	LOCATION	PERMIT/ LICENSE/ EPA ID #	ISSUING AGENCY	TYPE OF ACTION/NATURE OF VIOLATION	DISPOSITION	$ AMT. OF PENALTY
11/17/22	LANDFILL	100963	BWM	AMENDMENT TO CONSENT ORDER AND ARGREEMENT – November 2021 leachate storage	Extension of time – paragraph 3A to from November 30, 2022 to November 30, 2023	
11/10/22	LANDFILL	100963	BWM	CONSENT ASSESSMENT OF CIVIL PENALTY Waste Transporter Violations – load leaking	CONSENT ASSESSMENT	$750.00
9/28/22	LANDFILL	100963	BWM	N.O.V. – Waste Transportation		
11/30/21	LANDFILL	100963	BWM	AMENDMENT TO CONSENT ORDER AND AGREEMENT – Leachate storage capacity (2021 Amendment to CO&A)	Extension of time to Nov 30, **2022** obtain adequate leachate storage capacity	
8/4/20	LANDFILL	100963	BWM	CONSENT ORDER AND AGREEMENT – Leachate storage capacity	Consent Order & Agreement - By Nov 30, 2021 obtain adequate leachate storage capacity	$20,000.00

DATE	LOCATION	PERMIT/ LICENSE/ EPA ID #	ISSUING AGENCY	TYPE OF ACTION/NATURE OF VIOLATION	DISPOSITION	$ AMT. OF PENALTY
01/23/20	LANDFILL	100963	BWM	N.O.V. – 4TH Quarter groundwater analysis report	Required groundwater and leachate analysis were submitted	
11/21/19	LANDFILL	100963	BWM	CONSENT ASSESSMENT OF CIVIL PENALTY (3/23/18 – Fld 1-4 cap slide; 5/24/18 – erosion gullies greater than 9", Fld 11B leachate ponding; tires mixed with waste; 9/27/18 – vegetation;	CONSENT ASSESSMENT	$20,000.00
12/5/18	LANDFILL	100963	BWM	N.O.V. – IMPROPER MANAGEMENT OF SOLID WASTE – Ponding leachate and storm water on exposed areas of Fld 11; Fld 11 erosion gullies exceeded 9 inches; leachate outbreaks on Fld 11 slopes; Fld 11 slopes lacked adequate vegetative cover since 9/27/18 inspection; leachate storage above 25% of storage capacity for large portion of 2018		
05/31/18	LANDFILL	100963	BWM	N.O.V. – IMPROPER MANAGEMENT OF SOLID WASTE - TIRES ON WORKING FACE; ADEQUATE DAILY COVER; SURFACE WATER PONDING; EROSION GULLIES; LEACHATE OUTBREAKS/COLLECTION		
02/09/18	LANDFILL	#41-23040	STORAGE TANK SECTION	N.O.V. – PERFORMANCE & DESIGN STANDARDS – BLOCK VALVE WAS LOCATED DOWNSTREAM OF THE SOLENOID VALVE	SUBMITTED DOCUMENTATION THAT CONCERN HAD BEEN ADDRESSED	
09/12/17	LANDFILL	100963	BWM	N.O.V. – LEACHATE COLLECTION AND STORAGE SYSTEMS ON SITE CAPACITY DOES NOT MEET 30 DAY CAPACITY STANDARD		
ISSUED 06/01/16 CONSENT SIGNED 07/11/16	LANDFILL	100963	BWM	CONSENT ASSESSMENT – FOR TRANSPORTATION COMPLIANCE N.O.V. – HAULING TIRES W/O PROPER SIGN	CONSENT ASSESSMENT	$350.00
				TRANSPORTATION COMPLIANCE N.O.V. –		

DATE	LOCATION	PERMIT/ LICENSE/ EPA ID #	ISSUING AGENCY	TYPE OF ACTION/NATURE OF VIOLATION	DISPOSITION	$ AMT. OF PENALTY
05/18/16	LANDFILL	100963	BWM	VEHICLE HAULING TIRES W/O A SIGN IDENTIFYING THE TYPE OF WASTE		
12/22/14	LANDFILL	WH1276	WM	CONSENT ORDER AND AGREEMENT – LEACHATE LEAKING FROM THE REAR OF THE TRAILER	CONSENT ORDER AND AGREEMENT – COMMUNITY EVIRONMENTAL PROJECT	$500
09/17/14	LANDFILL	WH1276	WM	N.O.V. – LOAD LEAKING FROM THE REAR SEAL OF THE TRAILER		