



Pennsylvania Department of Environmental Protection

230 Chestnut Street
Meadville, PA 16335-3481
March 9, 2010

Northwest Regional Office

814-332-6848
Fax: 814-332-6117

CERTIFIED MAIL NO. 7009 1410 0001 0413 6957

Mr. Anthony Cialella
Vice President Regional Manager
Advanced Waste Service of PA, LLC.
1001 Sampson Street
New Castle, PA 16101

Re: Advanced Waste Services of Pennsylvania, LLC
Residual Waste Processing Facility
City of New Castle, Lawrence County
ID No. 301353
APS ID No. 612543
Auth. No. 677702

Dear Mr. Cialella:

Enclosed is Solid Waste Permit No. 301353 for the operation of Advanced Waste Services of Pennsylvania, LLC, issued in accordance with Article V of the Solid Waste Management Act, 35 P.S. Sections 6018.101, et seq.

Compliance with the terms and conditions set forth in the permit is mandatory. You have the right to file an appeal as to these terms and conditions.

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. §7514, and the Administrative Agency Law, 2 Pa.C.S.A. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, 717-787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800-654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in braille or on audiotape from the Secretary to the Board at 717-787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD.

IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD 717-787-3483 FOR MORE INFORMATION.

If you have any questions about the enclosed permit or requirements of the Solid Waste Management Act, please contact Joel Fair, P.E. at 814-332-6848.

Sincerely,



Todd Carlson
Regional Manager
Waste Management

Enclosure

cc: Lawrence County Commissioners (w/enclosure)
City of New Castle (w/enclosure)
R.A.R. Engineering Group, Inc. (w/enclosure)
County Specialist (w/enclosure)
Tracking File (w/enclosure)
Permit File (w/enclosure)
NRO (w/enclosure)

TC:CB:jb

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

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

Permit No. 301353
Date Issued March 9, 2010
Date Expires March 9, 2020

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)

City of New Castle in the County of Lawrence

is granted to (applicant) Advanced Waste Services of Pennsylvania, LLC

(address) 1001 Sampson Street

New Castle, PA 16101

This permit is applicable to the facility named as and

Advanced Waste Services of Pennsylvania, LLC

and described as:

Latitude: 41° 0' 42"

Longitude: 80° 21' 30"

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. 301353 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

Fredd Carlsson

FOR THE DEPARTMENT OF
ENVIRONMENTAL PROTECTION

THIS PERMIT IS NON-TRANSFERABLE

Page 1 of 7

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

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

| | |
|--------------|---------------|
| Permit No. | 301353 |
| Date Issued | March 9, 2010 |
| Date Expires | March 9, 2020 |

Section A – Site/Application Information

1. This permit is issued for the construction and operation of a residual waste processing facility identified as the Advanced Waste Services of Pennsylvania, LLC. pursuant to the application for permit originally dated April 17, 2007, and received April 23, 2007. Supplemental information and revisions were received May 25, 2007, May 29, 2007, August 20, 2007, September 14, 2007, November 15, 2007, January 24, 2008, July 17, 2008, May 26, 2009, and September 25, 2009. The application was comprised of the following:

Forms A, B, B1, D, E, G(A), GI, HW-C, L, P, R1, X, 5R, and Bonding Worksheets.

Where there is a conflict between an earlier and a later dated submittal, the later dated submittal shall take precedence.

This permit is based on the assumption that the information submitted in the application as identified above is accurate and that the facility will be constructed and/or operated as specified in the application. Any inaccuracies found in this information may be grounds for revocation or modification of this permit and potential enforcement action. The permittee must inform the Department of any deviation from a change in the information in the application which would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

2. All amendments or modifications to this permit shall be issued by the Department in writing. Such amendments shall be attached hereto and shall become effective on the date specified thereupon.
3. This permit is issued for the facility as delineated on sheet No. 1 of 1 of the Design Plans entitled "Site Plan," as prepared by RAR Engineering Group, submitted on April 23, 2007.
4. This facility is approved to operate and accept waste 24 hours per day, seven days per week.
5. No more than 550,000 gallons of waste water may be stored at the facility at any one time.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

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

| | |
|--------------|---------------|
| Permit No. | 301353 |
| Date Issued | March 9, 2010 |
| Date Expires | March 9, 2020 |

Section B – General Conditions

1. If there is a conflict between the application, its support documents and/or amendments on one hand, the Rules and Regulations and/or Act 97 on the other hand, the Rules and Regulations and the Act shall apply unless a specific condition of this permit authorizes a specific variance to a requirement contained therein. There are no specific variances granted in this permit.
2. Under this permit, the permittee is responsible for the processing and/or disposal operations and the conditions at the site to the extent required by the Pennsylvania Solid Waste Management Act, the Clean Streams Law, the Rules and Regulations promulgated thereunder, as well as any decisional law interpreting the aforesaid statute and regulations.
3. All construction, operation, and procedures shall be in accordance with the application, submittals and supporting documentation, and such application, submittals and supporting documentation are hereby made a part of this permit.
4. This permit does not authorize, nor shall be construed to be an approval to discharge industrial waste, including without limitation, any leachate discharge from the permitted area to waters of the Commonwealth, absent a permit from the Bureau of Water Quality Management pursuant to the Clean Streams Law.
5. The operator may not cause or allow a point or non-point source discharge of pollution from or on the facility to surface waters of this Commonwealth.
6. 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. Section 6018.101 *et seq.*

THIS PERMIT IS NON-TRANSFERABLE

Page 3 of 7

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

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

| | |
|--------------|---------------|
| Permit No. | 301353 |
| Date Issued | March 9, 2010 |
| Date Expires | March 9, 2020 |

7. 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 representatives of the Department, without advance notice or search warrant, upon presentation of appropriate credentials, and without delay, to have access to and to inspect all areas or adjacent areas to which solid waste management activities are being or will be conducted. This authorization and consent shall include consent to collect samples of solid waste, water or gases, to take photographs, to take measurements, to perform surveys and other tests, to inspect the method of operation, and to inspect and/or copy documents, books and papers required to be maintained by the Department. This permit condition is referenced in accordance with Sections 608 and 610.7 of the Solid Waste Management Act (Act 97).
8. Approval of any plans or facilities herein refers to functional design, but does not guarantee stability or operational efficiency. Failure of the measures and facilities 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 facilities in conformity with the approved plans shall be grounds for the revocation or suspension of this permit.
9. Any final operation, design or other plan developed subsequent to permit issuance which exhibits changes in the structures, locations, specifications, or other changes of substance shall be submitted to the Department for subsequent permit action. Any deviation of plans herein approved shall not be implemented before first obtaining a permit amendment or written approval from the Department.
10. The permittee shall submit, on the Form No. 6, "Certification of Facility, Design and Construction," as provided, certification by a Pennsylvania Registered Professional Engineer of site preparation in accordance with the approved plans (for residual waste).

THIS PERMIT IS NON-TRANSFERABLE

Page 3A of 7

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT**Permit
For
Solid Waste Disposal and/or Processing Facility
FORM NO. 8**

| | |
|--------------|----------------------|
| Permit No. | <u>301353</u> |
| Date Issued | <u>March 9, 2010</u> |
| Date Expires | <u>March 9, 2020</u> |

Section C – Operating Conditions

1. A copy of the Preparedness, Prevention, and Contingency Plan (PPC Plan) must be readily available on-site and shall include a detailed map of the landfill and surrounding area.
2. A daily operational record must be maintained describing the types and amounts of materials processed at the site meeting the requirements of Section 297.261 of the Residual Waste Regulations.
3. An Annual Operations Report shall be submitted to this Department on or before June 30 of each year meeting the requirements of Section 297.262 of the Rules and Regulations.
4. A current certificate of insurance, as specified in Section 287.372(a) of Residual Waste Regulations evidencing continuous coverage for public liability insurance as required by the Section, shall be submitted in conjunction with the annual report form.
5. A written update of the total bond liability for the facility under Section 287.331 of Residual Waste Regulations must be submitted conjunction with the annual report form. If additional bond is determined to be necessary, it shall be submitted to the Department within ninety (90) days after the annual report is due.
6. All tipping areas, loading and unloading areas, storage and processing areas shall be constructed in such a way as to be readily cleanable by flushing and shall be equipped with drains or sumps and pumps connected to a sanitary sewer system.
7. The vehicle doors of the building shall remain closed at all times except for the ingress and egress of trucks and equipment, at which time the doors will be immediately closed upon the trucks or equipment entering or leaving the building, or required maintenance.

THIS PERMIT IS NON-TRANSFERABLE

Page 4 of 7

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT**Permit
For
Solid Waste Disposal and/or Processing Facility
FORM NO. 8**

| | |
|--------------|---------------|
| Permit No. | 301353 |
| Date Issued | March 9, 2010 |
| Date Expires | March 9, 2020 |

8. Within 24 hours after the permittee affects the quality or quantity of any water supply, it shall replace the supply with a temporary source of water of at least equal quality and quantity. If the temporary supply is purchased from a drinking water purveyor, the purveyor shall be licensed by and be in good standing with the Commonwealth of Pennsylvania. The permittee shall continue to provide the temporary supply until the quantity and quality of the original supply is restored or a permanent alternate water supply is provided.

Within 15 days after the permittee affects the quality or quantity of any water supply, the permittee shall submit a remedial plan to the Department for its approval. The plan shall set forth the means by which the permittee will either provide a permanent alternate water source of at least equal quality, quantity, and convenience of-use, or restore the original source and shall include a schedule of implementation. The plan for restoration or permanent alternate supply shall be completely implemented within 60 days after the permittee receives Departmental approval.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

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

| | |
|--------------|---------------|
| Permit No. | 301353 |
| Date Issued | March 9, 2010 |
| Date Expires | March 9, 2020 |

Section D – Waste Acceptance

1. The permittee is prohibited from accepting or processing of any hazardous waste at this facility.
2. The waste approved for processing at this Residual Waste Processing Facility shall be limited to residual waste. The following specific conditions shall apply.
 - A. All wastes from new generators shall be consistent with the requirements stated in the Form R1, Waste Analysis and Classification Plan. The permittee may accept generic residual wastes (Residual Waste Code-900) specifically stated in the Form R1 as long as the wastes are consistent with the Waste Analysis and Classification Plan. The following general waste categories may be accepted:

General

Category Code Waste Category

| | |
|-----|---|
| 000 | Combustion Residues |
| 100 | Metallurgical Process Residues |
| 200 | Sludges, Scales |
| 300 | Chemical Wastes |
| 400 | Generic Manufacturing or Processing |
| 500 | Special Handling Wastes |
| 700 | Industrial Equipment, Maintenance/Waste Scrap |
| 800 | Non-Coal Mining Wastes |
| 900 | Miscellaneous: |
| 901 | Automobile Shredder Residues |
| 902 | Non-hazardous Residue from treatment of Hazardous Waste |

THIS PERMIT IS NON-TRANSFERABLE

Page 5 of 7

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

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

| | |
|--------------|---------------|
| Permit No. | 301353 |
| Date Issued | March 9, 2010 |
| Date Expires | March 9, 2020 |

- B. The permittee shall not accept any residual waste whose chemical constituents are not included or are in excess of the maximum acceptance concentrations as delineated in the Waste Analysis and Classification Plan without written approval from the Department.
- C. The permittee shall submit a request to process residual waste and the source reduction strategy on the appropriate forms supplied by the Department for each generator of waste which is proposed for processing. These documents must be, at a minimum, administratively complete. The forms shall be sent to the Department's Northwest Regional Office by certified mail with return signature card or hand delivered at least fifteen (15) business (working) days before accepting the waste. If the Department does not object during the fifteen (15) day period, the permittee may accept the waste as long as acceptance of the waste described in the request is consistent with the Waste Analysis and Classification Plan; the absence of disapproval by the Department during or after the waiting period does not constitute an approval or final action. If after the fifteen (15) day period the Department determines that the waste which is accepted is not consistent with the request or the Waste Analysis and Classification Plan, the permittee shall be subject to any or all applicable enforcement actions of the Solid Waste Management Act or the Department's Rules and Regulations promulgated thereunder.
- D. The permittee shall submit, quarterly to the Department's Northwest Regional Office, an amended Appendix to the permit which lists all residual wastes currently approved for processing at the facility. The amended Appendix shall provide the information by waste type, generator and quantity for residual wastes including small quantity generators and small quantity waste types from large quantity generators.
- E. The permittee shall not accept residual waste from any generator who is subject to 25 Pa. Code, Chapter 287.54 that does not provide the permittee with the chemical analysis of the waste or certification that the physical and chemical properties of the waste and the process generating the waste has not changed, on or before the anniversary date of waste acceptance at the processing facility and the permittee shall not accept residual

THIS PERMIT IS NON-TRANSFERABLE

Page 5A of 7

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

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

| | |
|--------------|---------------|
| Permit No. | 301353 |
| Date Issued | March 9, 2010 |
| Date Expires | March 9, 2020 |

waste from any generator who does not provide all information as required by the Waste Analysis and Classification Plan.

- F. Before any residual waste is transferred to a disposal facility which has been permitted by the Department, the waste and the generator of the waste must have approval for disposal at the facility and the waste must be in compliance with the disposal facility's approved Form R, Waste Analysis and Classification Plan.
- G. Any waste oil containing more than 1,000 ppm total halogens may be processed only where it can be demonstrated that the waste oil does not contain hazardous waste. The demonstration may be based on an analytical method from the current edition of SW-846 to show that the waste does not contain halogenated hazardous waste constituents identified in 25 Pa. Code §264.34(e) (relating to Appendix VIII-Hazardous Constituents). The data forming the basis for demonstrating that waste containing greater than 1,000 ppm total halogens has not been mixed with hazardous waste shall be retained at the facility for five years.
- H. For generators meeting the conditions of 25 Pennsylvania Code, Chapter 271.601(a)(2 or 3) (Small Quantity Generators and Small Quantity waste Types), the acceptance of waste shall be as delineated in the Waste Analysis and Classification Plan for these generators; except the Permittee shall submit to the Department a complete application on the appropriate form (Form U) for all generators of industrial waste types that are generated in quantities of 2,200 pounds or less of that residual waste type per generating location in each month (Small Quantity Waste Type). The Department waives the detailed analysis of physical properties and chemical composition, the source reduction strategy (Form 25R) and the evaluation of leachability for these small quantity waste types; except as required under 25 Pa. Code Chapter 261, Subchapters A-D for a hazardous waste determination. Additionally, the Department waives the waiting period as referenced in paragraph C for these small quantity waste types. Before the Permittee accepts residual waste from a generator whose total combined residual waste is 2,200

THIS PERMIT IS NON-TRANSFERABLE

Page 5B of 7

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

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

| | |
|--------------|------------------|
| Permit No. | 301353 |
| Date Issued | March 9, 2010 |
| Date Expires | March 9, 2020 |
| Date Revised | November 1, 2011 |

pounds or less (Small Quantity Generator), the generator of the residual waste must submit a letter of certification to the Department and demonstrate the waste is not hazardous. The Permittee may submit to the Department the certification and demonstration received from the generator.

3. In accordance with the major permit modification received on July 20, 2011, this permit is modified to allow acceptance of municipal waste from residential, commercial, or institutional establishments which are identical to or similar in characteristics of Residual Waste. Acceptance of these wastes will be under the From U process and in accordance with the Revised Form R1 dated 05/11/2011.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

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

| | |
|--------------|---------------|
| Permit No. | 301353 |
| Date Issued | March 9, 2010 |
| Date Expires | March 9, 2020 |

Section E – Specific Variances

1. Under the provisions of §287.7 of the Residual Waste Regulations, treated brine from this facility will no longer be considered a waste when separated from other waste and used for the purposes identified and under the conditions listed in this section. This determination is automatically void, and the material is a waste, if the treated brine is used in a manner inconsistent with your request and the terms under which it was determined no longer to be a waste.

2. Summer Use: The treated brine may be used for dust control and road stabilization as described in the Department's Fact Sheet for Roadspreading of Brine for Dust Control and Road Stabilization. The brine may only be applied at a rate and frequency necessary to suppress dust and stabilize the road. The rate, frequency, and timing of the application must be controlled to prevent the brine from flowing or running off into roadside ditches, streams, creeks, lakes and other bodies of water or infiltrating to groundwater.

3. Winter Use: The treated brine may be used for roadway pre-wetting (mixed with anti-skid materials prior to roadway application), anti-icing (applied directly to roadway and walkway surfaces prior to precipitation event), or de-icing (applied directly to roadway and walkway surfaces after a precipitation event). The use is limited to winter time application to minimize the formation or development of bonded snow and ice to roadways and walkways. The rate, frequency, and timing of the application must be controlled to prevent the brine from flowing or running off into roadside ditches, streams, creeks, lakes and other bodies of water or infiltrating to groundwater.
 - a. Natural gas well brines* for roadway pre-wetting, anti-icing, and de-icing purposes must meet the following acceptance criteria:

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT

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

| | |
|--------------|---------------|
| Permit No. | 301353 |
| Date Issued | March 9, 2010 |
| Date Expires | March 9, 2020 |

| <u>Allowable Level</u> Pre-wetting | <u>Parameter</u> | <u>Allowable Level</u> Anti-icing/De-icing |
|---------------------------------------|------------------|---|
| >170,000 mg/l | TDS | >170,000 mg/l |
| >80,000 mg/l | Chloride | >80,000 mg/l |
| >40,000 mg/l | Sodium | >40,000 mg/l |
| >20,000 mg/l | Calcium | >20,000 mg/l |
| 5 to 9.5 | pH | 5 to 9.5 |
| <500 mg/l | Iron | <500 mg/l |
| 100 mg/l | Barium | 30 mg/l |
| 10 mg/l | Lead | 5 mg/l |
| <1,000 mg/l | Sulfate | <400 mg/l |
| <15 mg/l | Oil & Grease | <15 mg/l |
| <0.5 mg/l | Benzene | <0.5 mg/l |
| <0.7 mg/l | Ethylbenzene | <0.7 mg/l |
| <1 mg/l | Toluene | <1 mg/l |
| <1 mg/l | Xylene | <1 mg/l |

* Natural gas well brines from sour gas wells are prohibited from use.

- b. The roadway application rates for use of the natural gas well brines shall be limited to 10 gallons per ton for pre-wetting use, =50 gallons/lane/mile for anti-icing use, and 100 gallons/lane/mile for roadway de-icing. A walkway application rate of 1-3 oz/yd² shall be limited to wetting of the walkway surface to avoid any liquid run-off.

THIS PERMIT IS NON-TRANSFERABLE

Page 6A of 7

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WASTE MANAGEMENT**Permit
For
Solid Waste Disposal and/or Processing Facility
FORM NO. 8**

| | |
|--------------|---------------|
| Permit No. | 301353 |
| Date Issued | March 9, 2010 |
| Date Expires | March 9, 2020 |

Section F – Environmental Assessment, Benefits and Mitigations

1. The permittee has proposed mitigation of harms and has identified benefits of the project to the public in the submissions included as part of the April 17, 2007, residual waste processing permit application. Based upon the Department's evaluation of the environmental assessment, of which the harms/benefits analysis is part, it has been determined that the benefits of the project clearly outweigh the known and potential harms as required by Section 287.127(d) of the Residual Waste Regulations. Failure to complete all mitigation measures in the application submissions or failure to provide for all the benefits accepted by the Department based its analysis may result in permit suspension, permit revocation, and/or other appropriate enforcement actions.
2. The Department's analysis and review of the Environmental Assessment for the major modification in the above condition is attached to this permit as Exhibit EAI.

Exhibit EA1

Environmental Assessment (Harms/Benefit)



Castle Environmental Inc. Riverview Park Facility

Castle Environmental, Inc.
City of New Castle
Lawrence County
ID No. 301353

Prepared by:
Pa. Department of Environmental Protection
Northwest Regional Office
Waste Management –Facilities Section
March 2008

PROJECT DESCRIPTION

On April 23, 2007 Castle Environmental, Inc. (Castle) submitted an application to the Department of Environmental Protection. With this application, Castle is proposing to operate a residual waste processing facility to be known as Castle Environmental, Inc. Riverview Park Facility. Currently, the company operates a residual waste processing facility at this site under the Department's permit-by-rule provisions of the Residual Waste Regulations. Once permitted, the facility will be able to process types of waste streams (primarily liquid waste or sludge containing higher percentages of waste oil) not currently being processed under the permit-by-rule provisions. This proposed permit will also give the company added operational flexibility and would be limited to a ten year term.

The site is approximately 5.12 acres and consists of an existing industrial building located at 101 River Park Drive, New Castle, PA 16101, in Lawrence County. Since the existing building will be utilized for the processing facility there will be minimal disturbance. The facility's primary processing function is and will continue to be volume reduction by pressure filtration in conjunction with chemical separation processes.

The process will continue to include the discharging wastewaters to the sanitary sewer line. The wastewater is discharged into a six inch metered line. The New Castle Sanitation Authority will be receiving approximately 40-50 million gallons per year.

ENVIRONMENTAL ASSESSMENT PROCESS

25 Pa. Code §§287.126 and 287.127 (relating to environmental assessments) require that an applicant conduct an environmental assessment and demonstrate that the benefits of the project clearly outweigh the known and potential environmental harms that will remain after the proposed mitigation of harms. The benefits of the project can be social and economic, and/or environmental. Social and economic (SE) benefits are evaluated after offsetting them with SE harms. Environmental harms are evaluated after offsetting them with acceptable mitigation plans. To determine whether an impact is a harm or a benefit, DEP compares the applicant's proposal to the conditions that would exist if the project did not move forward. The environmental harms are then balanced against all acceptable benefits to determine if the benefits clearly outweigh the harms.

In this instance, Castle's Application is compared to the conditions that would exist if the entire project did not move forward. In addition, the Department will factor into our review the existing conditions of the site as it now operates as a permit-by-rule facility. The findings and conclusions in this review are limited to the design of the current proposal. Any future expansion to this facility would be considered a change in the areas covered by this environmental assessment and would necessitate a new evaluation be completed.

Castle submitted an environmental assessment in the application that provided an analysis of the potential impact of the proposed facility on the environment, public health, and safety. The Department, after consultation with appropriate government agencies and potentially affected parties, evaluates the environmental assessment to determine whether the proposed project has the potential to cause environmental harm. The Department did conduct a Local Municipal Involvement Process (LMIP) meeting on July 11, 2007. The purpose of the meeting was to provide representatives of affected public and/or governmental authorities an opportunity to express to both the Department and Castle any concerns regarding the proposed project. The

lack of attendance of the LMIP meeting inferred a lack of local interest in the project. No comments were received. In this document, DEP provides its analysis of the known and potential environmental harms that will remain after implementation of the proposed mitigations and whether the benefits of the proposed project clearly outweigh the remaining harms.

Each harm is discussed individually below to determine if it has been fully mitigated. If the harm is fully mitigated, that harm is not included in the balancing portion of this document. If there is harm remaining after mitigation, that remaining harm is included in the balancing. The balancing looks at the individual and collective impacts of all of the harms and the benefits to ensure that the total effect of the project is such that the benefits clearly outweigh the harms. Among other things, the degree to which a harm or a benefit affects the Department's balancing is based on the following factors:

1. *Harms and benefits.* Harms are identified as known or potential. Benefits must be associated with the project and not be speculative. A known harm or benefit is one that the Department concludes is certain to occur in the future. A potential harm is one that would result from the proposed project under some circumstances, but not others. A known benefit or harm carries greater weight than if that same benefit or harm were a potential benefit or harm for a particular project.
2. *What is the duration, frequency, and intensity of the benefit or harm?* "Duration" refers to how long a harm or benefit continues. "Frequency" refers to how often it will occur; it can be measured on a daily, weekly, or yearly basis, or it may be constant. "Intensity" refers to how much the harm or benefit will be if or when it occurs. For example, a loud noise is more intense than a softer noise. All other things being equal, the longer a harm or benefit lasts, the more frequently it occurs, and the more intense it is, the more it will affect the Department's balancing.
3. *How many people are impacted by a benefit or harm?* All other things being equal, the more people impacted by harm or benefit, the more that harm or benefit will affect the Department's balancing.
4. *How sensitive are the receptors?* All other things being equal, the more sensitive the receptors are to a harm or benefit, the more that harm or benefit will affect the Department's balancing. For example, if a harm would impact children more than adults, and the proposed project is in an area with a high population of children, that harm would affect the Department's balancing for that project more than if the project would be located in an area without children nearby.

HARMS AND MITIGATION DISCUSSION

Residual waste processing facilities have the potential to negatively impact traffic, water quality, stream flow, fish and wildlife, plants, aquatic habitats, threatened or endangered species, water uses, air quality, community aesthetics, and land uses. In addition, depending on the location of the facility, the operation could produce negative impacts on specific resources such as: 100-year floodplains, scenic rivers, local parks, State and Federal forests and parks, the Appalachian Trail, historic and archaeological sites, National wildlife refuges, State natural areas, National landmarks, prime farmland, wetlands, special protection watersheds designated under Chapter 93 (relating to water quality standards), airports, public water supplies and other applicable resources. The specific harms associated with these criteria as they apply to the proposed Castle Environmental, Inc. Riverview Park Facility are described below:

1. **Water Quality – Castle's Proposed Mitigation**

As a waste facility, water quality can be a harm to the environment. There is a potential for wastes to migrate into water sources or for material to leach into ground water. Castle's facility mitigates this potential problem with several measures. The transfer of waste from haul trucks to processing equipment is done over a depressed concrete pad with a drainage structure at its lowest point; any and all waste that might spill in this area is run through the drainage system into the facility for processing. Likewise the processing equipment is enclosed in a building that has a drainage system, which flows into the tanks for processing. All processing tanks and equipment have retaining walls and secondary containment to capture any spill or leak that may occur. All liquids are then collected and then directed back into the treatment to process.

Wastewater that is created through the processing of waste material flows to the New Castle Sanitation Authority Waste Water Treatment Plant for further treatment before releasing back into the environment. These processes ensure that water is thoroughly treated to be sure that water quality of surrounding environment is not being harmed.

DEP Comments on the Proposed Mitigation

Based upon the information presented by Castle Environmental, the Department agrees that the potential water quality impacts from the proposed processing facility will be mitigated through the implementation of the proposed controls. The discharge from this facility does not directly enter the waters of the Commonwealth. It enters into the publicly owned sewage system with appropriate local approvals. For the purposes of the Environmental Assessment Process (EAP) no harm remains.

2. Noise Impact – Castle's Proposed Mitigation

There are 2 sources of noise considered in this assessment. The first being noise from the actual treatment of wastes at this facility. The treatment of waste occurs within a building structure. A significant portion of noise created by pumps and equipment operating within the facility is contained and dampened within this building structure. Noise levels within the processing area of the building are consistent with other commercial/industrial facilities. Outside of the building and in the office section of the building noise levels are significantly lower due to the absorption of noise from the building itself.

The second noise source is truck noise associated with the hauling of waste into and out of the facility. This noise is characteristic of other commercial or industrial facilities. The facility is located within an industrial zoned area where noise of this type is typical and anticipated by local businesses and residents.

Noise levels are anticipated to be characteristic of commercial/industrial areas and due to the location of facility and the limited number of receptors, Castle Environmental perceives noise nuisance to be a minor potential harm.

DEP Comments on the Proposed Mitigation

The Department has reviewed the information presented and concurs with Castle's findings. It is evident that the proposed operations within an enclosed facility and location of the building will help to minimize the impact from noise on the minimal number of receptors. For purpose of the EAP a minor harm remains.

3. Dust – Castle's Proposed Mitigation

Dust during transport of wastes into and out of the facility is recognized as a potential harm to the surrounding area. Dust control measures are in effect. Castle Environmental has obtained the appropriate permit to utilize brine water for dust control purposes; this form of dust control will be applied to gravel portions of the roadway within the facility on an as needed basis in order to minimize dust production. All traffic areas within facility are either paved or gravel surfaces to minimize the potential of dust.

Also in recognizing the potential dust and truck traffic, as described below, the speed limit within facility is reduced to limit potential described harms.

Concerning the waste transported in and out of the facility the majority of the waste being brought into the site is in a liquid form and the filter cake being taken out of the site is in plastic lined roll off containers. It is asserted that waste into and out of the facility will not be producing dust.

DEP comments on Proposed Mitigation

The Department agrees that the proposed control measures will substantially mitigate the potential dust impact on the minimal receptors and surrounding environment. The location of the facility and the distance to receptors helps to lessen the potential for dust impacts from the proposed facility. The potential harm is identified as temporary in nature for any single occurrence and should only occur intermittently throughout the operating life of the processing facility. For the purposes of the EAP a minor harm remains.

4. Odors Castle's Proposed Mitigation

Castle, realizing the potential nuisances that odor can cause to both the public and their employees' has taken measures to reduce and control any possible odors. These odors may be introduced at the site during the treatment process; therefore Castle has installed several systems to reduce, control, and eliminate odors. These systems include a mister neutralizing system placed in their processing area, an air powered neutralizing system placed in their building, chemical odor control during processing, and separating waste which has a higher potential of producing odor for further treatment to reduce any odor that may be emitted during processing. Inspections will be made throughout each operations day to ensure that all of these systems are functioning, and reducing/eliminating any odor that may be emitted by or during the treatment process.

DEP comments on Proposed Mitigation

The Department has received a few prior complaints from one individual concerning odor in the area of the Castle Environmental facility. Investigation of these complaints could not conclusively identify the existing facility as the cause of the odors. Since this time the company has installed some of the additional systems referenced above. The Department agrees that the proposed control measures should substantially mitigate the potential odor impact on the few nearby receptors. However, the potential for odors on an infrequent basis still remains therefore, for the purposes of the EAP a minor harm remains.

5. Litter – Castle's Proposed Mitigation

Litter is a recognized potential harm with any waste facility. This mostly comes from hauling trucks having articles of waste blown from the truck while in transport. Castle Environmental does not anticipate litter to be an issue with their facility because a majority of the waste handled at this facility is brought in with tanker trucks as a semi-liquid waste, all transfer of waste from truck to facility is handled in a contained area, and filter cake waste leaving facility is hauled in a tarp covered truck.

Personnel at the facility will monitor that trucks entering the facility and leaving the facility pose little to no risk of creating litter.

DEP comments on Proposed Mitigation

The Department agrees that the nature of the waste being processed and the proposed controls will mitigate the potential litter impact. For the purposes of the EAP no harm remains.

6. Vectors – Castle’s Proposed Mitigation

Vectors such as birds or insects are a recognized potential harm for any waste facility operation. However, considering the type of waste and the enclosed setting in which the waste is processed; Castle Environmental does not anticipate vectors to be an issue. The waste brought into the facility would not normally attract or sustains a vector infestation.

Facility Personnel are aware that vector infestation is a potential harm and if any infestation is found, appropriate actions will be taken to remove infestation problem. Details of this plan will be required for the technical review of the application.

DEP comments on Proposed Mitigation

The Department agrees that the proposed controls will mitigate the potential vector impact. It is evident that the types of waste and proposed operations within an enclosed facility will substantially mitigate the impact of vectors. The additional waste streams proposed in the permit application are not normally of the type to attract vectors. For the purposes of the EAP a minor harm remains.

7. Truck Traffic – Castle’s Proposed Mitigation

Truck traffic into and out of the facility could cause a potential health and safety harm due to possible traffic accidents. The facility has been laid out to limit cross traffic and multi-directional traffic, it also includes proper sight distances and wide turning areas. The speed limit is reduced within the bounds of the facility to reduce required stopping distances of trucks and to increase awareness of drivers within the facility.

Truck traffic entering and leaving the facility do so onto state route 422, a 4-lane highway; since truck traffic flows from site to an access roadway, to this highway no traffic study was performed. The access roadway leading to the 4-lane highway is paved and shared by other industrial facilities, but due to low volume of traffic utilizing entranceway congestion is not anticipated.

The current number of truckloads that enter the facility on a daily basis, Monday through Friday, averages approximately 36. It is anticipated once the facility is permitted this number may increase to 50 truckloads per day, or 40%. Castle Environmental has substantially mitigated truck traffic hazards as possible.

DEP Comments on Proposed Mitigation

The Department agrees that the potential harms associated with truck traffic/safety hazards at the proposed processing facility's location will be substantially mitigated by Castle's efforts. The Department will contact the Pennsylvania Department of Transportation during the technical review phase of the application to determine if a more in depth study will be required for the additional trucks that may result from the potential new waste streams. For purposes of the EAP a minor harm remains.

8. Erosion and Sediment Control – Castle's Proposed Mitigation

The facility is on an existing industrial site with permanent erosion control devices in place including swales and rock dissipaters for storm drainage into the Shenango River. The site is fully vegetated in all areas outside of the paved and gravel roadways. The building structure is already in place so erosion control devices for construction will not be necessary.

The potential harm caused by erosion has been mitigated through erosion and sediment control devices and by keeping the site vegetated; the storm water system of the site is kept in a functioning order so that excess runoff is controlled.

DEP Comments on Proposed Mitigation

The Department agrees that the existing control measures at an existing industrial site will substantially mitigate any erosion and sediment issues at the facility. The proposed change from a permit-by-rule facility to a individual residual waste processing permit will not change any existing conditions with respect to the erosion and sedimentation control systems. For the purposes of the EAP no harm remains.

9. Accidental Spillage Potential - Castle's Proposed Mitigation

Due to the hauling of waste into and out of the facility there is always a potential for spillage to occur onsite and offsite. To minimize the chance of a spillage event onsite several mitigation systems have been set into place. Truck traffic is controlled to minimize potential of a traffic accident; this minimizes potential of spillage from such an accident. Transfer of waste from truck to facility and from facility to truck is completed only in designated areas where concrete loading/unloading pads have been established. These pads are designed to contain any spillage so that spilled material may be processed by the facility.

In order to minimize the chance of potential spillage off site, trucks hauling material into the facility are routinely inspected for damage or wear to ensure a lower potential of leakage or spills while in transit. Waste material leaving site will be transported in 20 cubic yard roll off containers. These are lined prior to filling to ensure that leaking will not occur during transport.

Any spillage event that may occur within the facility will be promptly cleaned up in accordance with the PPC Plan and material from said spillage will be sent through the facility for processing as needed. The PPC Plan has mandatory site and building inspections at the beginning of every work shift. Any leaks or spills in the processing areas will be spotted and corrected at that time. This ensures that leaks and spills are recognized and handled in an appropriate manner.

Other spillage and leakage possibilities are the chemicals that are stored onsite for the processing of waste. These chemicals are kept to a minimal quantity so that if a leak/spill does occur the amount of leak/spill will be minimized. The staff is also familiarized with all chemicals stored onsite and is informed of the proper handling and how to clean a spill of these chemicals. Castle Environmental keeps an inventory of commercial absorbent materials in event of a spill.

DEP Comments on Proposed Mitigation

The Department agrees that the proposed plans and control measures will substantially mitigate the potential environmental harm due to accidental spillage. The potential harm is identified as temporary in nature for any single occurrence and should only occur intermittently throughout the operating life of the processing facility. For purposes of the EAP a minor harm remains.

ENVIRONMENTAL, SOCIAL, AND ECONOMIC BENEFITS

1. Reduce Volume of Residual Wastes

The primary purpose of this facility is the wastewater treatment in effort to reduce volume of residual wastes. Waste materials are processed by a dual clarifier system and a filter press. This significantly reduces the volume of waste being disposed of in the landfill, which conserves on landfill usage. For example, an industry that would normally send a liquid waste stream to a landfill for solidification could be processed at Castle Environmental. Here the solids portion would be removed through pressure filtration, thereby only the solids portion of the waste stream are land filled while the water portion continues through for final treatment by the POTW. This reduction of waste is a major benefit to the environment of the local area.

The facility provides an avenue for local businesses to have waste materials disposed of in an environmentally conscience and legal manner. Castle's facility encourages local businesses to reduce landfill wastes by utilizing their services. Providing said services helps the local community on an economic and environmental level.

DEP comments on proposed benefit

The Department agrees with Castle's claim that the proposed processing facility will reduce the volume of residual waste being disposed of in a landfill. However, the Department does not conclude this is the only acceptable environmentally manner to dispose of residual waste. There is no guarantee additional waste will be received at the facility, or that this facility provides a more efficient disposal option than another waste water treatment facility or landfill. For purposes of the EAP, the Department rejects this environmental benefit.

2. Purchase of Goods and Services

This facility also helps the local economy by the purchase of goods and services. The facility requires many supplies including but not limited to processing chemicals, paper products, office supplies, equipment supplies, trucking services, and fuel. Local businesses are able to benefit by providing said goods and services to this facility.

DEP comments on proposed benefit

While the justification presented by the applicant for this benefit is speculative in nature sine they do not guarantee specific purchases or amounts that will be spent, the Department does acknowledge some additional revenue and increase of local spending by Castle will result from the project. Without additional justification or guarantees this can only be considered a minor social and economic benefit.

3. Employment

This facility provides continued employment for approximately 25 individuals on staff. Currently employees are offered competitive wages, 401k, and healthcare benefits. This provides a benefit to those employed by the facility on a social and economical level. Once permitted and with the anticipated expansion and processing capabilities, the daily employee workforce should increase up to 10 individuals. It is also anticipated that a third work shift is possible.

DEP comments on proposed benefit

Although the actual number of future employees is speculative, the Department accepts Castle's claim that an increase in local employment is a benefit. For purposes of the EAP, this is a minor social and economic benefit.

4. Tax Revenue

This facility will provide tax revenue to the local governments both directly and indirectly. Tax revenue will come directly from payroll, corporate, and real estate taxes and indirectly by taxes on purchased goods and services, both by the facility and the employees of the facility. This is a direct benefit to the economy of the local area.

DEP comments on proposed benefit

The Department accepts Castle's claim that some additional tax revenue will result from the project. For purposes of the EAP, this is a social and economic benefit.

HARMS/BENEFITS BALANCE

In accordance with 25 Pa. Code Section 287.126 and 287.127 (relative to environmental assessment), an applicant for a residual waste processing facility is required to conduct an environmental assessment of that proposal. The Department's continuation of the technical review process is contingent upon a demonstration by the applicant through the environmental assessment process that the harms be completely mitigated or the benefits of the proposal clearly outweigh the harms. As described in the preceding analysis, the application by which Castle proposes to operate the Castle Environmental, Inc. Riverview Park Facility identifies potential impacts to both the environment and the public. These include water quality impacts, noise, dust, odors, litter, accidental spillage, and truck traffic. The application identifies the specific measures by which Castle proposes to mitigate the potential impacts. The Department's review of those measures concluded

that the impacts will be substantially mitigated in intensity, frequency and/or duration. The Department has determined that the harms remaining after mitigation to be minor in nature. These will mostly be nuisance type harms that would be infrequent in occurrence and should be easily abated or addressed when they do occur. Balanced against the unmitigated harms are the environmental and social and economic benefits attributable to the operation of the processing facility. Operation of the proposed residual waste processing facility will establish benefits to the City of New Castle and the surrounding areas of Lawrence County through the purchase of goods and services from local businesses, tax revenue, and employment. As a result, the Department hereby determines, given the minor nature of the harms remaining after mitigation in relation to the benefits of the project, that the benefits of permitting and operating the Castle Environmental, Inc. Riverview Park Facility clearly outweigh the harms.

CONCLUSION

The Department has concluded its review and balancing of the harms and benefits associated with the operation of the Castle Environmental, Inc. Riverview Park Facility. The Department did consider Castle's compliance history and the current conditions associated with its existing operation when reviewing the known and potential harms and proposed benefits. The Department has reviewed the assessment and mitigation plans to confirm that all applicable harms were considered and the extent to which the harms are mitigated. The Department evaluated each mitigation measure to establish that, individually and collectively; those measures adequately protect public health, safety, welfare and the environment. The Department has determined that the projected benefits of the proposed processing facility provide advantages to the public near the facility and outweigh the minor harms associated with that proposal. Based on the findings of this assessment, the Department concludes that the requirements of 25 Pa. Code Section 287.127 are met and that the pending application for operation of the Castle Environmental, Inc. Riverview Park Facility, Solid Waste Permit No. 301353, should proceed to technical review.