



## ENERGY AND ENVIRONMENT CABINET

Matthew G. Bevin  
Governor

Charles G. Snaveley  
Secretary

DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
DIVISION OF WASTE MANAGEMENT  
200 FAIR OAKS LANE, 2<sup>ND</sup> FLOOR  
FRANKFORT, KENTUCKY 40601  
PHONE (502) 564-6716  
www.dep.ky.gov

February 25, 2016

CERTIFIED MAIL #: 7007 0710 0003 3744 3732  
Return Receipt Requested

Mr. Cory Hoskins  
Advanced TENORM Services, LLC  
32 Crestview Drive  
West Liberty, KY 41472

**RE: Request for Information**  
Advanced TENORM Services  
West Liberty, Morgan County, Kentucky  
AI# 125200

Dear Mr. Hoskins:

The Kentucky Division of Waste Management (Division) is requesting additional information via an Information Request to Advanced TENORM Services regarding management of TENORM waste streams/contaminated waste and disposal of such waste. The West Virginia Office of Environmental Health Services/Radiation, Toxics and Indoor Air Division (WVOEHSTIAD) reported a shipment of TENORM waste destined for disposal in Kentucky on January 19, 2016. The Division conducted a field visit to your facility on February 4, 2016. It was reported that your facility was located at Morgan County Library and no employee or representatives of Advanced TENORM Services was present at the location.

Information available to the Division suggests Advanced TENORM Services has been engaging in activities or arranging for disposal of TENORM-contaminated waste from out-of-state facilities. One of the actions allegedly conducted by Advanced TENORM Services, as reported by the WVOEHSTIAD, is the act of solidifying the "fracking" sludge in Ashland, KY and then sending it to a Class D landfill in Kentucky.

The Division is investigating the processes being conducted by Advanced TENORM Services and any waste determinations made in conjunction with these wastes from its solidifying processes as well as any processes conducted prior to the involvement of Advanced TENORM Services. Additional information is requested by the Division to aid in making a determination of whether the provisions of Kentucky Revised Statutes (KRS) Chapters 221 and 224 and 401 Kentucky Administrative Regulations (KAR) have been followed prior, during, and after the

Information Request Cover Letter  
Advanced TENORM Services

time Advanced TENORM Services was notified that TENORM wastes generated out of state were prohibited from disposal in any Kentucky landfill pursuant to KRS 211.859 and to assess the response action(s) taken. It will also examine any partnership or commercial arrangements Advanced TENORM Services had or has and look to identify any possible mismanagement of TENORM by Advanced TENORM Services. (See Attachment A)

Pursuant to KRS Chapters 221 and 224, 401 KAR Chapters 30 through 38, 401 KAR 40:010, and 401 KAR 40:020, Advanced TENORM Services shall respond fully and truthfully to the information requested in this letter by March 25, 2016. **Compliance with this request is mandatory** and any information provided by Advanced TENORM Services to the Division may be used in future enforcement actions. Failure to respond fully and truthfully to each inquiry contained in this letter within the permitted time frame or failure to justify such failure to respond may result in further enforcement action against Advanced TENORM Services by the Division.

The information requested herein must be provided regardless of any confidentiality claims made by Advanced TENORM Services. Advanced TENORM Services may assert a confidentiality claim covering part or all of the information requested as outlined in KRS 224.10-210, KRS 224.10-212, and 401 KAR 30:020. If Advanced TENORM Services claims confidentiality under KRS 224.10-210 or KRS 224.10-212, Advanced TENORM Services shall submit justification of the confidentiality pursuant to KRS 224.10-210, KRS 224.10-212, or 401 KAR 1:060 with any such request.

Please address each of the comments, item by item, in a separate reply by **March 25, 2016**. Advanced TENORM Services shall submit three (3) hard copies and one (1) electronic copy of all the responses plus an accompanying cover letter to the Division by verifiable delivery or hand delivery to the following address:

**ATTN: April J. Webb P.E., Manager**  
Hazardous Waste Branch  
Division of Waste Management  
200 Fair Oaks Lane, 2<sup>nd</sup> Floor  
Frankfort, KY 40601

If you have any questions, please contact April J. Webb at (502) 564-6716, ext. 4699 or via email at april.webb@ky.gov.

Sincerely,



Anthony R. Hatton P.G., Director  
Kentucky Division of Waste Management

AJW/mml

Attachment A: Information Request

c:  
ce: Tony Hatton, DWM  
April J. Webb, Hazardous Waste Branch  
Maridely M. Loyselle, Hazardous Waste Branch  
Field Office Operations Central Office  
Matthew McKinley, Radiation Health Branch, CHFS

**Department for Environmental Protection**  
**Division of Waste Management**  
**Hazardous Waste Branch**  
www.waste.ky.gov

200 Fair Oaks Lane  
Frankfort KY 40601  
Phone 502.564.6716  
Fax 502.564.2705

## **INFORMATION REQUEST**

# **Hazardous Waste Management Actions**

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## **Information Request & Provisions**

TO:  
**ADVANCED TENORM SERVICES, LLC**  
West Liberty, Morgan County, Kentucky  
AI# 125200

**February 25, 2016**



Department of Environmental Protection  
Division of Waste Management  
Hazardous Waste Branch  
100 North 17th Street  
Raleigh, NC 27601  
Phone: 919-733-2300  
Fax: 919-733-2301

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Information Request & Provisions

ADVANCED TENORM SERVICES, LLC  
West Liberty, Morgan County, Kentucky  
40380



## INSTRUCTIONS FOR DIVISION INFORMATION REQUESTS

### Instructions

1. Identify the person(s) responding to these Information Requests on behalf of Respondent.
2. A separate response and an electronic copy must be made to each of the Information Requests set forth herein.
3. Precede each answer with the number of the Information Request to which it corresponds.
4. In answering each Information Request, identify all documents and persons consulted, examined, or referred to in the preparation of each response and provide true and accurate copies of all such documents.
5. If information not known or not available to you as of the date of submission of a response to this Information Request should later become known or available to you, you must supplement your response to the Division. Moreover, should you find at any time after the submission of its response that any portion of the submitted information is false or misrepresents the truth; you must notify the Division thereof as soon as possible.
6. For each document produced in response to this Information Request, indicate on the document, or in some other reasonable manner, the number of the Request to which it responds.
7. Where specific information has not been memorialized in a document, but is nonetheless responsive to a Request, you must respond to the Request with a written response.
8. If information responsive to this Information Request is not in your possession, custody or control, then identify the person from whom such information may be obtained.
9. If you have reason to believe that there may be persons able to provide a more detailed or complete response to any Information Request or who may be able to provide additional responsive documents, identify such persons and the additional information or documents that they may have.

## DEFINITIONS

The following definitions shall apply to the following words as they appear in this letter and its attachments.

1. The term **"AND"** and **"OR"** shall be construed either disjunctively or conjunctively as necessary to bring within the scope of this Information Request any information which might otherwise be construed to be outside their scope.
2. The term **"Advanced TENORM Services"** or **"ATS"** shall mean Advanced TENORM Services, LLC and all facilities owned or operated or historically owned or operated by Mr. Cory Hoskins.
3. The term **"CABINET"** shall mean the Kentucky Energy and Environment Cabinet.
4. The term **"DISPOSAL"** shall mean the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste, special waste, or hazardous waste into or on any land or water so that such solid waste, special waste, or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any water, including groundwater.
5. The term **"DOCUMENT"** and **"DOCUMENTATION"** shall include writings of any kind, formal or informal, whether or not wholly or partially in handwriting (including by way of illustration and not by way of limitation), any invoice, receipt, endorsement, check, bank draft, canceled check, deposit slip, withdrawal slip, order, correspondence, record book, minutes, memorandum of telephone and other conversations including meetings, agreements and the like, diary calendar, desk pad, scrapbook, notebook, bulletin, circular, form pamphlet, statement, journal, postcard, letter, telegram., telex, report, notice, message, analysis, comparison, graph, chart, inter-office or intra-office communications, Photostat or other copy of any documents, microfilm or other film record, photograph, sound recording on any type of device, punch card, disc or disc pack, tape or other type of memory generally associated with computers and data processing (together with the programming instructions and other written material necessary to use punch card, disc, disc pack, tape or the type of memory); including (a) every copy of each document which is not an exact duplicate of a document which is produced, (b) every copy which has any writing, figure, notation, annotation, or the like of it, (c) drafts, (d) attachments to or enclosures with any document, and (e) every document referred to in any other document.
6. The term **"GENERATION"** shall mean any act or process which produces any waste as defined by KRS 224.1-010(31).

7. The term "**IDENTIFY**" means, with level to a natural person, to set forth the person's name, present or last known business address and business telephone number, present or last known home address and home telephone number, and present or last known job title, position, or business.
8. The term "**IDENTIFY**" means, with respect to a corporation, partnership, business trust or other associate of business entity (including a sole proprietorship), to set forth its full name, address, legal form (e.g., corporation, partnership, etc.), organization, if any, and a brief description of its business.
9. The term "**IDENTIFY**" means, with respect to a document, to provide its customary business description, date, number, if any (invoice or purchase order number), the identity of the author, addressor, addressee and/or recipient, and the substance or the subject matter.
10. The term "**PERSON**" includes, in the plural as well as the singular, any natural person, firm, unincorporated a conciliate partnership, corporation, trust or other entity.
11. The term "**SOLID WASTE**" means a solid waste as defined in KRS 224.1-010(31).
12. The term "**SPECIAL WASTE**" means a special waste as designated in KRS 224.50-760(1)(a).
13. The term "**YOU**" shall mean the addressee of this Information Request, the addressee's officers, managers, employees, contractors, trustees, successors, assigns, and agents.

**INFORMATION REQUESTED****General Facility Process**

1. Provide a list of all facilities owned, operated, or historically owned or operated by Mr. Cory Hoskins.
2. Provide name, position title and job duties of all employees of any facilities provided in response to question 1 for the last two (2) years.
3. Provide any and all training documents that have been in effect at the facilities from question 1 for the last two (2) years relating to waste management activities.
4. Provide a flow chart of the chain of command of **Advanced TENORM Services**.
5. Provide a list of all services **Advanced TENORM Services** offers as a company.
6. Provide a list of all Permit/authorization/certifications **Advanced TENORM Services** has been issued and the source.
7. Provide documentation of the financial status and liability insurance of **Advanced TENORM Services**.
8. Provide a list of all facilities that **Advanced TENORM Services** is associated with that dispose or have disposed of waste in Kentucky and each location associated with that disposal.
9. Explain the type and kind of activities **Advanced TENORM Services** has with each facility provided in response to number 7. Identify each company's roles and responsibilities as well as remuneration, associates, and transactions performed in the past two (2) years.
10. Provide a list of all landfills in Kentucky that have received TENORM waste or any other waste **Advanced TENORM Services** has arranged for disposal in Kentucky. Identify each company's roles and responsibilities as well as remuneration, associates, and transactions performed in the past two (2) years. Include in your documentation:
  - a. Name of landfill operator;
  - b. Landfill address;
  - c. Contact Person: name, and email address;
  - d. Waste volume;
  - e. Shipment documentation; and
  - f. Radiation level of the waste.
11. Identify when, how, and where solidification of the TENORM waste or any other waste **Advanced TENORM Services** has arranged for disposal in Kentucky has been or will be performed and who is or was responsible for those activities.

12. Explain step by step the solidification treatment process of TENORM waste or any other waste **Advanced TENORM Services** has arranged for disposal in Kentucky. Include description of the required equipment and training need to perform such activity.

#### Shipments & Transportation

13. Provide a step by step process description of shipment arrangements of TENORM or any other waste **Advanced TENORM Services** has arranged for disposal in Kentucky.
14. Provide a list of all transporters used by **Advanced TENORM Services**. Provide a list identifying the following items:
  - a. Transporter EPA ID number
  - b. Date of shipments
  - c. Number and type of trucks
  - d. Waste volumes
  - e. Type of container
  - f. Facility of Origination
  - g. Time period from pick up to final facility destination
  - h. Radiation level reported
  - i. Name of any intermediary transfer facilities or consolidation in the process to transportation
15. Provide copies of all shipment manifests.
16. Identify any treatment performed on the waste during transportation.

#### Waste Profile & Sampling

17. For each waste stream managed at **Advanced TENORM Services**, provide a detailed description of the storage and disposal activities related to those waste streams for the last two (2) years, including but not limited to, a description of collection procedures, accumulation areas, accumulation methods, and disposal methods.
18. Provide a profile questionnaire for each type of waste **Advanced TENORM Services** manages or intends to manage.
19. Provide a step by step description of the process and how sites for disposal of waste streams are determined and selected.
20. For the waste managed by **Advanced TENORM Services**, describe the factors for determining the disposition of the following wastes:
  - a. "Earthen material" from the drilling process;
  - b. "Earthen material" with residual coating of refined-oil based muds;
  - c. Recycled drilling mud;

- d. Recycled hydraulic fracturing water / flow back water including some Brine (likely concentrated);
  - e. Spent tank bottoms;
  - f. Filtrate, either liquid or solid, that results from, created during, processing and/or recycling of used hydraulic fracturing water, flow back water, or produced water;
  - g. Used hydraulic fracturing sands;
  - h. Production by pumping out gas, oil, brine and pipe scale (a separation station is used to separate the gas, oil, and brine.); and
  - i. Others.
21. Provide information how **Advanced TENORM Services** determines the primary constituents of concern (COCs) for Oil and Gas production and its radiological characterization. Identify any analytical methods used for the purpose of characterization of waste materials.
  22. Provide the procedures used to conduct field sampling of alpha, beta, and gamma screening measurements, and how sampling of various media of radiological and laboratory analyses are performed. Identify sampling size, type, methods, location, and scope.
  23. Explain what factors are used to determine a "representative sample".
  24. Provide all sample documentation information found in the field logbook(s).
  25. Provide an example of chain-of-custody form(s) documentation and procedures. How is a successful evaluation of a completeness and accuracy check of the chain-of-custody form(s) performed?
  26. What containers are used to collect samples? Provide an example of a container sample label.
  27. Provide information on how:
    - a. A laboratory is selected;
    - b. the laboratory performs the requested analyses; and
    - c. the original chain-of-custody form(s) with final analytical results from laboratory are transmitted.
  28. What is the specific analysis requested on any TENORM sample or any other waste **Advanced TENORM Services** has arranged for disposal in Kentucky.
  29. Provide a description as to how corrections to documentation are made. Provide examples of when these corrections are needed, and the procedures for such changes.
  30. Provide a description of the type of sample containers destined for laboratory analysis, how they will be packaged and stored, the area of storage, and the time period between collection and shipment to the laboratory.

31. What are the retention procedures for original copies of field data, field records, analytical data, training records, and other specific documentation which are retained by **Advanced TENORM Services**.
32. Identify the criteria used by **Advanced TENORM Services** to reject any shipment of waste destined for landfills.
33. Provide documentation showing that Advanced TENORM Services has determined the relative risks from radiation exposures for the personnel managing TENORM waste or any other waste **Advanced TENORM Services** has arranged for disposal in Kentucky.
34. Provide a list of all equipment used to measure TENORM levels by **Advanced TENORM Services**.
35. Provide a summary table of all samples taken by **Advanced TENORM Services**
  - a. Sample type,
  - b. Sample Quantity;
  - c. Medium;
  - d. Container type;
  - e. Analytical Parameter;
  - f. Analytical Methods;
  - g. Detection Limits; and
  - h. Rationale
36. Provide a step by step description of how **Advanced TENORM Services** assesses the potential risk of the management of waste streams.
37. Provide any analytical results of any TENORM waste stream or any other waste **Advanced TENORM Services** has arranged for disposal in Kentucky given to or performed by Advance TENORM Services for the last five (5) years.
38. Provide the Quality Control Protocols followed by **Advanced TENORM Services** employees or subcontractor employees to avoid cross contamination.
39. Provide documentation related to the waste determination of all waste streams shipped and identify the point of generation for each waste and any associated EPA waste codes.
40. Provide any documentation provided to the laboratory that performed the sample analysis that set forth the constituents and the test methods for those constituents.
41. Provide a list of all hazardous waste constituents that could be released to the environment from the mismanagement of TENORM or any other waste **Advanced TENORM Services** has arranged for disposal in Kentucky.
42. Describe all non-compliance items that have been identified in any of the Notice of Violations between February 2010 and the date of this request, and include, the

exact date each noncompliance item was discovered at the facility and the current status of each noncompliance item.

- 43. Identify the Project Manager or the official supervisor responsible for waste certification and shipments.
- 44. Provide written documentation explaining the procedure used by **Advanced TENORM Services** to review the waste certification and shipments.

**\*\*\* End of Information Request \*\*\***