



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • Fax (317) 233-6647 • www.idem.IN.gov

Mike Braun, Governor

January 31, 2025

NOTICE OF DECISION

The Commissioner of the Indiana Department of Environmental Management (IDEM) has issued a Hazardous Waste Management Permit renewal and a Class 3 Permit Modification to Tradebe Treatment & Recycling, LLC (Tradebe), located in East Chicago, Indiana. The permit allows Tradebe to continue to operate a hazardous waste storage and treatment facility subject to revised and updated permit conditions, as well as construct a new container storage area.

Copies of documents pertaining to the Hazardous Waste Management Permit are available for public viewing via IDEM's Virtual File Cabinet (VFC). To view these documents, go to www.in.gov/idem/legal/public-records/virtual-file-cabinet/. VFC permit Content IDs are:

Environmental Justice Memo [83678627](#) Good Character [83757120](#)
Permit Conditions [83757938](#)

Permit Attachments:

A [83757929](#) B [83757930](#) C [83757931](#) D [83757932](#) F [83757933](#)
G [83757934](#) H [83757935](#) I [83757936](#) J [83757937](#)

A Response to Comments has been prepared for comments received during the public comment period and the public meeting held September 10, 2024. The Response to Comments is enclosed for your information.

Any aggrieved party has the right to appeal this decision pursuant to IC 4-15-10.5 (see enclosure). The Petition for Administrative Review and the Petition for Stay must be submitted to the Indiana Office of Administrative Law Proceedings (OALP) within 15 days of your receipt of this notice.

If you have questions regarding this notice, please contact Ms. Paula Bansch at (317) 232-3243 or pbansch@idem.IN.gov.

Sincerely,

Donald W. Stilz, Chief
Hazardous Waste Permit Section
Permits Branch
Office of Land Quality

Enclosures

Visit on.IN.gov/survey or scan the QR code to provide feedback.

We appreciate your input!

Letterhead INDY Temp-01.2025





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We Protect Hoosiers and Our Environment.

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Eric J. Holcomb
Governor

Brian C. Rockensuess
Commissioner

What if you are not satisfied with this decision and you want to file an appeal?

Who may file an appeal?

The decision described in the accompanying Notice of Decision may be administratively appealed. Filing an appeal is formally known as filing a “Petition for Administrative Review” to request an “administrative hearing”.

If you object to this decision issued by the Indiana Department of Environmental Management (IDEM) and are: 1) the person to whom the decision was directed, 2) a party specified by law as being eligible to appeal, or 3) aggrieved or adversely affected by the decision, you are entitled to file an appeal. (An aggrieved and adversely affected person is one who would be considered by the court to be negatively impacted by the decision. If you file an appeal because you feel that you are aggrieved, it will be up to you to demonstrate in your appeal how you are directly impacted in a negative way by the decision).

The Indiana Office of Administrative Law Proceedings (OALP) was established by state law – see Indiana Code (IC) 4-15-10.5 and is a separate state agency independent of IDEM. Review by OALP of IDEM decisions is limited to the review of environmental pollution concerns or any alleged technical or legal deficiencies associated with the IDEM decision making process. Once your request has been received by OALP, your appeal may be considered by an Administrative Law Judge.

What is required of persons filing an appeal?

Filing an appeal is a legal proceeding, so it is suggested that you consult with an attorney. Your request for an appeal must include your name and address and identify your interest in the decision (or, if you are representing someone else, his or her name and address and their interest in the decision). In addition, please include a photocopy of the accompanying Notice of Decision or list the permit number and name of the applicant, or responsible party, in your letter.

Before a hearing is granted, you must identify the reason for the appeal request and the issues proposed for consideration at the hearing. You also must identify the permit terms and conditions that, in your judgment, would appropriately satisfy the requirements of law with respect to the IDEM decision being appealed. That is, you must suggest an alternative to the language in the permit (or other order, or decision) being appealed, and your suggested changes must be consistent with all applicable laws (See Indiana Code 13-15-6-2) and rules (See Title 315 of the Indiana Administrative Code, or 315 IAC).



A State that Works

The effective date of this agency action is stated on the accompanying Notice of Decision (or other IDEM decision notice). If you file a “Petition for Administrative Review” (appeal), you may wish to specifically request that the action be “stayed” (temporarily halted) because most appeals do not allow for an automatic “stay”. If, after an evidentiary hearing, a “stay” is granted, the IDEM-approved action may be halted altogether, or only allowed to continue in part, until a final decision has been made regarding the appeal. However, if the action is not “stayed” the IDEM-approved activity will be allowed to continue during the appeal process.

Where can you file an appeal?

If you wish to file an appeal (petition for administrative review), you must do so in writing. To access the petition form and more information on filing a petition with OALP, visit their website at <https://www.in.gov/oalp/>. Submit your petition form electronically as directed on the OALP website, or send or deliver it to:

**Office of Administrative Law Proceedings
100 North Senate Avenue, Suite N802
Indianapolis, IN 46204**

If you file an appeal, also please send a copy of your appeal letter to the IDEM contact person identified in the Notice of Decision, and to the applicant (person receiving an IDEM permit, or other approval).

Your appeal must be received by OALP in a timely manner. The due date for filing an appeal may be given, or the method for calculating it explained, on the accompanying Notice of Decision (NOD). Generally, appeals must be filed within 18 days of the mailing date of the NOD. To ensure that you meet this filing requirement, your appeal request must be:

- 1) Delivered in person to OALP, by the close-of-business on the eighteenth day (if the 18th day falls on a day when OALP is closed for the weekend or for a state holiday, then your petition will be accepted on the next business day on which OALP is open), or
- 2) Given to a private carrier who will deliver it to the OALP on your behalf, (and from whom you must obtain a receipt dated on or before the 18th day), or
- 3) For those petitions sent by U.S. Mail, your letter must be postmarked by no later than midnight of the 18th day, or
- 4) Submitted using OALP’s online petition form, available at <https://www.in.gov/oalp/>

What are the costs associated with filing an appeal?

The OALP does not charge a fee for filing documents for an administrative review or for the use of its hearing facilities. A cost that could be associated with your appeal would be for attorney’s fees. Although you have the option to act as your own attorney, the administrative review and associated hearing are complex legal proceedings; therefore, you should consider whether your interests would be better represented by an experienced attorney.

What can you expect from the Office of Administrative Law Proceedings after you file for an appeal?

The OALP will provide you with notice of any prehearing conference, preliminary hearings, hearings, “stays,” or orders disposing of the review of this decision. In addition, you may contact the OALP by phone at 1-800-457-8283 with any scheduling questions. However, technical questions should be directed to the IDEM contact person listed on the Notice of Decision.

Do not expect to discuss details of your case with OALP other than in a formal setting such as a prehearing conference, a formal hearing, or a settlement conference. The OALP is not allowed to discuss a case without all sides being present. All parties to the proceeding are expected to appear at the initial prehearing conference.

RESPONSE TO COMMENTS
RCRA DRAFT PERMIT RENEWAL & CLASS 3 PERMIT MODIFICATION
TRADEBE TREATMENT & RECYCLING, LLC
EAST CHICAGO, INDIANA
IND000646943

INTRODUCTION

The public comment period for the Tradebe Treatment & Recycling Draft Permit Renewal and Class 3 Permit Modification began on August 9, 2024, with a public notice in The Times of Northwest Indiana and a mass mailing to interested parties. The notice requested comments regarding the Draft RCRA Permit Renewal (which included the Class 3 Permit Modification for the property known as “Marport”) and also stated that a public hearing would be held on September 10, 2024 at the East Chicago Public Library, Pastrick Branch, East Chicago, Indiana. The public comment period ended on September 23, 2024.

This Response to Comments is issued pursuant to 329 IAC 3.1-13-13, which requires that the Indiana Department of Environmental Management (IDEM) shall:

1. briefly describe and respond to all significant comments on the Draft Permit;
2. specify which provisions, if any, of the Draft Permit have been changed, and the reasons for the change; and
3. explain the right to request an adjudicatory hearing on the permit as specified in IC 4-21.5.3.5 (see Notice of Decision).

All comments and the hearing transcript are located in IDEM's Virtual File Cabinet (VFC). To view these documents, go to www.in.gov/idem/legal/public-records/virtual-file-cabinet/. VFC Content IDs are: 83701223, 83701227, 83701227, 83701563, 83704174.

RESPONSE TO PUBLIC COMMENTS

The following responses have been prepared by the Indiana Department of Environmental Management (IDEM) to address the concerns expressed by the public during the public comment period. The comments are described in the following sections along with IDEM's responses and any permit changes made as a result of the comments. In some instances, the description is a general summary of a comment, not necessarily a word for word reprint. Also, in some instances comments that were of a similar nature were not reproduced, as other responses addressed those comments' intent.

GENERAL STATEMENTS & IDEM RESPONSES

GENERAL STATEMENT 1: ENVIRONMENTAL JUSTICE CONCERNS

Several commenters submitted comments regarding environmental justice concerns of the permit renewal and Class 3 modification.

IDEM RESPONSE TO GENERAL STATEMENT 1

Several commenters expressed concerns that the facility subject to this permitting action is located in an environmental justice community and requested IDEM, OLQ to conduct a cumulative impacts analysis to understand the potential cumulative impacts of the RCRA permit renewal and Class 3 Modification. As stated on U.S. EPA's Environmental Justice website¹, environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. This goal will be achieved when everyone enjoys:

The same degree of protection from environmental and health hazards, and equal access to the decision-making process to have a healthy environment in which to live, learn, and work.

As stated on U.S. EPA's Title VI and Environmental Justice website², and in accordance with Title VI of the Civil Rights Act of 1964³, each Federal agency shall ensure that all programs or activities receiving Federal financial assistance that affect human health or the environment do not directly, or through contractual or other arrangements, use criteria, methods, or practices that discriminate on the basis of race, color, or national origin.

I. IDEM Obligations Under Title VI.

Title VI of the Civil Rights Act of 1964, prohibits discrimination based on race, color, or national origin in state agency programs that receive federal funding. U.S. EPA issued regulations to implement Title VI, codified at 40 C.F.R. section 7.10, *et seq.* The regulations apply to all applicants for, and recipients of, U.S. EPA assistance in the operation of programs or activities receiving such assistance as of February 13, 1984.⁴ A recipient as defined by the regulations includes IDEM.⁵ The regulations state that no person shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving U.S. EPA assistance on the basis of race, color, national origin, or on the basis of sex in any program or activity receiving U.S. EPA assistance under the Federal Water Pollution Control Act, as amended, including the Environmental Financing Act of 1972.⁶ The regulations also include specific prohibitions:

(a) As to any program or activity receiving U.S. EPA assistance, a recipient shall not directly or through contractual, licensing, or other arrangements on the basis of race, color, national origin or, if applicable, sex:

(1) Deny a person any service, aid or other benefit of the program or activity; (2) Provide a person any service, aid or other benefit that is different, or is provided differently from that provided to others under the program or activity; (3) Restrict a person in any way in the enjoyment of any advantage or privilege enjoyed by others receiving any service, aid, or benefit provided by the program or activity; (4) Subject

¹ <https://www.epa.gov/environmentaljustice>

² <https://www.epa.gov/environmentaljustice/title-vi-and-environmental-justice>

³ 42 U.S.C. § 2000d, *et seq.*

⁴ 40 C.F.R. § 7.10, *et seq.*

⁵ 40 C.F.R. § 7.25

⁶ 40 C.F.R. § 7.30

a person to segregation in any manner or separate treatment in any way related to receiving services or benefits under the program or activity; (5) Deny a person or any group of persons the opportunity to participate as members of any planning or advisory body which is an integral part of the program or activity, such as a local sanitation board or sewer authority; (6) Discriminate in employment on the basis of sex in any program or activity subject to section 13, or on the basis of race, color, or national origin in any program or activity whose purpose is to create employment; or, by means of employment discrimination, deny intended beneficiaries the benefits of U.S. EPA assistance, or subject the beneficiaries to prohibited discrimination. (7) In administering a program or activity receiving Federal financial assistance in which the recipient has previously discriminated on the basis of race, color, sex, or national origin, the recipient shall take affirmative action to provide remedies to those who have been injured by the discrimination.

(b) A recipient shall not use criteria or methods of administering its program or activity which have the effect of subjecting individuals to discrimination because of their race, color, national origin, or sex, or have the effect of defeating or substantially impairing accomplishment of the objectives of the program or activity with respect to individuals of a particular race, color, national origin, or sex.

(c) A recipient shall not choose a site or location of a facility that has the purpose or effect of excluding individuals from, denying them the benefits of, or subjecting them to discrimination under any program or activity to which this part applies on the grounds of race, color, or national origin or sex; or with the purpose or effect of defeating or substantially impairing the accomplishment of the objectives of this subpart.

(d) The specific prohibitions of discrimination enumerated above do not limit the general prohibition of § 7.30.⁷

The above regulations and Title VI prohibitions apply to permitting decisions by recipients, such as IDEM.⁸

II. IDEM Actions Taken to Prevent Against Discrimination

IDEM's mission is to implement federal and state regulations to protect human health and the environment while allowing the environmentally sound operations of industrial, agricultural, commercial, and governmental activities vital to a prosperous economy.

IDEM, OLQ is a U.S. EPA delegated RCRA permitting authority. Environmental laws are enacted by the Indiana legislature and the legislature has delegated rulemaking authority to the Indiana Environmental Rules Board (ERB)⁹. IDEM, OLQ has no authority to create any permit requirements or measures that exceed what is legally required for a regulated entity. Nothing in the criteria, methods, or practices of IDEM, OLQ discriminate based on race, color, or national origin. Permit decisions made by IDEM, OLQ are based on the ability of a facility to comply with

⁷ 40 C.F.R. § 7.35

⁸ 40 C.F.R. § 7.35(c); see also *S. Camden Citizens in Action v. N.J. Dep't of Env'tl. Prot.*, 145 F. Supp. 2d 446, 476 (D. N.J. 2001). However, at least one court has enjoined U.S. EPA from enforcing the Title VI disparate-impact requirements contained in 40 CFR § 7.35(b) and (c) against any entity in the State of Louisiana. *Louisiana v. U S EPA*, 2024 U.S. Dist. LEXIS 151359, *8, 54 ELR 20125, 2024 WL 3904868.

⁹ More information about the rulemaking process is available at <https://www.in.gov/idem/legal/rulemaking/> on IDEM's Website.

RCRA permit requirements and applicable state and federal hazardous waste permitting rules and regulations that are in place to protect human health and the environment.

A. IDEM's Nondiscrimination Policy and Environmental Stakeholder Inclusion Program

As part of the IDEM's Nondiscrimination Policy, A-008-AW-18-P-R5, the agency adopted the concept of Environmental Stakeholder Inclusion (ESI) for the fair treatment and meaningful involvement of all people regardless of race, color, gender, national origin, geographic location, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies¹⁰. An environmental stakeholder is a person with an interest or concern in environmental activities. The intent of IDEM's ESI program is to ensure that interested stakeholders are included and represented in agency actions, as outlined in the agency's Nondiscrimination Policy. Within IDEM, the environmental stakeholder inclusion coordinator works with the agency's program areas to enhance environmental stakeholder involvement in the regulatory processes administered by the agency¹¹.

B. Public Participation in Permitting Process

IDEM, OLQ encourages the public to participate in the rulemaking and permitting processes. IDEM, OLQ issues notices to the public when citizen participation is required or sought concerning agency actions. Examples include projects requiring an environmental permit, rules being considered by the ERB, and environmental studies or reports available for public comment¹².

To further IDEM, OLQ's commitment to the fair, equitable, and transparent implementation of its Title VI obligations and interactions with the public, IDEM, OLQ implemented the following recommended best practices identified in U.S. EPA's "Plan EJ 2014" (September 2011)¹³ document under section entitled "Considering Environmental Justice in Permitting":

- Public notifications outside of newspapers.
- Direct and targeted outreach to community organizations and institutions.
- Making documents physically accessible and free to communities.
- Scheduling meetings during non-working hours.
- Permit process descriptions of when, where, and how the public can get involved.

IDEM maintains a searchable electronic database for public access to digital copies of documents through IDEM's virtual file cabinet (VFC).

Below is summary of the public involvement and communication for this permitting action:

¹⁰ IDEM's Nondiscrimination Policy can be found at the following website:

https://www.in.gov/idem/health/files/idem_policy_A-008-AW-18-P-R5.pdf

¹¹ Additional information on the IDEM's Environmental Stakeholder Inclusion program can be found at the following website: <https://www.in.gov/idem/health/environmental-stakeholder-inclusion/>

¹² Additional information about public participation in agency actions can be found in the Citizens' Guide to IDEM, which can be found on the following website: <https://www.in.gov/idem/resources/citizens-guide-to-idem/>

¹³ <https://nepis.epa.gov/Exe/ZyPDF.cgi/P100DFCQ.PDF?Dockey=P100DFCQ.PDF>

- IDEM attended the Class 3 public meeting held by the applicant on March 16, 2023.
- IDEM public noticed the draft decision on the permit renewal and Class 3 modification on August 9, 2024. The public notice provided information on the 45-day comment period and a public meeting and hearing – time and location.
- IDEM issued a Fact Sheet including information about the draft decision, where the draft permit could be located in IDEM’s Virtual File Cabinet, and provided information on the public meeting and hearing.
- IDEM provided a copy of the Fact Sheet along with an Interested Party letter to those on the facility mailing list.
- IDEM preemptively scheduled a public hearing.
- IDEM held the aforementioned public hearing along with a public meeting on September 10, 2024.
- IDEM typically posts a weekly submission to its Twitter site (<https://twitter.com/idemnews>), Facebook site (<https://www.facebook.com/IndDEM>), Instagram site (<https://www.instagram.com/idemnews>), and LinkedIn site (<https://www.linkedin.com/company/inddem>) indicating the number of new or updated IDEM public notices that have been posted to its website in the last week and providing a link for the public to view public notices and to sign up for IDEM public notice notifications (<https://on.in.gov/publicnotices>)

All written comments submitted to IDEM, OLQ during the public comment period and all verbal statements received during the public hearing were reviewed and responses to those applicable comments and statements are provided in this response to comments. IDEM, OLQ combined the permitting actions on Tradebe’s permit renewal and Class 3 Modification to allow the public to submit comments on both projects simultaneously, as opposed to individually.

IDEM, OLQ believes that it has taken all reasonable steps to ensure that all persons, regardless of race, color, or national origin or sex, have had a full and fair opportunity to participate in this permitting decision. Additionally, IDEM, OLQ believes that it has complied with the requirements of Title VI and EPA’s implementing regulations. This is evidenced by the significant public participation throughout all stages of this permitting process.

Additionally, The Office of Environmental Adjudication, the final authority for IDEM actions has determined that there exist no statutes or regulations which require IDEM to consider environmental justice impacts when determining whether to issue a permit.¹⁴ Similarly, IDEM does not have statutory or regulatory authority to conduct a cumulative impact analysis, nor does any authority define a cumulative impact analysis, when one might be required, how one is used in regulatory decisions, or the bounds of such an analysis. Commenters have not identified any authority that would require IDEM to conduct such an analysis.

IDEM, OLQ recognizes and understands the concerns expressed through public comments and during the public hearing regarding environmental justice concerns. A review of EPA EJ Screen

¹⁴ Maya Energy, 2023 OEA 087, 098, “City of Gary did not identify any legal authority that would allow IDEM to deny a permit based solely on environmental justice impacts. Moreover, there exist no statutes or regulations which require IDEM to consider environmental justice impacts when determining whether to issue a permit.”

In July 2024 the Office of Environmental Adjudication was merged with the Office of Administrative Law Proceedings (OALP) and now OALP is the final authority for IDEM actions.

shows that the area within a 5-mile radius of the facility generally falls within the 80th to 95th percentile for the environmental and socioeconomic indexes examined by the EJ Screen tool. However, IDEM, OLQ cannot resolve the historical issues that lead to the industrial development of the area through an individual permitting decision. IDEM, OLQ believes that these concerns can be balanced with IDEM, OLQ's commitment to public involvement in the permitting process to ensure all people have an equitable opportunity to participate in the permitting decision, as well as IDEM' OLQ's obligation to regulate hazardous waste facilities and enforce permit conditions. The proposed permit renewal contains all health-based and technology-based standards established by U.S. EPA and the ERB, which will ensure protection of human health and the environment.

GENERAL STATEMENT 2: COMPLIANCE AND ENFORCEMENT CONCERNS

Several commenters expressed concern regarding Tradebe's compliance history.

IDEM RESPONSE TO GENERAL STATEMENT 2

Several commenters expressed concerns regarding Tradebe's enforcement and compliance history. IDEM, OLQ is aware of Tradebe's enforcement and compliance history and is actively taking steps through enforcement and compliance authority to address this problem.

IDEM, OLQ assesses increased civil penalties against Tradebe for repeat violations. IC 13-30-4-1 gives IDEM the authority to assess civil penalties. IDEM utilizes its Civil Penalty Policy to calculate penalties in all enforcement matters.¹⁵ IDEM imposes civil penalties for the purpose of encouraging voluntary compliance, deterring future violations, and recovering enforcement costs.¹⁶ The civil penalty policy takes various factors into consideration in the assessment of an appropriate civil penalty for noncompliance with statutes, rules, or permits.¹⁷ The total civil penalty assessed in an enforcement case may include penalties for several violations or groups of violations, each calculated pursuant to the policy.¹⁸

Generally, a civil penalty is calculated by: (1) determining a base civil penalty dependent on the severity and duration of the violation, (2) adjusting the penalty for special factors and circumstances, and (3) considering the economic benefit of noncompliance. The base civil penalty is grounded on two factors: (1) potential for harm to human health or the environment, or to a regulatory program, and (2) extent of deviation from a statutory, rule, or permit requirement. This penalty is subject to multiplication based on the number of days of violation. Additionally, the base civil penalty may be adjusted upward or downward to reflect any particular factual situation surrounding the violation, the following factors may be considered:

- (1) Actions before the violation
- (2) Actions after the violation
- (3) History of noncompliance
- (4) Ability to pay

¹⁵ ENFORCEMENT-99-0002-NPD

¹⁶ *Id.* at 2.

¹⁷ *Id.*

¹⁸ *Id.*

- (5) IDEM enforcement costs
- (6) Other unique factors ¹⁹

The penalty can also be adjusted based on any economic benefit of noncompliance. If a violator has derived significant savings or competitive advantage by its failure to comply with requirements, the amount of economic benefit from noncompliance gained by the violator will be added to a penalty.

IDEM has been steadily increasing civil penalties assessed against Tradebe based on history of noncompliance and repeat violations. As the commenters correctly point out, Tradebe has a history of the same or similar violations. Based on this history, IDEM has been increasing civil penalties for the grouping of the same or similar violations by 75%. Furthermore, IDEM, OLQ inspects Tradebe more frequently than other facilities and inspects Tradebe on a quarterly basis.

Additionally, IDEM, OLQ will start requiring specific compliance requirements in Agreed Orders for repeat violations at Tradebe. These will include compliance steps such as Tradebe establishing compliance with the specific violations addressed by an Agreed Order by a date certain or be subject to stipulated penalties. As the commenters noted, Tradebe has a history of improper container stacking, container labeling, and storage of liquid waste containers in solids only areas. For future violations of a similar nature, IDEM, OLQ will require Tradebe to show compliance through documentary or photographic evidence that the violations identified in a Notice of Violation have been addressed, with stipulated penalties per container if the violations are not resolved by a date certain.

IC 13-15, *et seq.*, governs the hazardous waste permit program.²⁰ IC 13-15-7-1 grants the IDEM Commissioner the discretion to revoke or modify a permit granted by IDEM under the following circumstances:

- (1) A violation of any condition of the permit.
- (2) Failure to disclose all of the relevant facts.
- (3) Any misrepresentations made in obtaining the permit.
- (4) Changes in circumstances relating to the permit that require either a temporary or permanent reduction in the discharge of contaminants.
- (5) Any other change, situation, or activity relating to the use of a permit that, in the judgment of the department, is not inconsistent with the purpose of Title 13 or Rules adopted by the ERB.

The statute does not mandate that the Commissioner deny or revoke a permit based on a violation of any condition of the permit. Similarly, Indiana's good character disclosure statute grants the Commissioner the discretion to revoke a permit under certain circumstances but does not mandate the revocation of a permit.²¹

IDEM, OLQ's position on Tradebe's enforcement history is to utilize the powers it has regarding enforcement and compliance towards ultimately achieving compliance for Tradebe's East Chicago facility. IDEM, OLQ will continue to thoroughly inspect Tradebe's facilities. IDEM, OLQ

¹⁹ The civil penalty policy includes a more detailed discussion of these factors.

²⁰ See IC 13-22-3-1.

²¹ See IC 13-19-4-5.

understands the commenter's concerns regarding Tradebe's enforcement history and appreciates the commenter's suggestions on how to bring Tradebe into compliance. IDEM, OLQ will consider those suggestions in current or future enforcement actions.

GENERAL STATEMENT 3: OVERLAPPING RCRA AND CAA OBLIGATIONS

Several commenters expressed concerns regarding the overlap of RCRA and Clean Air Act requirements and how Tradebe demonstrates compliance with RCRA air emission regulations.

IDEM RESPONSE TO GENERAL STATEMENT 3

TSDFs may be subject to various overlapping obligations under a number of statutes and rules. Specifically, TSDFs are generally subject to both National Emission Standards for Hazardous Air Pollutants ("NESHAP") and the RCRA air emission standards.²² U.S. EPA considered it unnecessary for owners and operators of waste management or recovery units/equipment subject to air standards under both sets of rules to perform duplicative testing and monitoring, keep duplicative sets of records, or perform other duplicative actions.²³ It was U.S. EPA's intention to minimize, if not eliminate, regulatory overlap to the extent U.S. EPA was allowed under the relevant statutory law.²⁴ U.S. EPA decided that the best way to eliminate such overlap was to amend the RCRA rules to exempt units that are using air emission controls in accordance with the requirements of applicable NESHAP or New Source Performance Standards ("NSPS") regulations.²⁵ Therefore, U.S. EPA amended the RCRA air emission regulations to provide a mechanism to address regulatory overlap with CAA requirements, specifically 40 CFR parts 60, 61, and 63.²⁶ U.S. EPA applied the same logic regarding subparts AA and BB as it did with subpart CC.²⁷ Where facility air emission units or equipment are subject to both CAA and RCRA requirements, an owner/operator may take specific steps to certify compliance with CAA requirements in place of RCRA requirements.

Briefly, Subpart AA controls air emissions from certain process vents, Subpart BB controls air emissions from specified equipment leaks, and Subpart CC controls air emissions from certain tanks, containers, and surface impoundments. Air emissions from miscellaneous units may be subject to Subparts AA, BB, and CC as necessary to protect human health and the environment. In addition to control requirements, Subparts AA, BB, and CC also include inspection and monitoring requirements to ensure proper operation and maintenance of air pollution control equipment. These requirements vary depending on the type of equipment, waste management unit, and air emission controls for regulated waste management equipment. In order to qualify for the Subpart AA and CC exemption the facility must provide:

²² Codified at 40 CFR 264 Subpart AA, BB, & CC, commonly referred to together as RCRA air emission standards.

²³ Hazardous Waste Treatment, Storage, and Disposal Facilities and Hazardous Waste Generators; Organic Air Emission Standards for Tanks, Surface Impoundments, & Containers, 61 Fed. Reg. 59932, 59938 (November 25, 1996)[hereinafter *Subpart CC Exemption*].

²⁴ *Id.*

²⁵ *Id.*

²⁶ *See Id. See also*, Hazardous Waste Treatment, Storage, and Disposal Facilities and Hazardous Waste Generators; Organic Air Emission Standards for Tanks, Surface Impoundments, & Containers, 62 Fed. Reg. 64636. (December 8, 1997) [hereinafter *Subpart AA & BB Exemption*].

²⁷ *Id.* at 64638.

1. Identification of and description for each process vent and unit subject to the request for exemption, and its location.
2. A description of the pollution control equipment installed at each subject AA or CC unit or emission control program implemented at the facility.
3. Identification of the current CAA requirement applicable to each subject AA or CC unit or equipment, and the source of the requirement.
4. A written statement that the owner/operator certifies all subject units are operating air emission controls in accordance with the requirements of an applicable CAA regulation codified under 40 CFR parts 60, 61, or 63. This certified written statement, accompanied by the specific information listed above, must state that all subject units are in compliance with applicable CAA requirements and that no unit for which the RCRA exemption is being claimed is currently exempted or will be exempted in the future from operating air emission controls because of emission averaging across the facility, via emission threshold determination, or for other reasons.²⁸

In order to qualify for the Subpart BB compliance election provision, the facility must provide:

1. Identification and description of all equipment subject to Subpart BB and how the equipment is controlled by application of an emission control program under the CAA, such as an LDAR program.
2. Identification of the current CAA requirement applicable to each subject BB equipment, and the source of the requirement.
3. A written statement that the owner/operator elects to determine compliance of all subject equipment under the identified CAA requirements, and that such documentation is kept with or made readily available with the facility operating record.²⁹

A. Tradebe's Subpart AA Exemption Certification

Tradebe included the certification required by 40 CFR 264.1030(e) with Appendix D-16 to Attachment D of the permit application.³⁰ The certification included a description of each process vent subject to the request for the exemption, the air pollution control equipment installed on the unit, the equipment's location at the facility, identification of the relevant CAA requirements, and the requisite certification.

B. Tradebe's Subpart BB Election Determination

Tradebe's Subpart BB election determination is located in Attachment D to the permit application, supplemented by Appendix D-17 that lists the equipment subject to Subpart BB by equipment identification number, approximate location at the facility, type of equipment, and method used to demonstrate compliance with the standard.³¹ Tradebe's election determination identifies and describes all equipment subject to Subpart BB, how the equipment is controlled by an LDAR program, identifies the CAA requirement applicable to each unit, and a written statement that

²⁸ See Implementing The RCRA/CAA Air Emission Controls Compliance Exemption/Election Provisions Through RCRA Permits, U.S. EPA, EPA530-R-19-006, at 15 (October 2019).

²⁹ *Id.*

³⁰ See VFC# 83679602.

³¹ *Id.* at 59.

Tradebe elects to determine compliance of all subject equipment under the identified CAA requirements.³² Tradebe's election determination also states that the compliance documentation is kept with the facility operating record for at least 3 years.³³ Tradebe's election determination includes the necessary information and Tradebe will be required to supplement this information in a compliance schedule.

Unlike the exemptions for Subpart AA and CC, the Subpart BB election provision does not require a certified statement from the facility.³⁴ 40 CFR 64.1080(m) provides TSDFs the option to show compliance with Subpart BB standards through the recordkeeping requirements of 40 CFR part 60, part 61, or part 63, whichever rules apply, instead of requiring duplicative recordkeeping under Subpart BB. This is consistent with the overarching purpose of the Subpart BB election provision and the Subpart AA & CC exemption provisions by preventing duplicative record keeping.³⁵

C. Tradebe's Subpart CC Exemption Certification

Tradebe's Subpart CC certification is located at Appendix D-18 of Attachment D. Tradebe's Subpart CC certification included the requisite CAA standard applicable to the facility, referenced the facility's CAA permit, and included the required certification. However, Tradebe's Subpart CC certification failed to identify and describe each unit subject to the request for the exemption and its location at the facility, as well as a description of the pollution control equipment installed at each subject CC unit or emission control program. Tradebe must supplement its Subpart CC certification to include the above information.

D. Compliance with 40 CFR Part 60 & Part 61

Commenters also stated that Tradebe has not shown compliance with 40 CFR Part 60 and 40 CFR Part 61 and is therefore ineligible for the RCRA Subpart CC exemption. 40 CFR Part 60 contains NSPS rules under the CAA and 40 CFR Part 61 contains NESHAP rules under the CAA.³⁶ The nature of the Subpart AA, BB, and CC exemptions is to remove duplicative regulatory requirements and decrease overlap.³⁷ These requirements are included in Tradebe's CAA permit.³⁸ Tradebe's Subpart AA & CC certification refer to and appropriately reference Tradebe's CAA permit, which includes all requisite NSPS and NESHAP requirements.

³² *Id.*

³³ *Id.*

³⁴ 40 CFR 64.1080(m) states that the owner or operator of a facility with equipment that is subject to this subpart and to regulations at 40 CFR part 60, part 61, or part 63 may elect to determine compliance with this subpart either by documentation pursuant to § 264.1064 of this subpart, or by documentation of compliance with the regulations at 40 CFR part 60, part 61, or part 63 pursuant to the relevant provisions of the regulations at 40 part 60, part 61, or part 63. The documentation of compliance under regulations at 40 CFR part 60, part 61, or part 63 shall be kept with or made readily available with the facility operating record.

³⁵ See *Subpart AA & BB Exemption*, *supra* note 6.

³⁶ See 40 CFR 60, *et seq* & 40 CFR 61, *et seq*, respectively.

³⁷ See *Subpart CC Exemption*, *supra* note 3. See also *Subpart AA & BB Exemption*, *supra* note 6.

³⁸ Permit No. 089-43696-00345

E. Notification Plan for CAA Violations

Commenters stated that Tradebe failed to provide the requisite notification plan pursuant to 40 CFR 264.1090(a). 40 CFR 264.1090 applies to owners or operators managing hazardous waste in a tank, surface impoundment, or container exempted from using air emission controls under the provisions of 40 CFR 264.1082(c).³⁹ 40 CFR 264.1082(c) contains exemptions for tanks, surface impoundments, or containers that satisfy specific requirements listed in the rule.⁴⁰ Unlike the Subpart CC exemption discussed above, the tanks, surface impoundments, or containers listed in 40 CFR 264.1082(c) are themselves exempted from air emission controls under RCRA, not subject to air emission control requirements with compliance determined through a different set of rules. Additionally, Tradebe is already required to disclose to IDEM noncompliance with its CAA permit.⁴¹

CHANGE

IDEM has revised the permit for the following:

- a. Revise Section V. Air Emission Standard Conditions A – C to clarify how Tradebe is complying with Subparts AA, BB and CC with respect to the CAA regulations.
- b. To include a compliance requirement for Tradebe to provide updates to its Subpart CC exemption certification.
- c. Include a compliance schedule item for Tradebe to provide to update Attachment D, Appendix D-17 to include all the components relative to the SDS such as Distillation unit, Pot Still, and Thin Film Evaporator are included in Subpart BB list.
- d. Section V. Air Emission Standard Conditions A – C will be replaced with the following:

A. PROCESS VENTS

The Permittee has certified that each process vent that would otherwise be subject to subpart AA is equipped with and operating air emission controls in accordance with the process vent requirements of an applicable Clean Air Act regulation codified under 40 CFR part 60, part 61, or part 63 as allowed by 40 CFR 264.1030(e). The Permittee must maintain documentation of compliance under those regulations for each process vent. That documentation must be kept with, or made readily available with, the facility operating record. Maintenance of that documentation constitutes compliance with all applicable requirements of 40 CFR Part 264, Subpart AA for process vents. Tradebe must inform OLQ, in writing, about any local, state, or federal findings or notice of alleged noncompliance with CAA requirements at the subject process vents, at least 15 days after Tradebe's receipt of such notice of such noncompliance.

³⁹ 40 CFR 264.1090(a).

⁴⁰ 40 CFR 264.1082(c).

⁴¹ See Permit No. 089-43696-00345, Condition C.16, General Reporting Requirements "Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report . . . a deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit."

Changes to Equipment/Air Emission Controls:

If Tradebe anticipates changing the installed air emission control equipment, including any changes in the use or operation of such equipment, from that described in Tradebe's Subpart AA Exemption Certification or permit application, the facility owner or operator must inform OLQ, in writing, about the changes within seven (7) calendar days after the change is put into effect for Class 1 modifications, and within 15 days after implementing any such changes which were approved in a Class 2 and/or a Class 3 modification.

B. EQUIPMENT LEAKS

The Permittee must comply with all applicable requirements of 40 CFR Part 264, Subpart BB, regarding air emission standards for equipment. This equipment is also subject to regulations at 40 CFR part 60, part 61, or part 63 of the Clean Air Act. The Permittee has elected to determine compliance with this subpart by documentation of compliance with the regulations at 40 CFR part 60, part 61, or part 63 pursuant to the relevant provisions of the regulations at 40 part 60, part 61, or part 63 rather than under 40 CFR 461.1064(m) as allowed by 40 CFR 264.1064(m). The documentation of compliance under regulations at 40 CFR part 60, part 61, or part 63 must be kept with or made readily available with the facility operating record. Subpart BB requirements are still enforceable under the RCRA permit. Tradebe must inform OLQ, in writing, about any local, state, or federal findings or notice of alleged noncompliance with CAA requirements at the subject equipment, at least 15 days after Tradebe's receipt of such notice of such noncompliance.

Changes to Equipment:

If Tradebe anticipates changing equipment subject to Subpart BB/CAA, including any changes in the use or operation of such equipment, from that described in Tradebe's Subpart BB Equipment list, the facility owner or operator must inform OLQ, in writing, about the changes within seven (7) calendar days after the change is put into effect for Class 1 modifications, and within 15 days after implementing any such changes which were approved in a Class 2 and/or a Class 3 modification.

C. TANKS AND CONTAINERS

The Permittee has certified that each hazardous waste management unit that would otherwise be subject to subpart CC is equipped with and operating air emission controls in accordance with the requirements of an applicable Clean Air Act regulation codified under 40 CFR part 60, part 61, or part 63 as allowed by 40 CFR 264.1080(b)(7). The Permittee must maintain documentation of compliance under those regulations for each hazardous waste management unit. That documentation must be kept with, or made readily available with, the facility operating record. Maintenance of that documentation constitutes compliance with all applicable requirements of 40 CFR Part 264, Subpart CC for tanks and containers. Tradebe must inform OLQ, in writing, about any local, state, or federal findings or notice of alleged noncompliance with CAA requirements at the subject units, at least 15 days after Tradebe's receipt of such notice of such noncompliance.

Changes to Air Emission Controls:

If Tradebe anticipates changing the installed air emission control equipment, including any changes in the use or operation of such equipment, from that described in Tradebe's Subpart CC Exemption Certification or permit application, the facility owner or operator must inform OLQ, in writing, about the changes within seven (7) calendar days after the change is put into effect for Class 1 modifications, and within 15 days after implementing any such changes which were approved in a Class 2 and/or a Class 3 modification.

GENERAL COMMENTS

1. COMMENT

Section VIII. Compliance Schedule, Condition C is missing several key words. The condition should be revised accordingly. Specifically, the following sentence should be revised. "The Permittee must [missing word?] IDEM within 15 [missing word?] after completion of each task."

RESPONSE

IDEM concurs.

CHANGE

Section VIII. Compliance Schedule, Condition C has been modified to the following: "The Permittee must construct Area 12 and Area 1 North Apron container storage areas in accordance with the schedule included in Appendix B-3. The Permittee must notify IDEM within 15 days after completion of each task."

2. COMMENT

Section VII "Waste Codes" of the draft permit lists explosive waste codes that may be accepted at the facility including K044 and K045. In a May 23, 2022, response to IDEM's April 29, 2022, NOD, Tradebe stated, "K044 and K045 were removed form Appendix C-4 [Waste Identification]." The Waste Codes section of the permit should be carefully reviewed to ensure that the permit only authorizes the appropriate waste codes to be managed at the facility.

RESPONSE

Comment was addressed with Facility Comments, Attachment A, Comment 82 below.

CHANGE

Waste codes K044, K045, and K047 were removed from the waste code list. The new, revised waste code list replaced the list in Permit Condition VII.

3. COMMENT

Section V "Air Emission Standard Conditions" of the draft permit states that, "FOR TANKS: Air pollutant emissions from tanks shall be controlled in accordance with the Tank Level 2 controls as set forth in the Process Description, Attachment D, Section D-2f RCRA Air Emission Controls

and Appendix D-18.” In addition, “FOR CONTAINERS: Air pollutant emissions from containers shall be controlled in accordance with Container Level 1 and 2 standards as set forth in the Process Description, Attachment D, Section D-2f RCRA Air Emission Controls and Appendix D-18.” This information is incorrect since Section D-2f Subpart CC and Appendix D-18 state that Tradebe has elected to claim the exemption provided in 40 C.F.R. § 264.1080(b)(7). The draft permit should be updated to reflect the correct permitting conditions for all 40 C.F.R. Part 264 Subpart CC units.

RESPONSE

Please see IDEM response to General Statement 3.

CHANGE

None

4. COMMENT

The permit documentation should describe exactly how issuance of the permit changes or terminates the Agreed Order (AO) or elements of the AO if the AO is not fully terminated.

RESPONSE

The Agreed Order was terminated on October 9, 2024. Please see VFC# 83708146.

CHANGE

None

5. COMMENT

The permitting record should describe the proposed resolution of all inadequate responses to comments and any unaddressed comments from the Notices of Deficiencies (NODs) prepared by the state.

RESPONSE

The permit, once issued, inherently ensures that the permittee must adhere to relevant regulatory requirements. Issues or deficiencies raised during the review that were not addressed or had inadequate responses are typically addressed through conditions placed within the permit or through ongoing compliance monitoring. The focus of the permitting record is on the application and final decision, while enforcement of compliance occurs through the permit conditions and regulatory oversight.

CHANGE

None.

6. COMMENT

IDEM should continue to improve its community engagement processes, including a modified public meeting format and greater coordination between branches.

As a preliminary matter, we offer some comments on IDEM's community engagement process in connection with this Draft Permit. In doing so, we acknowledge that IDEM has taken some proactive steps during this process to foster community input and participation—most notably, the decision to pre-emptively schedule both a public meeting and public hearing on this Draft Permit. These were positive steps which should be repeated in the future, across IDEM's different branches, for draft permits issued in relation to facilities where there has been an existing demonstration of community interest and engagement or where the nature of the facility and its operations significantly contributes to an existing high cumulative pollutive burden faced by the community.

Looking forward, we have some suggestions for how IDEM could continue to strengthen its community engagement process.

First, the hybrid public meeting / public hearing format should be maintained, but with a modification to the public meeting portion. While the 'trade show' format of one-on-one dialogue with individual IDEM officials can be useful, it is not necessarily facilitate broad public participation. This format should be supplemented with a plenary portion of the meeting where IDEM officials answer questions in a group setting. This would enhance the ability of the community to gather together *as a community* to ask questions, learning from and building on the answers to each other's questions.

Second, there should be better coordination between the different branches of IDEM to ensure that community engagement happens in a holistic rather than piecemeal manner. As an example, the OLQ stated that it pre-emptively scheduled a public meeting and hearing based on the application of IDEM's Environmental Justice Policy for enhanced public participation.

Inexplicably, the OAQ did not make a similar decision to pre-emptively schedule a public meeting and hearing in connection with Tradebe's draft modified air permit, issued only a couple of weeks after the Draft Permit in this case. Moreover, despite several of the undersigned requesting that OAQ schedule such a public meeting and hearing in a letter sent on September 4, 2024, a request that was reiterated by email on September 13, as of the date of this comment, no public meeting or hearing has been scheduled, and the CAA permit comments are due in just two days. It is particularly disappointing because there were a number of questions raised at the Draft Permit public meeting on September 10 which IDEM staff from OLQ were unable to answer, and which were dismissed as "air issues." It certainly would have been more informative and more efficient for the community to have both the OLQ and OAQ engage with the community at the same meeting.

This failure to coordinate, and inconsistent positions, taken between OLQ and OAQ regarding a public meeting or hearing mirrors the substantive coordination failures between the two branches discussed below. While Tradebe is subject to separate statutory and regulatory regimes, headed by separate branches within IDEM, as a practical matter, from both an operational perspective and a community concerns perspective, the facility operates as one entity. While we appreciate OLQ scheduling a public meeting and a public hearing, we strongly

recommend that IDEM conduct both its public engagement processes, and its substantive inspections and enforcement protocols, more systematically with this reality in mind.

RESPONSE

Please see IDEM response to General Statement 1.

CHANGE

None.

7. COMMENT

IDEM should withdraw the Draft Permit until it has completed its promised environmental justice and cumulative impacts analyses of Tradebe's proposed expansion.

Tradebe is located in a community and situated adjacent to residential neighborhoods which are disproportionately inhabited by low-income people of color. The community is already overburdened by the cumulative impact of numerous nearby pollutive industries.

According to USEPA, IDEM committed to USEPA in previous communications that IDEM would conduct environmental justice and cumulative impacts analyses to determine the impact of Tradebe's proposed expansion before issuing its Draft Permit. Without public explanation, IDEM appears to have reneged on that commitment. IDEM should withdraw the Draft Permit in order to conduct these promised analyses, and re-issue the Draft Permit with appropriate modifications in light of whatever conclusions those analyses reach.

- **East Chicago and the Calumet neighborhood are overburdened environmental justice communities.**

Tradebe's requested expansion would bring increased environmental risk to the 58,387 residents—81% people of color and 49% low-income—who live within a three-mile radius of Tradebe's facility. This vulnerable community already faces significant and cumulative environmental harms.

The census block in which Tradebe is located is in the 90th percentile or higher compared to other U.S. census blocks in twelve categories assessed by U.S. EPA's environmental justice screening tool:

- Superfund proximity (98%)
- Risk management plan facility proximity (97%)
- Hazardous waste proximity (96%)
- Wastewater discharge (98%)
- Particulate Matter (PM) 2.5 (95%)
- Underground storage tanks (94%)
- Diesel PM (93%)
- Lead paint (94%)
- National Air Toxics Assessment (NATA) air toxics cancer risk (91%)

- Ozone (94%)
- Toxic releases to air (97%)⁷

A number of polluting facilities are located near residential areas in East Chicago. According to facility reports collected by U.S. EPA's Toxic Release Program (TRI), in 2022 alone, the top fourteen polluting facilities in East Chicago released on-site 499,600 pounds of toxic chemicals into the air and 152,600 pounds into the water. Within ZIP Code 46312, which includes the Tradebe facility, thirteen of the facilities that report to the TRI were in violation of their permits as of the end of the most recent reporting period, and twenty-four have had violations during at least some point in the past three years. Facilities in ZIP Code 46312 have faced \$15,622,016 in environmental enforcement penalties over the last five years.

The pollutants emitted from these operations, other facilities, and the transportation sector affect the health and wellness of East Chicago community members on a daily basis. Short- and long-term exposure to air pollutants has been linked to increased risk of breast cancer in women, emphysema, asthma prevalence and severity in children, dementia, and more. Lake County was one of the eight counties in Indiana with the highest incidences of asthma-related health emergencies in 2019 and has higher incidences of low-infant birthrate than less industrial counties in the state. Lake County has also experienced elevated rates of breast cancer compared to neighboring counties, more deaths from breast cancer than neighboring counties, and higher inpatient hospitalizations due to cardiovascular disease than neighboring counties.

As was described in public comments previously submitted by members of the ECCC- CAG, residents of this community have serious concerns with air quality in the vicinity of the Tradebe facility:

The ECCC-CAG members report that they strictly limit their time outdoors due to poor air quality and frequent noxious odors. ECCC-CAG member Lori Locklear described toxic fumes so strong that “on a beautiful spring day, I have to keep my windows shut.” Instead of opening her windows, she runs her air conditioning units almost continuously to keep her home cool and to circulate the air, resulting in an increased electric utility bill. ECCC-CAG member Akeeshea Daniels has described migraine headaches brought on by the odors in the air. Both Ms. Locklear and ECCC-CAG member Maritza Lopez suffer from asthma. Ms. Locklear has said that in East Chicago, “you can literally feel your lungs being suffocated.”

Several ECCC-CAG members who live near Tradebe have noted a persistent pungent smell emanating from Tradebe's East Chicago facilities. Ms. Daniels said that the odor in the air changes “as soon as you enter that area.” Ms. Locklear added, “Your eyes are burning, your nose is burning, you can feel it in your lungs, and there's no way to get around it.” Ms. Locklear noted that the smell near Tradebe is particularly strong at around 2:00 to 3:00 PM, the same time that children ride by on school buses. These concerns demonstrate residents' dissatisfaction with Tradebe's current operations in East Chicago and their belief that Tradebe's existing facilities already contribute to environmental harms in the area.

Furthermore, several community resources relied upon by particularly vulnerable groups—including children, disabled people, and the elderly—are located in close proximity to Tradebe's facility. Tradebe is located a mere 0.4 miles from Riley Park, 0.5 miles from the

Martin Luther King Recreation Center, 0.6 miles from the St. Joseph's assisted living facility, 1.1 miles from Carrie Gosch Early Learning Center, and 1.1 miles from Joseph L. Block Middle School.

The map below illustrates Tradebe's proximity to local community resources:



- **IDEM should complete environmental justice and cumulative impacts analyses of Tradebe's proposed expansion, as requested by USEPA and the ECCC-CAG and as previously promised by IDEM.**

Given that Tradebe is located within an environmental justice community which is already overburdened by the cumulative impact of an array of sources of pollution, and the attendant disproportionate public health impacts of that pollution, IDEM should not finalize the Draft Permit without analyzing those impacts.

Some signatories to this comment have been urging USEPA and IDEM to conduct such an environmental justice analysis for the last three years. The ECCC-CAG first requested that USEPA conduct such an analysis in October 2021. In a response the following month, USEPA informed us that “[a]s IDEM is the permitting agency, they are the proper agency to conduct the analysis,” and that **EPA has spoken with IDEM to confirm that it will evaluate the potential for adverse and disproportionate impacts associated with permit renewal for this facility.**”

We were pleased to hear from USEPA that IDEM had committed to conduct such analysis. Nevertheless, we continued to reiterate this request in subsequent correspondence, including in a February 2022 letter to IDEM, in a May 12, 2022 meeting with USEPA and IDEM officials, and again in the ECCC-CAG's April 14, 2023 public comments on a prior version of Tradebe's draft RCRA permit.

USEPA also continued to reiterate the importance of conducting environmental justice and cumulative impacts analyses in connection with Tradebe's permit renewal and proposed expansion. In a November 2022 letter to Tradebe, USEPA expressed that it “is concerned that Tradebe has not analyzed site specific data and considered the cumulative impacts its proposed expansion will have on the surrounding community in East Chicago.” Similarly, in a

March 2023 letter to IDEM, USEPA emphasized that “[t]he Tradebe facility is located in an area where operation of the facility may cause or contribute to disproportionate impacts on residents,” noted that “IDEM has previously committed to evaluate the potential for adverse and disproportionate impacts associated with permit renewal for this facility,” and recommended that “IDEM consider potential adverse and disproportionate impacts associated with Tradebe’s Class 3 permit modification request to ensure protection of the community’s human health and the environment.”

Conducting an environmental justice and cumulative impacts analysis would also be in alignment with IDEM’s own policies. For example, according to IDEM’s nondiscrimination policy, the agency aims to provide fair treatment and meaningful involvement to all people regardless of race, color, gender, national origin, geographic location, income, or any other federally protected class with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies within the agency’s jurisdiction.

As the ECCC-CAG noted in its April 14, 2023 public comments, compliance with IDEM’s nondiscrimination policy in this case requires the agency to conduct environmental justice and cumulative impacts analyses related to the Draft Permit:

Because the East Chicago community faces a number of cumulative environmental burdens, fair treatment of East Chicago residents necessarily entails a full accounting of preexisting vulnerabilities and harms. Without this crucial analysis, IDEM will be unable to properly assess the community impact of Tradebe’s requested expansion. In accordance with its commitment to environmental stakeholder inclusion, IDEM should not grant Tradebe’s request without a full and comprehensive environmental justice analysis.

For all of these reasons, most notably IDEM’s previous commitment to EPA to conduct such analysis, we were surprised and disappointed to see on August 9, 2024 that IDEM issued the Draft Permit without any evidence of having conducted any form of environmental justice or cumulative impacts analysis.³¹ We raised this omission in a letter to USEPA sent on August 28, 2024, copying various IDEM officials, in which we conveyed that in our review of the draft permit materials to date, we have been unable to locate any indication that either IDEM or Tradebe has undertaken this type of Environmental Justice analysis to consider the adverse and disproportionate impacts of Tradebe’s proposed expansion on the surrounding community. We are deeply concerned by this omission, particularly since it appears that IDEM may have reneged on its commitment to EPA to conduct such an analysis in connection with this permit renewal.

We now understand that IDEM has officially rejected the request, repeatedly conveyed by both USEPA and the ECCC-CAG, to conduct environmental justice and cumulative impacts analyses prior to issuing a final permit, as the Assistant Commissioner of IDEM’S OLQ has stated to the media that “[n]o such assessment has been undertaken in Tradebe’s case,” and “the agency will issue a final decision on the permit renewal and modification without conducting one.”

In light of IDEM’s prior commitments to USEPA, and in light of the importance of such analyses to upholding the principles of IDEM’s nondiscrimination policy and in shedding light of the true

impact of the Draft Permit on the surrounding community, IDEM should reconsider this decision.

We therefore respectfully urge IDEM to:

- (a) Conduct an environmental justice analysis to assess the impact of Tradebe's proposed expansion on low-income community members and people of color.
- (b) Conduct a cumulative impacts analysis to assess the impact of Tradebe's proposed expansion on a neighborhood and community which is already overburdened by an array of pollutive and hazardous industries, and which already experiences significantly poorer health outcomes as a result of these and other environmental conditions.
- (c) Withdraw the Draft Permit until such time as these environmental justice and cumulative impacts analyses are complete.
- (d) Incorporate the findings of these environmental justice and cumulative impacts analyses into any re-issued proposed permit, including specific permit conditions designed to address the findings of these analyses.

RESPONSE

Please see IDEM response to General Statement 1

CHANGE

None

8. COMMENT

(Tables of violations for this comment are in VFC document # 83701223)

In light of Tradebe's long history of permit violations and unlawful operations, IDEM should not grant Tradebe a permit to expand the facility's operations until IDEM has strengthened the Draft Permit to include meaningful and enforceable **permit conditions that are sufficient to ensure Tradebe can and will comply with its permits going forward.**

A. Tradebe has a long history of permit violations and unlawful operations.

Tradebe has a long history of repeated, serious permit violations and unlawful operations, including both under the Resource Conservation and Recovery Act (RCRA) and the Clean Air Act (CAA). In our May 31, 2024 letter to IDEM concerning the pattern of Agreed Orders that IDEM has entered into with Tradebe, we included in Appendix A a table summarizing Tradebe's documented RCRA violations between March 13, 2019 and February 13, 2024. This table does not include the Clean Air Act violations that occurred during this same period. Since this letter was sent, IDEM inspected the facility and, once again, found a number of violations of the same or similar nature as violations dating back at least five years.

The ongoing RCRA and CAA violations at Tradebe are so consistent that it is extremely likely they will persist.

Tradebe has a pattern of violating provisions of its current RCRA Part B permit related to container storage and treatment conditions, air emissions standards, manifest and recordkeeping requirements, and incident preparedness and prevention. Tradebe continuously:

- fails to treat and maintain open and leaking containers,
- stores containers and pallets in unstable formations,
- labels containers and drums improperly,
- stores free liquids in solids-only areas,
- stores incompatible waste together,
- neglects to address failures in the secondary containment systems,
- uses a system that removes VOCs at <95% efficiency,
- stores hazardous waste in unpermitted areas for longer periods than allowed by its permit,
- fails to report to regulators accurately,
- fails to keep records accurately,
- fails to inspect its facility, and
- fails to train personnel properly.

In IDEM's recent inspection report, Tradebe had violated its RCRA Part B permit as well as State and Federal regulations by allowing containers to be kept in poor conditions (six containers), stacking containers in unstable configurations (at least thirteen containers), exceeding the 12-hour staging limit (twice), keeping containers with liquids in solids-only areas (over thirty containers and one trailer), storing containers for longer than 76 hours in unpermitted areas (fourteen containers), and maintaining an incorrect manifest.

These violations—among many others—are commonplace at Tradebe. Tables A-D below show a summary of Tradebe's RCRA violations between March, 2019, through the latest IDEM inspection report made publicly available. These tables show Tradebe's failure to properly store and maintain upkeep of containers, violations of air emissions standards, failure to accurately maintain its manifests, and failure to provide proper preparedness and prevention training and equipment at its facility.

The number of violations is highly likely to be an underestimate of the total number of container violations over the past five years. IDEM's February 13, 2024, inspection revealed that Tradebe reported fewer drums, containers, pallets, tanks, etc. than the actual number of drums, containers, pallets, etc., that IDEM counted on site. For example, an inspector noted that Tradebe had reported eighty containers in Area 7, A1, but the inspector counted 300 containers in just eight rows in Area 7, A1. These are just the rows that IDEM inspected, which were not even *all* the rows in A1. Moreover, IDEM limited its inspection to Area 7; it is unclear how many containers, drums, tanks, etc. in other areas were undercounted or underreported by Tradebe.

Tradebe's history of violations reveals consistent and wide-spread issues across its facility. The issues at Tradebe appear not to be fixable via tweaking its permit. The issuance of Agreed Order after Agreed Order indicates that these are not one-off issues that Agreed

Orders can address successfully, as IDEM has already seen. Furthermore, these issues could easily spread to what would be Area 12, should IDEM approve Tradebe's Class 3 Permit Modification request. Its history of violations shows that Tradebe's struggle to stay in compliance with RCRA and CAA is systemic, and IDEM should not allow this facility to continue operating without serious intervention.

We therefore respectfully urge IDEM to:

- (a) Require Tradebe to produce a credible plan to address prior violations and provide enforceable assurances that no future violations will occur.
- (b) Incorporate such plan into Tradebe's permit as an enforceable compliance schedule to bring Tradebe into compliance with its permit obligations and all relevant laws.

Until Tradebe can produce such a plan that is integrated into its Draft Permit, IDEM should refuse to grant the Class 3 Permit Modification.

B. IDEM has the legal authority—and the legal obligation—to include enforceable permit conditions sufficient to ensure Tradebe's ongoing compliance with all applicable environmental laws and regulations.

IDEM has the legal authority—and the legal obligation—to craft a permit which has sufficient conditions to ensure Tradebe's compliance with RCRA and its regulations going forward. Under 40 CFR § 270.32, which is incorporated into Indiana law pursuant to 329 IAC 3.1-13-1 and -2, "[e]ach RCRA permit **shall include** permit conditions necessary to achieve compliance with the Act and regulations," and each permit "**shall contain** terms and conditions as the . . . State Director determines necessary to protect human health and the environment."³⁹ Furthermore, "[i]f, as the result of an assessment(s) or other information, the . . . Director determines that conditions are necessary in addition to those required [by other regulatory provisions] to ensure protection of human health and the environment, he **shall include those terms and conditions** in a RCRA permit for a hazardous waste combustion unit."

These legal provisions speak in mandatory terms—IDEM has an obligation ("shall include") to include in the Draft Permit conditions which are sufficient to ensure Tradebe's compliance with the law going forward. Clearly, given Tradebe's long track record of repeated permit and other legal violations, the existing permit conditions are not sufficient to do so. We would therefore expect that IDEM would have conducted a comprehensive analysis, and required significant additional investigatory information from Tradebe, to determine the underlying causes of Tradebe's persistent compliance problems, and then to apply the results of that analysis to craft more robust permit conditions to bring Tradebe into compliance.

However, based on conversations with IDEM officials at the September 10 public meeting and hearing on this Draft Permit, it does not appear that IDEM has conducted any such type of comprehensive analysis of the underlying causes of Tradebe's violations, nor any analysis of what types of permit conditions might be required to bring Tradebe into compliance going forward.

IDEM should withdraw the Draft Permit and conduct a comprehensive analysis of the permit conditions necessary to ensure Tradebe's ongoing compliance with its legal obligations, in light of Tradebe's lengthy history of violations.

We therefore respectfully urge IDEM to:

- (a) Conduct a comprehensive analysis of the factors which have caused Tradebe's lengthy history of repeat permit violations and other legal violations, including an analysis of any deficiencies in Tradebe's training, operating policies and procedures, management and supervision, staffing levels, physical plant and equipment, and volume and scope of operations, to determine what role such deficiencies have played in Tradebe's history of violations.
- (b) Withdraw the Draft Permit until such time as this comprehensive analysis is complete.
- (c) Incorporate the findings of this comprehensive analysis into any re-issued proposed permit, including specific permit conditions designed to address the findings of these analyses, consistent with IDEM's legal obligation to issue permits containing conditions necessary to achieve compliance with the law.

Some specific examples of enforceable permit conditions which IDEM should include in a revised permit are discussed in sections of our comments below.

RESPONSE

Please see IDEM response to General Statement 2.

CHANGE

None.

9. COMMENT

IDEM should strengthen the Draft Permit by including robust third-party audits of Tradebe's operations and physical equipment as an enforceable permit condition, as well as engaging in more comprehensive agency inspections over the life of the permit.

In view of Tradebe's repeated RCRA violations at its existing facility, IDEM should require that Tradebe conduct a thorough third-party audit of its operations. Specifically, two such independent, third-party audits should be required.

The first such audit should focus on all aspects of RCRA compliance and it should be comprehensive, covering each and every applicable regulation. This audit should also include all corrective actions including groundwater monitoring that are occurring or should be occurring at Tradebe. Based on this audit, any non-compliance issues identified should not only be addressed legally but also required to be corrected in a timely manner. A follow-up audit should confirm that all identified issues have been properly addressed.

A second, complementary audit should focus on the engineering assessment of each piece of equipment at Tradebe. Given the age of the facility and the age of some of the equipment, it is not clear that Tradebe has properly maintained its equipment in a manner that will reasonably prevent releases of wastes. This not only affects that site itself but can also pose catastrophic risks to the surrounding community. The engineering audit should also cover all of the containment systems. It should not just be observational but should include the testing and quantification of foundations, wall-thicknesses, and testing for control efficiency, as needed. Like the compliance audit noted above, all findings of deficiency in this audit should also be required to be addressed in a timely manner, with a follow-up audit to verifiably ensure that such deficiencies have been addressed.

Any releases from Tradebe, either routine or catastrophic, have adverse impacts on the surrounding community. Therefore, the selection of the auditors noted above needs to include input from the community in order to ensure that the auditors are truly independent. The thoroughness of the audits and their determinations are crucially dependent on competence and independence. The permit should require Tradebe's full and unconditional cooperation with each of the two audits.

In addition to these third-party audits, IDEM should include as an enforceable permit condition that Tradebe submit to frequent, more robust inspections from IDEM inspectors from both OLQ and OAQ at the same time. IDEM has an obligation to "thoroughly inspect" Tradebe's facility on a regular basis to ensure compliance with Tradebe's permits and all legal obligations. In the opinion of a retired engineer (formerly of USEPA's stationary source compliance division) with whom we consulted in preparing our comments, based on his review of some of IDEM's inspection reports from its inspections of Tradebe's facility, while IDEM's inspections have been appropriate paperwork, container condition/labeling and storage area inspections, they do not satisfy the requirement for a Compliance Evaluation Inspection (CEI) that is supposed to meet the statutory "thoroughly inspect" requirement. For example, IDEM's inspection reports fail to describe the processes that Tradebe uses to treat the material or deal with the drums, fail to mention compliance with hazardous waste determinations and RCRA Subparts AA/BB/CC, and fail to document any checks on Tradebe's determination that any processes/units are not subject to RCRA or other applicable environmental statute or regulation.

In light of these concerns, and in the context of Tradebe's significant history of non-compliance, heightened scrutiny from IDEM is required, and the permit should include as an enforceable condition that Tradebe cooperate with more frequent, and more rigorous IDEM CEI inspections going forward. Furthermore, these inspections should be coordinated by both OLQ and OAQ to ensure comprehensive inspections of Tradebe's compliance with its permits and legal obligations under both RCRA and the CAA.

We therefore respectfully urge IDEM to:

- (a) Add as an enforceable permit condition that Tradebe undergo a comprehensive third-party regulatory audit, as described above, with a follow-up audit to confirm that all identified issues have been properly addressed.
- (b) Add as an enforceable permit condition that Tradebe undergo a comprehensive third-party engineering assessment, as described above, with a follow-up audit to confirm that all identified issues have been properly addressed. Add as an enforceable permit condition that Tradebe cooperate with more frequent and

thorough process-based inspections of the Tradebe facility, conducted by both OAQ and OLQ personnel at the same time to ensure proper coverage. This inspection should particularly include equipment that is regulated under both CAA and RCRA (e.g., equipment regulated under Subparts AA, BB, and CC). If IDEM does not have the resources for this type of inspection, we respectfully urge that IDEM request assistance from EPA Region V and/or EPA or OECA's NECIs.

Response

Please see IDEM response to General Statement 2.

Change

None.

10. COMMENT

The Draft Permit impermissibly relies on exemptions to which Tradebe is not entitled in light of its Clean Air Act violations

A. Inappropriate Exemption Claims to RCRA Subparts AA and CC

Tradebe's RCRA permit renewal should be denied because it fails to meet the requirements for its claimed exemption to RCRA's 40 CFR Part 264, Subparts AA and CC.

In Attachment D to Tradebe's Permit Application, Tradebe claims an exemption to RCRA's 40 CFR Part 264, Subpart AA (Air Emissions Standards for Process Vents) and RCRA's 40 CFR Part 264, Subpart CC (Air Emissions Standards for Tanks, Surface Impoundments, and Containers) on the basis that it meets certain CAA provisions.

First, Tradebe argues that it is exempt from complying with Subpart AA. "[S]ince the units and their emissions are also subject to the requirements of the Clean Air Act regulation 40 CFR Part 63, Subpart DD, Tradebe is electing to claim the exemption to the 264 Subpart AA rules available at 40 CFR 264.1030(e)." Tradebe provides self-certification documentation for this provision in Appendix D-16.

Second, Tradebe argues that it is exempt from complying with Subpart CC. "[T]he requirements of 264 Subpart CC do not apply to waste management units at the facility that the owner certifies is equipped with an operating air emission controls in accordance with the requirements of certain Clean Air Act regulations." Tradebe provides self-certification document for this provision in Appendix D-18.

Despite its self-certification, Tradebe continues to violate its CAA Title V Permit. Tradebe's continued noncompliance with its existing CAA obligations should weigh strongly against the renewal of its RCRA permit. Moreover, its noncompliance statutorily means that it cannot be exempt from its RCRA Subpart AA and CC obligations.

Tradebe is also required to show compliance with the CAA's 40 CFR Part 60 and the CAA's 40 CFR Part 61 provisions in order to obtain an exemption from RCRA's 40 CFR Part 264, Subpart

CC requirements. Yet, Tradebe does not demonstrate its compliance with Parts 60 and 61. “Tradebe must show that these units meet the applicable CAA requirements under 40 C.F.R. Part 60, 61, 63, however, this has yet to be demonstrated.”

Tradebe has not shown compliance with the CAA’s 40 CFR Part 60 and the CAA’s 40 CFR Part 61 and should not be granted an exemption to RCRA’s 40 CFR Part 264, Subpart CC.

B. Refusal to create notification plans to IDEM for CAA Violations.

On June 3, 2024, IDEM issued a NOD informing Tradebe of specific deficiencies related to their RCRA permit renewal application. In Comment #15, IDEM identified a missing notification provision in Tradebe’s permit and Waste Analysis Plan:

The permit and WAP should include provisions for Tradebe to notify IDEM, in writing, about any Local, State, or Federal findings of [sic] notice of alleged noncompliance with CAA requirements at the subject tanks and containers, at least 5 days after Tradebe’s receipt of such notice of noncompliance. Any written notice of noncompliance must contain the EPA identification number, facility name and address, a description of the noncompliance event and the cause, the dates of the noncompliance event, and the actions taken to correct the noncompliance event and prevent reoccurrence of the noncompliance event, 40 F.R. §§ 264.1089 and 2645.1090.

Tradebe responded that it was unable to identify such a requirement in 40 C.F.R. §§ 264.1089 and 2645.1090 [sic] and consequently “has not incorporated this statement [of a notification provision] in the modified application.” However, 40 C.F.R. § 264.1090(a) discloses the notification requirement that Tradebe failed to heed:

Each owner or operator managing hazardous waste in a tank, surface impoundment, or container exempted from using air emission controls under the provisions of § 264.1082(c) of this subpart **shall report to the Regional Administrator each occurrence when hazardous waste is placed in the waste management unit in noncompliance with the conditions specified in § 264.1082 (c)(1) or (c)(2) of this subpart, as applicable.**

Tradebe did not heed the notification requirement in 40 C.F.R. § 264.1090(a) and neglected to include such a notification provision in their modified application. Thus, Tradebe has not shown compliance with 40 C.F.R. § 264.1090(a) and should not be granted renewal at least until this provision is added to a modified permit.

C. Refusal to provide RCRA Subpart BB certification.

1. Monitoring of Carbon Units

In a June 3, 2024, NOD issued by IDEM to Tradebe noting deficiencies in its permit renewal application, IDEM noted that Tradebe did not properly certify its claimed exemption to RCRA’s Subpart BB requirements regarding the monitoring of its carbon units. Tradebe was required to certify its intent to use its CAA permit to show compliance with RCRA 40 CFR 264, Subpart BB. “Subpart BB allows for an elective provision under 40 C.F.R. § 264.1064(m). [...] Tradebe must provide a certification that the facility wishes to use an elective provision if the facility is using a CAA permit to show Subpart BB documentation compliance.”

Tradebe responded that it was unable to identify such a certification requirement. "Tradebe did not locate a regulatory citation that requires a Subpart BB certification to be included. [...] Therefore, Tradebe did not provide this document." However, IDEM clearly noted this 40 C.F.R. § 264.1064(m) requirement in Comment #24. "Subpart BB allows for an elective provision under 40 C.F.R. § 264.1064(m)."

The relevant RCRA exemption requirements state:

The owner or operator of a facility with equipment that is subject to this subpart and to regulations at 40 CFR part 60, part 61, or part 63 ***may elect to determine compliance with this subpart*** either by documentation pursuant to § 264.1064 of this subpart, or ***by documentation of compliance with the regulations at 40 CFR part 60, part 61, or part 63 [CAA permit requirements]*** pursuant to the relevant provisions of the regulations at 40 part 60, part 61, or part 63. The documentation of compliance under regulations at 40 CFR part 60, part 61, or part 63 shall be kept with or made readily available with the facility operating record.

Tradebe did not identify the certification provision in 40 C.F.R. § 264.1064(m) even though this was identified in Comment #24. Tradebe has not shown compliance with 40 C.F.R. § 264.1064(m) and should not be granted renewal at least until Tradebe can show compliance and proper certification of its compliance with the CAA's permit requirements.

2. Equipment associated with SDS units

Similarly, IDEM notes that Tradebe fails to provide any documentation certifying that its SDS units comply with its CAA permit requirements. Such documentation is required for Tradebe to exempt its SDS units from RCRA Subpart BB requirements. IDEM stated that the "list of all the equipment associated with SDS I and SDS II along with all applicable Subpart BB requirements for each piece of equipment must be provided. If the equipment is documented in a CAA permit, Tradebe must provide the CAA regulations that are being followed." Tradebe similarly argued that it could not locate such a requirement and did not provide such a certification.

As shown above, 40 C.F.R. § 264.1064(m) requires that Tradebe certify its compliance with relevant portions of the CAA if it is electing to use RCRA's elective provision to show its compliance with RCRA Subpart BB. Tradebe's SDS units do not comply with 40 C.F.R. § 264.1064(m) and Tradebe should not be granted a permit renewal at least until Tradebe can show that its SDS units are compliant with either RCRA Subpart BB or the relevant CAA provisions (40 CFR Parts 60, 61, or 63).

RESPONSE

Please see IDEM response to General Statement 3.

CHANGE

None.

11. COMMENT

IDEM should make additional modifications to strengthen the Draft Permit

A. Confidential Business Information

Some parts of the permit have information redacted because they are part of confidential business information. Many times businesses will claim that certain information is confidential when it is not actually confidential business information. The information that is not actually confidential business information should be available if needed.

B. Documents to be Maintained at Facility Site

If Section I.H of the permit conditions is intended to summarize all record-keeping requirements, RCRA Subparts AA, BB, and CC record-keeping requirements should be included as:

14. Records regarding documentation of compliance under regulations 40 CFR part 60, part 61, or part 63 to certify process vents that would otherwise be subject to RCRA Subpart AA are equipped with and operating air emission controls in accordance with the requirements for process vents under the Clean Air Act.

15. Records regarding documentation of compliance with 40 CFR part 60, part 61, or part 63 if an election is made to determine compliance with RCRA Subpart BB using such documentation, or documentation pursuant to 40 CFR § 264.1064.

16. To show compliance with RCRA Subpart CC, certification that the waste management unit is equipped with and operating air emission controls in accordance with the requirements of applicable Clean Air Act regulations codified under 40 CFR part 60, part 61, or part 63.

C. Management of Containers

To the extent that IDEM can, III.E.2.a should be revised such that Tradebe will have a shorter period than 60 days to ship rejected hazardous waste off-site to an alternate TSDf or generator. Given Tradebe's history of noncompliance, 60 days is too long of a period to allow for rejected hazardous waste to be handled at the Tradebe facility before something would go wrong.

The record retention period for documentation of the movement of containers from a permitted storage area to a staging area followed by placement into a permitted storage area is too short. Given Tradebe's long history of violations, including maintaining containers for longer than the permitted time in a staging area and most recent violation of not possessing supporting documentation pursuant to this part of the permit, Tradebe should be required to keep this documentation for longer than a 30-day period. Keeping the documentation will help with getting a clearer picture of Tradebe's operations and will increase accountability for long-term compliance.

D. Containment and Detection of Releases

Currently Section IV.G.2.b of the Draft Permit conditions is written broadly to account for reporting that must be made under the Clean Water Act:

“...If the collected material is a hazardous waste, it must be managed in accordance with all applicable requirements. The Permittee must note that if the collected material is discharged through a point source to U.S. waters or to a POTW, it is subject to requirements of the Clean Water Act. If the collected material is released to the environment, it may be subject to reporting under 40 CFR Part 302....”

However, because this is addressing hazardous waste, this section should make clear that any discharges may be subject to land disposal requirements and that a proper determination must be made and documented before releasing any material into U.S. waters or to a POTW. Documentation of this determination should be included in the facility’s operating record.

We respectfully urge that IDEM:

- (a) Add to the Confidential Information section of the permit conditions that a permittee may be required to substantiate their confidential business information.
- (b) Add to Section I.H the language requested above to show compliance and certification of compliance with 40 CFR part 60, part 61, and part 63 if Tradebe elects to show compliance with Subparts AA, BB, and CC in this manner.
- (c) Revise, to the extent possible, the 60-day period to ship rejected hazardous waste to another TSDf or generator facility to a shorter period to minimize potential for mismanagement.
- (d) Increase the documentation retention period for containers that have been staged and moved to a permitted area.
- (e) Clarify in IV.G.2.b that discharges may be subject to land disposal requirements and that Tradebe must make a proper determination, the documentation from such determination to be kept in the facility’s operating record, before releasing any material

RESPONSE

A. Confidential Business Information

There is limited information contained in the application that was submitted under the claim of confidentiality. This included piping and instrument diagrams to keep Tradebe’s treatment process for certain waste confidential from competitors.

B. Documents to be Maintained at Facility Site

Agreed

C. Management of Containers - III.E.2.a

The 60-day time period for rejected loads is allowed by 40 CFR 264.72(d)(1).

D. Recordkeeping for staging

Recordkeeping for staging is not in the rules, but 40 CFR 264.73(b)(2) requires, “The location of each hazardous waste within the facility and the quantity at each location. ... This information must be maintained in the operating record until closure of the facility.”

E. Containment and Detection of Releases

This is standard language in all RCRA permits issued by IDEM. This language is taken from the notation included in 40 CFR 264.193

Note:

If the collected material is a hazardous waste under part 261 of this chapter, it is subject to management as a hazardous waste in accordance with all applicable requirements of parts 262 through 265 of this chapter. If the collected material is discharged through a point source to waters of the United States, it is subject to the requirements of sections 301, 304, and 402 of the Clean Water Act, as amended. If discharged to a Publicly Owned Treatment Works (POTW), it is subject to the requirements of section 307 of the Clean Water Act, as amended. If the collected material is released to the environment, it may be subject to the reporting requirements of 40 CFR part 302.

CHANGE

- A. None
- B. See changes to Section I.H of the permit.
- C. None
- D. Section III.E.2.a is modified to change “This documentation shall be maintained for 30 days.” To “This documentation shall be maintained in the operating record until closure of the facility.”
- E. None

12. COMMENT

IDEM needs to provide greater clarity, and amend the Draft permit, around the transition to Tradebe’s newly-expanded facility.

The new permit authorizes Tradebe to alter and expand its hazardous waste storage operations, both within the boundaries of its current facility and at the former Marport facility. As part of these changes, Tradebe will close some storage areas, reduce and expand others, and build entirely new storage areas, including a structure at the former Marport facility with a total storage footprint of 22,746 square feet. In total, Tradebe will add over 1 million gallons of solids-only storage capacity, and over 385 thousand gallons of storage capacity approved for liquids.

Even a high-performing facility would likely struggle to carry out this significant and complex reshuffling and expansion project, and Tradebe already habitually fails to operate in accordance with its permits. Yet the Draft Permit lacks the conditions necessary to ensure that this transition does not endanger human health and the environment. First, the Draft Permit fails to delineate a responsible sequence for closing existing storage areas and opening new ones. Second, the Draft Permit fails to ensure that the physical site of the new storage areas at the former Marport facility can safely sustain major construction projects.

- A. Where IDEM has determined two storage areas should not operate simultaneously, the permit should require Tradebe to close the old area before opening the new one.

The Draft Permit would authorize Tradebe to undertake a massive reshuffling and expansion of its hazardous waste storage. Ultimately, Tradebe intends to open 15 new storage areas, modify the capacity of 5 existing storage areas, and close or partially close 5 storage areas. IDEM staff explained to us at the public meeting on September 10 that this combination of opening and closing different storage areas reflects the need to ensure Tradebe's expansion does not lead to overcrowding that would create hazards, including by preventing the safe flow of truck traffic.

We are concerned that the Draft Permit does not require Tradebe to appropriately sequence its opening and closing of hazardous waste storage areas to achieve that goal. In several places, the Draft Permit contradicts itself about when storage areas may operate. Additionally, the Draft permit would allow Tradebe to continue to utilize storage areas slated for closure for months after all of the new storage areas have opened.

Contradictions in the Draft Permit paint an unclear picture of which storage areas will operate simultaneously. We have identified the following points of contradiction:

- The closure plan explains that if a “container storage area will no longer be operated for hazardous waste management,” that constitutes a “partial closure” of the facility, triggering a series of decontamination, soil sampling and analysis, and notification procedures. It also states that “[a]t this point in time, it is not possible to predict or anticipate any such partial closures.” Yet the Facility Description identifies six storage areas to “to be closed after the construction Area 12” and one storage area “to be partially closed after the construction of Area 12.”
- The draft Compliance Schedule sets out a timeline for beginning the closure of storage areas slated to fully or partially close, but it fails to include the Area 2 East Apron. The Facility Description lists the Area 2 East Apron as a “[s]torage area to be partially closed after the construction of Area 12.”
- The Facility Description indicates that the Area 4 West Apron and the Area 6 South Apron will “be closed after the construction of Area 12.” Yet the facility Process Information indicates that after the construction of Area 12, these two areas will have a combined storage capacity of 254,760 gallons.
- The Facility Description indicates that the new Areas 11 North Pad and 11 West Apron are “approved to accept waste at the issuance of the permit renewal.”

However, the facility Process Information suggests these areas cannot open until Area 12 does.

In addition, we object to the proposed Compliance Schedule, which would allow Tradebe to continue using hazardous waste storage areas slated for closure and partial closure for months after Area 12 begins operating. These storage areas slated for closure or partial closure carry an additional capacity of around 600,000 gallons. The Compliance Schedule gives Tradebe “60 days after receiving approval to begin use of Area 12” before even beginning closure of those container

storage areas. Furthermore, beginning closure only marks the day to receive the final shipment of waste; the Draft Permit gives Tradebe another 60 days to move all materials out of the area, 90 days to decontaminate, and 180 days to assess for and address any residual contamination.

Together, these issues undermine IDEM's efforts to ensure Tradebe's planned expansion occurs safely. Tradebe's pattern of noncompliance with container storage conditions underscores the need for a clear and cautious plan that ensures Tradebe does not overcrowd its property or store waste in areas without IDEM's knowledge.

We therefore respectfully urge IDEM to:

- (a) Address or explain the apparent contradictions in the permit documents, described above, and amend the permit to provide clear, consistent information about which container storage areas may remain open simultaneously.
- (b) Revise the Compliance Schedule to require Tradebe to certify its closure of the designated storage areas before accepting any new waste for storage in Area 12.
- B. Tradebe should ensure the former Marport facility can safely support construction before Tradebe builds new container storage areas on that site.

Tradebe intends to construct new container storage areas, Area 12 and Area 1 North Apron, at the former Marport facility, a site with an extensive industrial history. Most recently, it has served as the site of Tradebe Transportation, a hazardous waste transfer facility. Since at least 2022, Tradebe has also used this property for unpermitted hazardous waste storage, placing incinerator-bound hazardous waste in trailers on designated areas of the property. The historical and current use of this site suggests the need for a clear and cautious plan to ensure construction projects avoid harm to both humans and the environment. Yet the Draft Permit does not require Tradebe (1) to close the incinerator-bound waste storage areas, or (2) to fulfill its corrective action obligations on this site prior to beginning construction.

The Draft Permit's silence on Tradebe's unpermitted incinerator-bound waste storage at the former Marport facility threatens to allow unnecessary hazards during construction of Area 12. According to IDEM's own overlay, the planned Area 12 footprint directly abuts the incinerator-bound waste storage at the former Marport facility. We doubt Tradebe could safely begin construction on Area 12 with trailers of hazardous waste in the immediate vicinity. At the public meeting on September 10, IDEM staff members indicated their belief that the Agreed Order between Tradebe and IDEM provides for the termination of hazardous waste storage in trailers prior to the construction of Area 12. However, we have found no terms in the Agreed Order, and no terms in the Draft Permit, that set a date or timeline for the conclusion of this activity.

The Draft Permit also fails to address potential contamination at the former Marport facility. IDEM has concluded that Tradebe's history of releases and potential releases necessitates a corrective action plan at this site, but the Draft Permit fails to synchronize the corrective action with Tradebe's proposed construction project. The Draft Permit would give Tradebe 120 days after permit issuance even to provide information about Solid Waste Management Units at the former Marport facility. It provides a further 90 days after receiving notice from IDEM to complete a RCRA Facility Investigation to thoroughly investigate the presence and impact of releases. Yet, Tradebe anticipates beginning the construction project as soon as March 2025. This proposed order of operations threatens to undermine the goals of the corrective action plan, as construction

threatens not only to create logistical barriers to thorough analysis and remediation but also to disturb soil and other media that could disperse contamination.

Indiana regulations require each RCRA permit to “contain terms and conditions as the Administrator or State Director determines necessary to protect human health and the environment,” and to “include permit conditions necessary to achieve compliance with the Act and regulations[.]” These conditions must include “schedules of compliance” for any necessary corrective action. Given these requirements, and our concern that construction at the former Marport facility without careful planning could generate unnecessary hazards, we request IDEM take action to strengthen the Draft Permit.

We therefore respectfully urge IDEM to:

- (a) Amend the permit to require Tradebe to certify the closure of the unpermitted storage area at the former Marport facility in accordance with the Closure Plan in Attachment I before authorizing construction on Area 12. If IDEM has determined construction can safely proceed without closure of the unpermitted storage area, we request that IDEM share this reasoning.
- (b) Modify the Schedule of Compliance to require Tradebe to meet its corrective action obligations at the former Marport facility before beginning construction of any new storage areas on this site.

RESPONSE

Prior to the final permit becoming effective, Tradebe’s 10-day transfer station (commonly referred to as “Marport”) is not subject to IC 13-22-2-5(6). Upon the final permit’s effective date, Permit Condition VI.C. *et seq* will apply to Marport. Tradebe’s responsibilities under the permit include identifying all potential sources of releases, regardless of when the releases may have occurred. Permit Condition VI.D.3 states, “The Permittee must conduct an RFI to thoroughly evaluate the nature and extent of the release of hazardous waste(s) and hazardous constituent(s) from all SWMUs and AOCs as required by IDEM.”

As allowed under IC 13-22-2-5(6), if corrective action cannot be completed before issuance of the permit, the permit must contain schedules of compliance for any required corrective action. The permit addresses this requirement via Permit Condition VI.F. The language in the closure plan about partial closure was not modified from the previous permit to include the areas that would be closed or partially closed due to the changes proposed with this permit renewal and modification. A sequence of closure is included. The permit will be modified to identify these areas within Attachment I.

Area 2 East Apron was mistakenly labeled with the superscript indicating that it was going through partial closure with the issuance of this permit, the superscript was removed.

The Facility Description indicates that the new Area 11 North Pad and 11 West Apron are “approved to accept waste at the issuance of the permit renewal.” However, the facility Process Information suggests that these areas cannot open until Area 12 does. Only Area 11 West Apron will be operational at the issuance of the permit renewal, and appropriate changes were made to the permit.

Tradebe has established timeframes for the closure or partial closure of the existing container storage area, not IDEM. Tradebe would have to cease operations at certain areas to expand in other areas and stay within the permitted areas and capacities. The closure/partial closure of the existing container storage areas will have to be closed according to the timeframes allowed in the rules, see 40 CFR 264.113.

CHANGE

A compliance schedule item has been added that requires Tradebe to submit a summary of historical activities and releases that have taken place at Marport, along with any response Tradebe has taken to investigate or mitigate releases of any hazardous waste or hazardous constituent. This summary is referred to as a Current Conditions Report.

A compliance schedule item was added to require the facility to update Attachment I to include a list of all of the areas that are planned to go through closure or partial closure with the issuance of this permit, and the sequence of removal from operational approval.

The General Description in Attachment B was modified to correct the incorrect superscripts for the following areas: Area 2 East Apron (5 removed), Area 4 West Apron (6 to 5), Area 6 South Apron (6 to 5), Areas 11 North Pad (1 to 2). The superscript was modified for Area 11 North Pad to indicate that it will become operational after the construction of Area 12. Attachment D, Table D-1a, added Area 11 West Apron to Solids Only list and modified capacities accordingly.

SDS Unit

13. COMMENT

The draft permit does not discuss the Solid Distillation Systems (SDS). Page 4 of Attachment B, Facility Description, states that, "Although the SDS recycling units are exempt from RCRA permitting as Recycling units, SDS units are subject to 40 Code of Federal Regulations (C.F.R.) 264 Subpart AA air emission standards. The permittee has opted to comply with the Clean Air Act (CAA) standards and the SDS air emissions are controlled by the site's Title V operating Permit with Level 2 controls." It goes on to state, "Shredder Units, dated correspondence from IDEM (Exhibit B-1) confirms its concurrence that SDS units, as they are operated at Tradebe, are exempt from the need for a permit under the hazardous waste rules pursuant to the recycling exclusion at 40 C.F.R. § 264(c)(1)." Since the SDS units are RCRA units being granted an exemption from permitting by IDEM, this exemption (and any other exemptions) and its limitations should be described in the RCRA permit.

RESPONSE

The Solid Distillation Systems (SDS) units are not being granted an exemption by IDEM, the SDS units are exempt from RCRA permitting per 40 CFR 261.6(c)(1) which was adopted by Indiana. IDEM does not list all exempted units in RCRA hazardous waste permits.

CHANGE

None.

14. COMMENT

The shredder units associated with the SDS meet the definition of hazardous waste treatment found at 40 C.F.R. § 260.10 since the units processes the hazardous wastes to change its physical character to render the waste amenable for recovery in the SDS unit. The permit should address why the shredders are not being treated as Subpart X units in a reclamation exemption.

RESPONSE

The shredder unit is not a Subpart X unit. IDEM has considered the shredding of SDS material as the first step in the reclamation of solvents in the SDS units. As such, the unit is exempt under 40 CFR 261.6(c)(1).

CHANGE

None.

15. COMMENT

Section V "Air Emission Standard Conditions" of the draft permit states that, "FOR TANKS: Air pollutant emissions from tanks shall be controlled in accordance with the Tank Level 2 controls as set forth in the Process Description, Attachment D, Section D-2f RCRA Air Emission Controls and Appendix D-18." In addition, "FOR CONTAINERS: Air pollutant emissions from containers shall be controlled in accordance with Container Level 1 and 2 standards as set forth in the Process Description, Attachment D, Section D-2f RCRA Air Emission Controls and Appendix D-18." This information is incorrect since Section D-2f Subpart CC and Appendix D-18 state that Tradebe has elected to claim the exemption provided in 40 C.F.R. § 264.1080(b)(7). The draft permit should be updated to reflect the correct permitting conditions for all 40 C.F.R. Part 264 Subpart CC units.

RESPONSE

See Response to General Comment #3.

CHANGE

None.

16. COMMENT

40 C.F.R. §§ 264.1030(e), 264.1064(m), 264.1089(j) [329 Indiana Administrative Code (IAC) 3.1-9-1], require the facility to document that it is operating in accordance with and in compliance with various CAA regulations in lieu of complying with comparable requirements under the Resource Conservation and Recovery Act (RCRA) to control organic air emissions. Given that the RCRA permit requirements for organic air emission control rely on the facility's compliance with these CAA requirements, it is appropriate to require notice of noncompliance. 40 C.F.R. § 270.30(h) (329 IAC 3.1-13) Duty to provide information, requires that "[t]he permittee shall furnish to the Director, within a reasonable time, any relevant information which the Director may request . . . to determine compliance with this permit." Further, 40 C.F.R. § 270.30(l)(10) (329 IAC 3.1-13) Other noncompliance, requires "[t]he permittee shall report all instances of noncompliance not

reported under paragraphs (l)(4), (5), and (6) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (l)(6) of this section.”

The requirement to report CAA noncompliance for RCRA units which rely on the CAA for RCRA Organic Air Emission controls is consistent with conditions applicable to all permits that are already in the draft permit and that are based on the regulations cited above (permit conditions I.D.7 and I.D.16). Contrary to any previous assertions in response to an NOD, any instance of CAA organic air emission control non-compliance subjects the facility to a notification and reporting duty pursuant to the permit and regulations and cannot be disregarded.

The permit should have supplemental language to that effect. Further, such suggested permit language is also consistent with recommendations from EPA’s 2019 RCRA/CAA implementation document *Implementing the RCRA/CAA Air Emission Controls Compliance Exemption/Election Provisions Through RCRA Permits*. Section V of the permit should include actions to be taken when there is a change to the air emission controls required under the CAA provisions or when there is a CAA enforcement action involving units otherwise subject to 40 C.F.R. Part 264 Subparts AA and CC. The permit should include suggested language from EPA’s 2019 RCRA/CAA implementation document as to when and how to report such changes and to request a modification to the RCRA permit should the compliance provisions of 40 C.F.R. § 264.1030(e) no longer apply to Subpart AA units or 40 C.F.R. § 264.1089 no longer apply to Subpart CC units.

RESPONSE

See Response to General Comment #3.

CHANGE

None.

17. COMMENT

The Recordkeeping section of the draft permit’s Section V “Air Emission Standard Conditions” states that the Permittee must comply with all applicable recordkeeping and reporting requirements of 40 C.F.R. Part 264 Subparts AA, BB and CC. Because Tradebe is electing to demonstrate Subpart BB compliance with the CAA, the permittee must comply with all applicable recordkeeping and reporting requirements of 40 C.F.R. Part 264 Subparts AA and CC and with 40 C.F.R. Part 63 Subpart DD in lieu of Subpart BB documentation requirements.

RESPONSE

See Response to General Comment #3.

CHANGE

None.

18. COMMENT

Section V of the draft permit outlines 40 C.F.R. Part 264 Subpart BB equipment requirements for Tradebe. Specifically, Section V states that the Permittee must comply with all applicable requirements of 40 C.F.R. Part 264, Subpart BB, as set forth in Attachment D: Process Description.

Appendix D-17 of attachment D provides a list of equipment in operation at the facility. Appendix D-17 should be reviewed to ensure that all equipment associated with the SDS 1, SDS 2, Distillation unit, Pot Still, and the Thin Film Evaporator are accounted for. In addition, because Tradebe is seeking to utilize 40 C.F.R. § 264.1064(m) to document 40 C.F.R. Part 264 Subpart BB requirements with CAA requirements, 40 C.F.R. Part 63, Subpart DD should be reviewed to ensure documentation is appropriate.

RESPONSE

See Response to General Comment #3.

CHANGE

None.

19. COMMENT

IDEM should carefully scrutinize Tradebe's Solids Distillation Systems and impose the terms and conditions necessary to protect the environment and human health.

Tradebe operates two multi-part units called Solids Distillation Systems, which Tradebe asserts recycle hazardous waste to recover products for industrial use. Tradebe refers to the units as "SDS I," which has operated since 2004, and "SDS II," which came online in 2015. The central component of each of these systems is a Thermal Desorption Unit ("TDU"). According to Tradebe, the TDUs heat hazardous waste in an oxygen-free environment to drive off volatile organic compounds, which are then recondensed for use as solvents. Together, the SDS units can process nine tons of waste per hour.

The SDS units pose a serious concern. They comprise a significant part of Tradebe's operations, yet, because Tradebe claims the units "recycle" hazardous waste, they are excluded from the hazardous waste permitting process and are subject to more lenient air emissions standards. The permitting process has failed to assure that Tradebe's SDS units merit the "recycling" designation that would justify their exemption from many of the regulations that protect human health and the environment. In addition, Tradebe has shown that its standard practices fail to control the hazardous waste char generated as a byproduct of the so-called recycling operations.

For these reasons, as part of this permitting process, we request that IDEM require Tradebe to produce the information needed to verify its "recycling" claim, and that IDEM independently corroborate that information and provide that information to the public to the greatest extent possible. As a part of this permitting process, IDEM should disclose on what bases it has confirmed, reviewed, examined and/or inspected the SDS units and confirmed their exemption under RCRA. We also request that IDEM include permit terms and conditions necessary to ensure Tradebe's management of hazardous waste char complies with applicable state and federal laws and regulations and does not harm the environment or human health.

- A. Tradebe has failed to substantiate its claim that the SDS units qualify for RCRA's recycling exemption.

Tradebe has evinced a belief that it can exclude the SDS units from its RCRA permit without providing any supporting evidence to show these units recycle hazardous waste. Tradebe relies

entirely on a single letter IDEM wrote in 2002, before either SDS unit had begun operating, to support its “recycling” claim. In this letter, IDEM provided a conditional response to Tradebe’s inquiry about whether SDS I would qualify as a recycling process, writing, “*Provided* that the unit is used only for the reclamation of components of hazardous waste that will be legitimately utilized either directly as ingredients in manufacturing other products you are correct in your understanding that the unit *would*” qualify.

The Draft Permit Appears to accept Tradebe’s minimal support for its “recycling” claim. As a result, Tradebe would gain exemption from many of the regulations that operate to prevent releases of hazardous waste and it would be subject to more lenient air emission standards. The flare Tradebe uses to burn off-gas from the TDUs is currently permitted under 40 CFR § 61, Subpart V, which requires the destruction of only 95% of hazardous emissions. If, for example, 40 CFR § 63, Subpart EEE, National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors, applied, as we suggest below would likely be appropriate, Tradebe would have to achieve a Destruction Removal Efficiency (DRE) standard of 99.9999%.

We view IDEM’s conditional 2002 letter as insufficient, and the information which Tradebe has made available about the SDS units causes us to doubt the appropriateness of Tradebe’s “recycling” claim for the following reasons:

1. We have reason to believe that the TDUs combust hazardous waste.

An improperly operated TDU has the potential to function not solely to recycle hazardous wastes, but also to combust them. A properly operated TDU recycles hazardous waste by heating materials in an anaerobic chamber in which the lack of oxygen prevents combustion reactions from occurring. Any oxygen in the chamber has the potential to produce a combustion reaction. When TDUs are used to combust, rather than solely to recycle, hazardous waste, they should not receive the recycling exemption. EPA Region 6 has determined that if “materials [are] burned in incinerators or other thermal treatment devices . . . [they] are considered to be ‘abandoned by being burned or incinerated’ under § 261.2(a)(1)(ii),” and a federal court has found that RCRA regulation applies in this scenario. Therefore, a properly operated, anaerobic TDU will qualify for the RCRA recycling exemption, while an improperly operated unit that incinerates materials will not qualify for the recycling exemption.

As the ECCC-CAG detailed in its letter to U.S. EPA Region 5 and IDEM on June 27, 2023, the little information that Tradebe has made available about the SDS units suggests that combustion occurs within the TDUs. First, to the best of our knowledge, Tradebe has never provided evidence that it can consistently achieve an anaerobic environment in the TDUs, and it may not even have oxygen monitoring in place. Second, the SDS units produce a byproduct of char at a rate of “10-13 [20 yd³] roll-offs per week,” a quantity so dramatic as to seem unlikely to result from a process that does not involve combustion. Third, Tradebe has failed to account for the total mass of the hazardous waste inputs into the SDS units, suggesting they do not operate as closed systems and may destroy materials through combustion. Tradebe has advertised that the SDS units process 120,000 tons of material and reclaim one ton of scrap metal, but provided no information regarding what happens to the other 119,000 tons of hazardous waste that are allegedly processed for recycling.

2. We suspect Tradebe has engaged in “sham recycling.”

Legitimate recycling must (1) “involve a hazardous secondary material that provides a useful

contribution to the recycling process or to a product or intermediate of the recycling process[,]" (2) "produce a valuable product or intermediate[,]" (3) "be managed as a valuable commodity[,]" and (4) "be comparable to a legitimate product or intermediate." Recycling that fails any of these criteria is not legitimate and qualifies as "sham recycling."

We have seen no documentation to confirm that Tradebe's SDS units meet the four requirements of "legitimate recycling," and we have particular concerns related to the first criteria. The Draft Permit and supporting documents omit descriptions of how wastes are treated in the SDS and related units. Tradebe has not disclosed or committed to any specific parameters for what types of waste can be recycled at Tradebe.

Additionally, we suspect Tradebe may process a broader range of waste in the SDS units than could contribute to the production of solvents for industry use. Regardless of whether combustion occurs within the TDU, such a practice would constitute "sham recycling" and should not receive a regulatory exemption. Tradebe has advertised that it accepts an extremely wide array of materials for processing in the SDS units. A promotional video on Tradebe's website indicates, "Wastes suitable for SDS II processing include: solvent-soaked materials, paints, resins, sludges, gels, solids... these and more." The video appears to additionally picture empty glass vials and treated wood as examples of recyclable materials. A different promotional brochure indicated, "SDS can effectively process virtually any solid organic hazardous waste." We question whether all the products described could contribute to the production of "high quality solvents that can serve industry again," as Tradebe has claimed.

3. A primary output of the SDS processes is char.

According to an industry expert familiar with the topic with whom we have conducted in preparing these comments, the SDS units can only achieve about 25% reclamation of solvents for beneficial reuse from many of the containerized solid wastes that Tradebe treats in the SDS. The rest, as much as 75% of the waste volume input, is char. We question whether an SDS unit could be considered legitimate when it generates waste as a much higher volume than solvents that are beneficially reclaimed.

4. The formation of char and the flaring of waste gases provide evidence of thermal destruction.

While some recovery of waste materials may be occurring as a result recycling processes associated with the SDS units, there is also substantial evidence of thermal destruction of waste. The formation of large quantities of char provides one example of this evidence. We further note that Tradebe omits the destruction that occurs via flaring. In fact, there is no mention of the flare at all in the draft permit, or in the entirety of the October 28, 2021 renewal permit application, including Attachment B, the Facility Description.

We would welcome information that substantiates Tradebe's entitlement to a recycling exemption, but we have seen none. The Draft Permit and associated documents suggest Tradebe has not corroborated its claim that the TDUs operate to recycle, and not to combust, hazardous waste. Instead, Tradebe has offered only one hypothetical sentence written by IDEM before either SDS unit began operating.

In the absence of countervailing indicators, we suspect that an appropriate permit would include the SDS units as fully regulated Hazardous Waste Management Units under RCRA. IDEM should

revisit its determination to accept at face-value Tradebe's "recycling" claim by engaging in a more thorough fleshing out of the facts.

We therefore respectfully urge IDEM to:

- a. Exercise its authority under Indiana law to request information from Tradebe that demonstrates its SDS units do not combust hazardous waste. This information should address how Tradebe maintains and monitors the anaerobic environment within the TDU chambers, how Tradebe prevents the destruction of hazardous waste in the flare, how much char Tradebe produces relative to usable solvents, and why the TDUs produce a significant quantity of char.
- b. Request information from Tradebe that demonstrates it meets the four criteria for legitimate recycling. This information should provide a description of the parameters for the waste Tradebe can accept for its recycling processes, and how this waste contributes to the production of usable products.
- c. Exercise its authority under Indiana law to conduct its own inspection to assess the operation of the SDS units and verify the information that Tradebe provides.
- d. Disclose the above information to the public, and implement as permit conditions the protocols and controls necessary to ensure Tradebe does not (1) combust hazardous waste or (2) engage in sham recycling by processing wastes that do not contribute to a usable product.

These requests apply to both SDS I and SDS II. IDEM should not rely on information about only one of the units to make a determination about both. IDEM should require Tradebe to provide information about both SDS units, and IDEM should examine, inspect and investigate both units.

B. The Draft Permit lacks conditions to protect East Chicago from releases of hazardous waste char, a byproduct of SDS processing.

In addition to our doubt about the legitimacy of Tradebe's claim to a recycling exemption, we are concerned about Tradebe's ability to manage the vast quantities of hazardous waste char generated as a byproduct of SDS processing. Tradebe has historically struggled to prevent releases of this char into the environment, and we have not found any conditions within the Draft Permit that would require Tradebe to alter its standard procedures for managing and storing it. We therefore seek to understand how Tradebe will manage this char to protect the environment and human health, and request that IDEM include conditions in the final permit to ensure the responsible and proactive management of the char.

The SDS units generate their own hazardous waste stream in the form of char, a soot-like byproduct of thermal treatment. We lack complete information about the composition of the char, but an industry expert familiar with the systems has informed us that the char likely contains hazardous metals, and, because Tradebe processes per- and polyfluoroalkyl substances (PFAS) in the SDS units, the char likely contains PFAS as well. Inspection reports indicate that Tradebe has historically stored char in roll-off containers, which are large, open, dumpster-like containers. Tradebe stores the containers outdoors, and ostensibly prevents drift by covering them with tarps. We understand that, as of 2019, Tradebe could "generate approximately 10-13 roll-offs per week

depending on operations.” At any given time, Tradebe estimates that it may have 72,750 gallons of hazardous waste char stored on site.

IDEM inspectors have found that Tradebe’s haphazard method of char management and storage has already failed on several occasions, leading to releases of hazardous waste materials. In December 2018, an IDEM inspector found four roll-off containers of char uncovered. In September 2019, an IDEM inspector found that hazardous waste char had blown onto the ground and into stormwater, and that “wind was causing some of the spilled char to become airborne.” A follow-up inspection the following month found similar issues. We commend IDEM not only for identifying these issues during inspections, but also for noting these incidents in its file review and acknowledging they had the potential to release hazardous waste or hazardous constituents.

Given this history, Tradebe might have used the permitting process as an opportunity to commit to improvements in its char management, but we have found no reference in the permit documents to Tradebe’s plan to manage the char so as to protect the environment and human health. We understand from Tradebe’s 2020 request to modify its air permit that Tradebe introduced a new method for unloading the char from the TDU in SDS II, which provides Tradebe the option to use a “bulk-o-matic container” as the receiving receptacle for the char instead of a roll-off container. However, we lack sufficient information about the bulk-o-matic containers or how Tradebe uses them to understand whether they reduce the risk of releases. We further note that Tradebe has not committed to discontinuing its use of roll-off containers. Additionally, we lack information about whether Tradebe has implemented this new method for SDS I.

By storing vast quantities of hazardous waste, which has the propensity to become airborne, outdoors in large, open containers only sometimes covered with tarp, Tradebe endangers East Chicago’s environment and residents. In preparing these comments we have consulted with an experienced environmental engineer who has examined IDEM’s documentation of how Tradebe’s manages its char. He describes Tradebe’s haphazard system as inappropriate for processing waste streams of this industrial scale. A system that uses a pneumatic conveyer and silo, for example, would be more appropriate and would provide greater protection for East Chicago.

Indiana regulations require each RCRA permit to “contain terms and conditions as the Administrator or State Director determines necessary to protect human health and the environment,” and to “include permit conditions necessary to achieve compliance with the Act and regulations[.]” This includes the regulation that “[a] container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste,” and “must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.”

We therefore respectfully urge IDEM to:

- (a) Require Tradebe to provide information about the hazardous constituents in the SDS char, including the presence of PFAS, to enable an informed assessment of the adequacy of the char management methods.
- (b) Require Tradebe to analyze several process runs for PFAS using EPA Method 1633. If this confirms the presence of PFAS, IDEM should ensure it is being properly managed. If Tradebe sells the char for any reason, it must inform customers of its chemical constituents.

- (c) Disclose whether and why it has determined that the Draft Permit contains the conditions necessary (1) to protect human health and the environment from releases of char, and (2) for Tradebe to achieve compliance with RCRA regulations governing its storage of containerized waste.
- (d) Integrate into the permit char management practices appropriate for a professional, industrial-scale operation located so close to a residential area.

RESPONSE

IDEM does not grant the exemption to The Solid Distillation Systems (SDS), the SDS units are exempt from RCRA permitting per 40 CFR 261.6(c)(1) which was adopted by Indiana. Additionally, these units have operated for a prolonged period during which there have been both federal and state inspections that included SDS units.

Tradebe implemented the SDS units to reclaim volatiles and generate a solvent product. As the process only reclaims solvents out of solid materials, it is not surprising that the process generates a greater amount of char than the amount of solvent reclaimed or produced. Additionally, Tradebe is subject to all hazardous waste generator requirements applicable the char generated as a byproduct of the SDS process. The char that the operation of the SDS units generates is a newly generated hazardous waste subject to regulation under hazardous waste generator regulations.

During the time that Tradebe has operated the SDS units, US EPA and IDEM have routinely inspected the facility and have not identified any information to substantiate allegations of sham recycling. Tradebe implemented the SDS units to reclaim volatiles and generate a solvent product. Proportionately, the process should generate char at a greater rate.

Not all volatile compounds driven off the solid hazardous wastes in the SDS units would or could be condensed in the process producing a solvent that is offered as a product. Volatile compounds remaining in the effluent process gases would be controlled by being managed with the air pollution control devices that service the units.

IDEM will continue to inspect the SDS units to ensure that the units qualify for the exemption.

CHANGE

None.

ATTACHMENT A – PART A APPLICATION

20. COMMENT

IDEM should review the hazardous waste codes that are listed in the permit to ensure this list reflects only the waste actually accepted, stored, and managed at the facility.

A. IDEM must revise incorrectly listed hazardous waste codes.

Attachment A, Appendices A-1 and A-4 list explosive hazardous waste (e.g., waste code K047, pink/red water from TNT operations) that both EPA and IDEM have previously asked Tradebe to remove if the facility does not handle such waste. In EPA's March 23, 2023 Comment on Tradebe's Class 3 Permit Modification Request, EPA pointed out:

Pursuant to 329 IAC 3.1-9-1/40 C.F.R. § 264.1201, TSDFs must comply with certain requirements when storing explosive wastes. There are several waste codes listed in Tradebe's Class 3 permit modification request... which correspond to explosive material (such as K047, pink/red water from TNT operations). Tradebe's Class 3 permit modification request does not have descriptions of how explosive waste will be managed. If these wastes will not be stored at the facility, Tradebe should revise the list of accepted waste codes to only include hazardous wastes that will be accepted and managed at the facility.

IDEM echoed EPA's comment in the April 21, 2023 notice of deficiency letter:

TTR's Class 3 permit modification request does not have descriptions of how explosive hazardous waste will be managed. If these wastes will not be stored at the facility, TTR should revise the list of accepted waste codes to only include hazardous wastes that will be accepted and managed at the facility.

Tradebe subsequently update Attachment A, Appendices A-1 and A-4 to remove hazardous waste codes K044, K045, and K047.

Despite this back-and-forth between IDEM, EPA, and Tradebe, Attachment A, Appendices A-1 and A-4 in the Draft Permit list K044, K045, and K047. Tradebe's RCRA Part B permit cannot be renewed, nor can the Class 3 Permit Modification request be granted, until this is corrected so that the permit is legally sufficient.

B. The Draft Permit should reflect only hazardous waste Tradebe can and will process.

As it is written currently, Attachment A is a blank check authorizing Tradebe to handle a wide variety of hazardous waste—in fact, nearly every type of hazardous waste. Attachment A, Appendix A-3 lists estimates of the amount of each type of hazardous waste Tradebe will handle under the permit; the majority of the hazardous waste codes listed simply list “1,000 tons,” indicating that this is a placeholder value. 40 C.F.R. § 270.13(j) requires Part A of the permit application to include an “estimate” of the quantity of each hazardous waste listed that is to be handled at the facility—a place-holder value is not an estimate. Rather, this effectively gives Tradebe the green light to accept nearly every type of hazardous waste without the assurance through detailed process descriptions that Tradebe is able to effectively process all these types of waste. Moreover, for each type of waste, Tradebe lists process codes with the same placeholder process description: “Included with above.” On page 13 of the permit Part A application, two process codes have references to Attachment B, while the other three have no reference at all and no description as 40 C.F.R. §§ 270.13(i) and (j) require. Attachment B does not attempt to match treatment, process, or management method to each hazardous waste listed in Attachment A. There is therefore no evidence provided in the permit as to how each type of listed hazardous waste will be processed correctly at the facility, nor any evidence as to how much of each hazardous waste will be processed to support the estimates Tradebe gave.

Similar to the long list of hazardous waste codes, Tradebe claims to be able to conduct a comprehensive and large number of treatment types including Acid Cracking, Blending, Fuel Blending, Chemical Oxidation, etc. This broad list of treatment types should be substantiated by Tradebe with evidence provided to IDEM. For example, Tradebe should explain which specific processes provide Acid Cracking, Blending, or Chemical Oxidation, and for which waste codes. Without this evidence, the Draft Permit again becomes a blank check that will inevitably result in compliance issues.

We respectfully urge IDEM to:

- (a) Withdraw the Draft Permit and deny the Class 3 Permit Modification request until Tradebe lists the hazardous waste codes that accurately represent the waste that is accepted, stored, and managed at the facility. This includes removing the explosive waste codes and other inaccuracies, and removing hazardous waste codes from its list for which it cannot support the estimated amount with evidence.
- (b) Require Tradebe to demonstrate 1) how, for each waste code, Tradebe's processes can effectively treat such wastes, and 2) how, for each listed process in Attachment B, Tradebe can effectively treat the relevant waste by those means.

RESPONSE

Regarding Comment 20. A, Waste codes K044, K045, and K047 appeared on the waste code list due to a typographical error. Tradebe noted this error in Facility Comment 82 below and IDEM corrected the waste code list accordingly.

Regarding Comment 20. B, IDEM concurs that the waste code list in draft Permit Condition VII is extensive and that Tradebe likely will not manage wastes associated with all of the waste codes on this extensive list during the course of operation. However, the waste code list was previously approved as part of the existing (April 2017) Tradebe RCRA Permit, and changes to the waste code list requires a RCRA Permit modification.

A general description of treatment per 40 CFR 260.10 appears in Attachment B - Facility Description, Section B-5a, pages 12-13, and includes a list of treatment processes employed at Tradebe. Table B-II: Summary of Hazardous Waste Management in Containers or Tanks offers additional descriptions of the Tradebe treatment processes. Section C-2a, WAP, pages 11-12, organizes the Tradebe treatment processes into five general waste management categories, and includes the clarification: "Due to variability in the composition of waste streams received, all waste codes identified in Appendix C-4 and the Part A forms are not presented in these generic characterizations of the predominant material types/waste codes." IDEM found the revisions to Section B-5a, Table B-II, and Section C-2a to be acceptable. Therefore, the Comment observation that "Attachment B does not attempt to match treatment, process, or management method to each hazardous waste listed in Attachment A" is correct but does not warrant change to Attachments B or C.

CHANGE

Waste codes K044, K045, and K047 were removed from the waste code list. The new, revised waste code list replaced the list in Permit Condition VII. Otherwise, no change to the Tradebe waste code list is needed.

No changes to Attachment B - Facility Description or Attachment C – WAP are needed in response to this Comment.

ATTACHMENT B – FACILITY DESCRIPTION

21. COMMENT

Tradebe provides a description of its facility in Attachment B, but this description is deficient in at least three ways.

First, Appendix B-2 is supposed to provide topographical maps of the land on which the facility sits. Attachment I - VFC No. 83679600 (2024.08.09), Appendix B-2. These maps are blurry and incomprehensible. Tradebe's Draft Application should not be approved at least until Tradebe provides legible maps that can be scrutinized by the community for vulnerabilities that would be affected by Tradebe's continued operation.

Second, Figure B-1 provides an area wind rose that is supposed to show representative meteorological conditions surrounding the Tradebe facility. The wind rose, however, is of an airport two miles away. Tradebe claims it has met the requirement contained in 40 CFR 270.14(b)(19)(v), to include a wind rose in its map of the facility because "[g]enerally, meteorological conditions observed at the airport should be representative of the overall wind distribution at the facility (in that they are only separated by approximately two miles)." Tradebe should provide a more representative wind rose, ideally of the site itself. Further, the current wind rose of the airport shows calm conditions 68.2% of the time. If this measurement is correct and representative of the Tradebe facility area, this would be concerning. Dispersion is likely to be very poor and adverse impacts to the surrounding communities would be much greater as a result of this significant amount of calm conditions.

Third, Paragraph B-4 provides an improbable description of how the facility will impact traffic. It estimates that each week, 1-3 non-hazardous tank trucks, 5-15 hazardous tank trucks, and 75-100 hazardous or non-hazardous trucks and trailers will unload at Tradebe. Because Tradebe's 2017 RCRA Permit provided identical estimates, we highly doubt the accuracy of these numbers. First, Tradebe's construction projects will undoubtedly add additional large vehicle traffic. Second, Tradebe intends to dramatically increase its total permitted storage, and will undoubtedly solicit a higher volume of business to take advantage of that increase. As described above, the residents in the neighborhood around Tradebe face among the highest rates of traffic proximity and diesel PM. Tradebe must provide the public with an accurate report of its impact on traffic, and we strongly encourage IDEM to consider traffic and diesel emissions when conducting an analysis of cumulative impacts

RESPONSE

- 1 A better topographic map was found in the application for the Class 3 modification and is included in Appendix B-2.
- 2 The wind rose for a location 2 miles away is sufficient for the needs requirements of 40 CFR 270.14(b)(19)(v)290(s)(5).
- 3 Although it first appears there is a question of whether or not the estimate of the truck traffic is accurate, there also appears to be an interest in the emissions from the vehicles and the environmental impact.

CHANGES

Appendix B-2 was updated to include additional topographic maps.

ATTACHMENT C - WASTE ANALYSIS PLAN - WAP

22. COMMENT

40 Code of Federal Regulations (C.F.R.) § 264.13(a)(4) and (c) [329 Indiana Administrative Code (IAC) 3.1-9-1] require that each hazardous waste movement is inspected and, if necessary, analyzed to determine whether it matches the identity of waste specified on the accompanying manifest or shipping paper (acceptance- or fingerprint-screening). Procedures that selectively evaluate only the appearance of the outer container fail to confirm that the waste in the container is the waste expected to be received. Waste physical and chemical properties directly affect the appropriate treatment, storage, and disposal methods. Even waste storage location and methods hinge upon whether the waste exhibits the properties expected (e.g. the presence of free liquids, incompatible properties, ignitability, reactivity, among others). The regulations require the WAP to provide procedures to confirm the waste identity so it can be handled safely and properly. It cannot be ascertained that the waste in the container matches the waste expected to be received without subjecting the waste in the container to acceptance screening.

The draft permit should be revised, specifically WAP Section C-2 (page 7, 3rd paragraph) and WAP Appendix C-8, Exemption i. For example, mercury wastes (No. 9) and cyanide wastes (No. 10), reactive sulfides (No. 12) (called out in Exemption i) are wastes that are commonly sampled at RCRA-permitted facilities and should not be exempted. Unless this condition is addressed, the WAP or permit must be revised to require the facility to conduct acceptance screening for all types of wastes including wastes accepted for storage and transshipment (a.k.a. drum in/drum out) with the requirement to inspect and screen the actual waste within containers received.

Note that for any waste considered for a sampling exemption, the WAP should require the collection of generator (acceptable- or process-) knowledge consistent with the 2015 WAP Guidance, including but not limited to process knowledge whereby detailed information on the waste is obtained from existing published or documented waste analysis data or studies conducted on hazardous wastes generated by processes similar to that which generated the waste, incidents of human injury or environmental damage attributed to the waste, data on waste composition or properties from analysis or relevant testing performed by the generator, information on the properties of waste constituents, or, in cases of newly listed wastes, data from recent waste analysis performed prior to the effective date of the listing (pages 1-15).

Further, generators now have specific requirements to document and keep records on their waste determinations at 40 C.F.R. § 262.11(f) (329 IAC 3.1-7-1). These regulations now describe types of knowledge that can form the basis for the waste determination and require that information to be: sufficient to make the determination; accurate; and maintained as part of recordkeeping for 3 years (since last sent off-site). The following information can form the basis for generator knowledge: process knowledge, information about chemical feedstocks and other inputs to the process, knowledge of the products, by-products, and intermediates produced by the manufacturing process, chemical and physical characterization, information on chemical and physical properties of chemicals used, produced, or contained in the waste, testing that illustrates waste properties, and

other reliable and relevant information (i.e., verifiable). The WAP must require that this information be obtained, especially for any waste subject to a sampling exemption.

The issuance of the final hazardous waste management permit without including conditions that address this comment would be inconsistent with the authorized program.

RESPONSE

Tradebe added IDEM-requested flow charts to the WAP and revised Appendix C-3 (Lab Pack Waste Characterization), Appendix C-5 (Waste Information Profile Sheet), and Appendix C-8 (Miscellaneous Waste) to clarify and demonstrate that the WAP includes required procedures so that each hazardous waste movement is inspected and, if necessary, analyzed to determine whether it matches the identity of waste specified on the accompanying manifest. With these procedures Tradebe can confirm the waste identity so it can be handled safely and properly.

The Comment specifically requests revision to WAP Section C-2 (page 7, 3rd paragraph) and WAP Appendix C-8, Exemption i, regarding materials designated for storage and subsequent transshipment off-site. The revised Appendix C-5 (Waste Information Profile Sheet) allows the generator to specifically identify wastes in containers which match the list in Appendix C-8, Exemption i – especially mercury wastes (D009), cyanide wastes, and reactive sulfide wastes. Per the waste acceptance process described in the WAP, Tradebe will have the Waste Information Profile Sheet information prior to the initial waste shipment, and Tradebe can determine then if the waste meets Tradebe waste management standards. When Tradebe accepts wastes listed in Appendix C-8, Exemption i for shipment, these wastes will be designated drum in and drum out (DIDO) and will only be visually examined to ensure consistency with the profile and manifest unless management determines additional analytical actions are required. Appendix C-8 further explains that “Opening containers of the waste ... can cause unnecessary exposure or risks to employees.”

The Comment also expresses concern that the WAP does not contain specific requirements for Tradebe to document and keep records on waste determinations performed by the generator or by Tradebe. However, the revised Appendix C-5 (Waste Information Profile Sheet) is an acceptable summary of each required waste determination, and the instructions attached to the Waste Information Profile Sheet include reference to 40 CFR 262.11 requirements. Furthermore, in WAP Sections C-1 and C-2, Tradebe specifies that documentation of waste stream information summarized on the Waste Information Profile Sheet, as well as additional waste stream information recorded on the waste manifest, the Appendix C-7 (Laboratory Order Worksheet), and the Appendix C-6 (Land Disposal Restriction Form) will be maintained in paper or electronic format and the data is uploaded into an electronic database. Additional description of the electronic database is in Section C-3b, *Notification, Certification, and Recordkeeping Requirements*, WAP, page 34. For waste analysis pertaining to Land Disposal Restrictions, Section C-3b(2), WAP, page 34, clearly states: “TRADEBE will maintain a copy of the notification and/or certification for a minimum of three (3) years.”

IDEM concurs that clarification to the WAP is needed to confirm that Tradebe is required to maintain waste determination information “as part of recordkeeping for 3 years (since last sent off-site).” Otherwise, the WAP and revised Appendices sufficiently address this Comment.

CHANGE

Section C-1, WAP, page 2, revised to clarify: “The incoming profiles will be maintained on site as part of recordkeeping for a minimum of three (3) years.”

23. COMMENT

The draft permit allows for compositing of hazardous waste samples across generators, media, or containers where it is technically inappropriate to do so. 40 C.F.R. § 264.13 (329 IAC 3.1-9-1) requires that the information collected in accordance with the WAP be representative of the waste and contain all the information which must be known to treat, store, or dispose of the waste in accordance with 40 C.F.R. Parts 264 and 268 (329 IAC 3.1-9 and 3.1-12). For the following technical reasons, the proposed sampling and analysis is not representative of waste and/or fails to provide the information necessary.

- a. Parameter altered qualitatively by compositing – flashpoint. Flashpoint is a measured property that is inappropriate for compositing. The property, a temperature at which a liquid forms an ignitable mixture near the liquid surface, is not evaluated on a weight or volume basis. As such, it is not clear how compositing will affect the results of the measurement. Unless this comment is addressed, the WAP or permit must specify that composite sampling should not be used for flashpoint analysis.
- b. Property required to characterize waste as-generated – [e.g. fuels blending – British Thermal Unit (Btu), total organic carbon (TOC), moisture]. Conditions necessary for fuels blending require that these parameters be evaluated as-generated, meaning before any mixing with other wastes. Compositing is itself mixing with other wastes and can mask the properties of wastes which are inappropriate for fuels blending, such as those that require burning for destruction and do not qualify for burning for energy recovery. Unless this comment is addressed, the WAP or permit must not use compositing for parameters which must be evaluated on an as-generated (at the original point of generation) basis.
- c. Determining if waste matches the waste expected (acceptance sampling or fingerprinting). Compositing across generators can suppress potential differences in physical and chemical parameters of each waste such that it cannot be determined if each waste received is, in fact, the waste expected (see requirement in Comment 1. - 40 C.F.R. § 264.13(a)(4) and (c) (329 IAC 3.1-9-1). Compositing across media (e.g. mixing sludges with aqueous liquid) is inappropriate since analytical methods (extractions, sample preparation, etc.) are often unique to certain media. Furthermore, different media have a much greater potential for extreme differences in pollutant concentration and compositing could mask important information about an individual waste. Further, when compositing different media, a homogenous composite sample may be difficult or impossible to achieve (e.g. oily waste and aqueous liquid) such that the final analysis result may not be representative of a true composite. Compositing across containers, even of the same waste stream, will mask differences between containers, eliminating any ability to detect errant or discrepant containers. Unless this comment is addressed, the WAP or permit must specify that samples used to conduct acceptance screening (fingerprinting) to evaluate if the waste is the waste identified on the manifest will not be composited.

The issuance of the final hazardous waste management permit without including conditions that address inappropriate compositing would be inconsistent with the authorized program.

RESPONSE

The footnote to Table C-2 – Waste Sample Compositing Methods, WAP, page 29 states: “Compositing is done for Tier II and Tier III Fingerprint parameters only. Multiple generators may be composited if they are the same waste management method. Pre-acceptance and Tier I samples are not composited.” Therefore, concerns regarding compositing samples as expressed in the Comment apply when compositing is done for Tier II and/or Tier III Fingerprint parameters only.

For Comment item a, flash point testing occurs for Tier II fingerprint testing for the Tradebe Blending Program (Figure C-2a) with a qualification footnote: “If the profile for a waste stream contains a D001 based on the generator waste determination at the point of generation, flash point testing will not be required.” IDEM disagrees that compositing is inappropriate for this specific use of flash point testing as a Tier II fingerprint.

For Comment item b, BTU, TOC, and moisture content testing occurs for Tier II fingerprint testing for the Tradebe Blending Program (Figure C-2a) with a qualification footnote: “BTU value is established by either the Heat of Combustion method in Table C-1 (bomb calorimeter) or by calculation based on results from the Moisture Content method in Table C-1 (titration). The Heat of Combustion method is run in addition to the Moisture Content method when verification of the result from moisture content method is needed.” IDEM disagrees that compositing is inappropriate for this specific use of BTU, TOC, and moisture content testing as a Tier II fingerprint.

As noted above, the WAP clearly states that Pre-acceptance and Tier I samples are not composited. Also, as stated in Section C-2d, WAP, page 31: “TRADEBE can randomly select subsequent hazardous waste movements for screening using Tier II, and/or III Fingerprint parameters as an additional quality control measure to ensure the waste matches the Profile.” Therefore, the concern expressed in Comment item c that “the WAP or permit must specify that samples used to conduct acceptance screening (fingerprinting) to evaluate if the waste is the waste identified on the manifest will not be composited” is addressed in the WAP.

CHANGE

None

24. COMMENT

40 C.F.R. § 264.13(b) (329 IAC 3.1-9-1) requires the WAP specify the parameters, rationale, and analytical methods for all sampling and analysis in the WAP. The WAP rationale does not describe how the Karl Fischer moisture content is used to generate a fuel value, and there is no referenced or attached analytical method. The Karl Fischer method for moisture content is not specific for the measurement of fuel value (Btu). The WAP states that the Heat of Combustion (Btu) method is run in addition to the Moisture Content (Karl Fischer) method when verification is needed, but fails to specify under what conditions verification is needed. The WAP or permit must not allow the use of the Karl Fischer method to determine fuel values unless appropriate and specific parameters, a complete rationale, and analytical methods for this analysis are included in the WAP. The issuance of the final hazardous waste management permit without including conditions that address this comment would be inconsistent with the authorized program.

RESPONSE

IDEM concurs that the WAP “does not describe how the Karl Fischer moisture content is used to generate a fuel value, and there is no referenced or attached analytical method.”

CHANGE

No change to the WAP is needed. IDEM will require Tradebe to address this comment as a compliance condition to the Permit.

25. COMMENT

The draft permit does not sufficiently provide for conditions necessary to ensure that:

- a. hazardous waste of insufficient fuel value is not burned for energy recovery by being processed into hazardous waste derived fuels (a recycling activity) when it must instead be burned for destruction [40 C.F.R. § 261.2(c)(2), 48 Federal Register (FR) 11158, 50 FR 49173, 62 FR 24251, 63 FR 33787, and 329 IAC 3.1-6]; and
- b. metal bearing wastes prohibited from dilution in a combustion unit are not blended into hazardous waste derived fuels (impermissible dilution per 40 C.F.R. § 268.3(c) (329 IAC 3.1-12-1)).

The draft permit should ensure that only hazardous wastes of sufficient fuel value be prepared into blended hazardous waste derived fuels. Failure to do so may alter the regulatory status of residuals of combustion that may be prepared as products for use on the land (such as cement) by combustors that use the fuel. Residuals from burning hazardous waste for destruction are hazardous waste by the derived-from rule. An exemption for combustion residuals (at 40 C.F.R. § 266.20(b) (329 IAC 3.1-11-1)) applies to recyclable materials when burned. However, wastes burned for destruction are not recyclable and thus do not qualify for this exemption.

Hazardous waste with fuel values at or above 5,000 Btus per pound (Btus/lb), as-generated, are generally deemed burned for energy recovery such that residuals from combustion are potentially eligible for the exemption at § 266.20. Hazardous wastes which have fuel values less than 5,000 Btu/lb, as-generated, may also be burned for energy recovery but must be matched to a combustion facility which has demonstrated and documented that the hazardous waste of a specified low fuel value is burned for legitimate energy recovery by contributing substantial, useable energy to the combustion unit. This dual specification, that as-generated hazardous waste exhibiting the appropriate fuel value be matched to the appropriate fuel value justified for a particular combustion unit as-fired, places the onus on the fuels-blending facility to determine and document that hazardous wastes considered for fuels blending meet both requirements. The draft permit does not specify the required incoming hazardous waste fuel value by the minimum required for the combustion facility it will be blended for. Nor does the permit or WAP specify the fuels blending specifications that must be met. 40 C.F.R. § 264.13 (329 IAC 3.1-9-1) requires that the WAP specify parameters for sampling and analysis, the rationale, the sampling method, the analytical method, and the frequency.

See comment 2.b. above for the requirements to address appropriate analysis to ensure metal bearing wastes prohibited from dilution in a combustion unit are not blended into hazardous waste derived fuels by collecting the correct fuel value (Btu/lb) and TOC data.

The draft permit should specify the chemical and physical parameters (fuel value, metals concentration, etc.) required for each combustion facility to which the blended fuel will be sent and likewise specify the chemical and physical parameters which must be evaluated for incoming hazardous wastes considered for fuels blending. Further, the draft permit should require that the combustion facilities be identified in the record along with the appropriate documentation justifying that the hazardous waste of a specified low fuel value is burned for legitimate energy recovery by contributing substantial, useable energy to the specific combustion unit. Unless these conditions are added to the permit and WAP, the facility must accept only those wastes for fuels blending with an as-generated fuel value of at least 5,000 Btu/lb.

The issuance of the final hazardous waste management permit without including conditions that address permitted treatment for fuels blending would be inconsistent with the authorized program.

RESPONSE

IDEM concurs that “The draft permit does not specify the required incoming hazardous waste fuel value by the minimum required for the combustion facility [emphasis added] it will be blended for.” Instead, the draft permit includes the following general statement in Section C-3a(1), WAP, page 33: “On a case-by-case basis, the facility may accept materials into the blending program with a heat value <5,000 BTU/lb when one (1) or more of the additional five (5) criteria listed under 40 CFR 268.3(c)(1)-(2) and (4)-(6) are satisfied, namely for waste which contains greater than 1% Total Organic Carbon (TOC).” A flow chart with Figure C-2a, WAP, page 17 further illustrates this statement.

The Comment also expresses specific concerns regarding metal bearing wastes accepted for fuel blending at Tradebe. Figure C-2a, WAP, pages 13-14 shows that a pre-acceptance and fingerprint test parameter - Total Organic Carbon (TOC) - is required for “Metal Bearing Waste (subject to 40 CFR 268.3(c)) destined for Fuel Blending with < 5000 BTU.” The instructions attached to the Appendix C-5 Waste Information Profile Sheet also state: “You must not dilute metal-bearing wastes (listed in Appendix XI of 40 CFR Part 268), if the diluted waste will be used as fuel in any RCRA permitted combustion facility, unless you have demonstrated that the diluted waste complies with one or more of the criteria specified in 40 CFR § 268.3(c).”

The Comment requests that “the draft permit should require that the combustion facilities be identified in the record along with the appropriate documentation justifying that the hazardous waste of a specified low fuel value is burned for legitimate energy recovery by contributing substantial, useable energy to the specific combustion unit.” This seems to imply that Tradebe should include a Clean Air Act (CAA) Feedstream Analysis Plan (FAP) or similar document for each off-site combustion facility receiving waste fuel blended at Tradebe. The Tradebe RCRA Permit Attachment C - WAP and the combustion facility CAA FAPs are currently maintained as separate documents in separate programs.

CHANGE

None.

26. COMMENT

40 C.F.R. § 264.13(c) (329 IAC 3.1-9-1) requires that off-site facilities must include in their WAP procedures which will be used to inspect, and if necessary, analyze, each movement of hazardous waste received at the facility to ensure that it matches the identity of the waste designated on the manifest. The WAP fails to identify some of the specific values for concentrations or properties that will be used for this purpose. Specifically, the fuel specifications for combustion facilities to which HWDF (fuels blending) will be sent should be specified in the WAP. Further, the pH ranges identified in the Attachment C-5 to the WAP, *Generator Waste Stream Profile Sheet*, are too broad to provide meaningful determinations as to the identity of the waste. The suggested range of pH 4.0 to 10.0 is overly broad and implies that some acidic wastes could be inappropriately considered identical to alkaline wastes when this should be an important chemical distinction that could indicate the waste received is not the waste expected. The fuels blending specifics should be added to the WAP and the pH range 4.0 to 10.0 standard units on the profile should be modified to reflect differences between acidic and alkaline wastes. Unless specific conditions are added to the WAP delineating justifiable fuel values, the permit must limit wastes accepted for fuels blending with an as-generated fuel value of at least 5,000 Btu/lb. The issuance of the final hazardous waste management permit without including conditions that address the specificity required in 40 C.F.R. 264.13(c) (329 IAC 3.1-9-1) would be inconsistent with the authorized program.

RESPONSE

The General Characteristics section of the Waste Stream Profile Sheet shows several options – not just pH 4.0 to 10.0 - for denoting pH: <2 (Acid), 2.0-4.0, 4.0-10.0, 10.0-12.5, >12.5 (Base), and N/A. The Comment does not indicate other specific pH range options to add to the Waste Stream Profile Sheet.

The General Characteristics section of the Waste Stream Profile Sheet also shows several options – not just >5,000 Btu/lb – for fuel value (BTU/lb): <3000(e.: water), 3,000-5,000, 5,000-10,000, and >10,000(ex: oil). BTU is further explained in the instructions attached to the Waste Stream Profile Sheet, and a flow chart (Sampling Scheme to Demonstrate Compliance with 40 CFR 268.3) in the WAP, page 17, helps show how wastes with BTU value <5,000 Btu/lb are managed for fuel blending. The Comment does not recommend a specific change to the Waste Stream Profile Sheet.

CHANGE

None.

27. COMMENT

40 C.F.R. § 268.7(a) and the Generator Paperwork Requirements Table (329 IAC 3.1-12) require that constituents of concern for F039 be identified. The required Land Disposal Restriction Notification Form in Appendix C-5 to the WAP is missing a call-out to and list of F039 constituents of concern. Further, the form does not include line items indicating if a hazardous waste is thought to qualify for an exemption and the required reporting elements in the Generator Paperwork Requirements Table for such wastes subject to 40 C.F.R. § 268.7(a)(4) (329 IAC 3.1-12). The form is also missing line items indicating if a hazardous waste is a lab pack for which the generator wishes to use the alternative treatment standard for lab packs found at 40 C.F.R. § 268.42(c) and the required reporting elements in the Generator Paperwork Requirements Table for such wastes

subject to 40 C.F.R. § 268.7(a)(9) (329 IAC 3.1-12). The form must be amended to include all information as well as any generator certifications delineated in 40 C.F.R. § 268.7(a) [329 IAC 3.1-12]. The issuance of the final hazardous waste management permit without including conditions that address this comment would be inconsistent with the authorized program.

RESPONSE

The Tradebe Land Disposal Restriction Notification Form is in Appendix C-6, not Appendix C-5 as stated in the Comment. If needed, changes to the Appendix C-6 - Land Disposal Restriction Form will be made by Tradebe. Therefore, IDEM will request Tradebe to address this Comment as a compliance condition to the Permit.

CHANGE

IDEM will require Tradebe to address this Comment as a compliance condition to the Permit. If needed, changes to the Appendix C-6 - Land Disposal Restriction Form will be made by Tradebe and the revised form will replace the form currently in Appendix C-6 of the Permit.

28. COMMENT

C-1, Chemical and Physical Analysis, Page 3:

The Waste Analysis Plan (WAP) states "Tradebe will examine the incoming waste to ensure consistency of the incoming manifested waste to the previously submitted profile. A sample of the incoming waste can be taken in accordance with this WAP...". 40 C.F.R. § 264.13(a)(4) states "inspect, and if necessary, analyze each waste movement received at the facility to determine whether it matches the identity of the waste specifies on the accompanying manifest or shipping paper." The WAP should reflect this language.

RESPONSE

Section C-2d, WAP, page 30 states: "To comply with the requirements of 40 CFR264 TRADEBE will in accordance with 40 CFR 264.13(a)(4); inspect, and if necessary, analyze each hazardous waste movement received at the facility to determine whether it matches the identity of the waste specified on the accompanying manifest." Therefore, the requested language is in the WAP.

CHANGE

None.

29. COMMENT

C-2, Waste Analysis Plan, page 6, first and second paragraphs and *Waste Acceptance Process* diagram, page 8.

The permit and WAP allow preliminary acceptance to ship waste to the facility with pre-acceptance sampling not completed until the time of arrival. The diagram states that if "analytical data" accompanies the shipment, acceptance (fingerprint) screening is skipped for the initial shipment. This is not appropriate as the required screening procedures at 40 C.F.R. §§ 264.13(a)(4) and (c) are meant to verify the shipment matches the identity of the expected waste. Off-site analytical data might not be representative of the shipped materials if there have been errors in shipment or

variation/changes to the waste generating process that occurred after that data was prepared. The WAP should be revised to require acceptance screening (fingerprint) on all incoming wastes.

RESPONSE

IDEM concurs that in some instances a Generator/Broker may ship waste to the facility with pre-acceptance sampling not completed until the time of arrival. However, Section C-2, WAP, page 6 states: "Representative samples of the initial shipment are then subjected to pre-acceptance chemical analysis described in Section C-2a of the WAP based on the prescribed processing method." Pre-acceptance chemical analysis may include analysis at the on-site or an off-site laboratory. Waste shipments that have arrived at the facility are considered to be in the receiving process until such time that the facility makes a final decision regarding waste acceptability.

IDEM concurs that one branch of the *Waste Acceptance Process* diagram could be interpreted as stating that if analytical data was provided with the waste Profile, then no additional sampling and analysis (pre-acceptance, fingerprint, or other) of the waste shipment is performed, and the facility only reviews Generator data to determine waste acceptance. Based on the text of the WAP, this is not the case. The diagram is a visual aid for understanding the waste acceptance process but should not be considered separately from the text of the WAP.

CHANGE

No change to the *Waste Acceptance Process* diagram is needed. For clarification, Section C-2, WAP, page 5, 2nd paragraph was revised to: "Waste shipments that have arrived at the facility are considered to be in the receiving process until such time that TRADEBE [emphasis added] makes a final decision regarding waste acceptability."

30. COMMENT

C-2, Waste Analysis Plan, Page 6, last paragraph:

Change "In addition, when discrepancies are observed as a result of pre-acceptance or fingerprint testing, in lieu of rejecting the shipment, the facility **may** recharacterize the material and generate a new waste profile" to "In addition, when discrepancies are observed as a result of pre-acceptance or fingerprint testing, in lieu of rejecting the shipment, the facility **will** recharacterize the material and generate a new waste profile", or describe in the WAP the reasoning not to generate a new waste profile.

RESPONSE

IDEM concurs.

CHANGE

The proposed word change was made to Section C-2, WAP, page 6, last paragraph.

31. COMMENT

C-2, Waste Analysis Plan, Page 6, last paragraph

Change "Recharacterization of waste **should** include analysis at off-site laboratory" to "Recharacterization of waste **will** include analysis at off-site laboratory," or describe reasoning not to analyze.

RESPONSE

Although recharacterization of waste will likely include analysis at off-site laboratory, it may be possible for facility to utilize existing off-site laboratory data combined with documented on-site laboratory data for recharacterization. Therefore, the proposed change is not warranted.

CHANGE

None.

32. COMMENT

C-2, Waste Analysis Plan, Page 7, 3rd paragraph:

This states Tradebe will only visually examine “drum in/drum out” wastes and will not do fingerprinting. The WAP must state the procedures to determine if the waste received is the waste expected for all hazardous waste management, including storage.

RESPONSE

Procedures for handling lab pack and miscellaneous wastes as “drum in/drum out” wastes are adequately described in Appendices C-3 and C-8. The WAP statement that such wastes “will only be visually examined to ensure consistency with the profile and manifest unless management determines additional analytical actions are required” is acceptable.

CHANGE

None.

Section C-2a, Parameters and Rationale

33. COMMENT

The WAP misquotes 40 C.F.R. § 264.13 and misstates the objective of the required WAP. The regulations should be stated correctly. The statement in the WAP implies that the regulations require a profile or equivalent when the regulations state instead that the facility must obtain detailed chemical and physical analysis.

RESPONSE

“40 CFR 264.13” is mentioned four times in Section C-2a – Parameters and Rationale in Attachment C – WAP; however, no direct quotes from 40 CFR 264.13 were found in Section C-2a. The Comment did not request specific wording changes. Therefore, no change to Section C-2a is warranted.

CHANGE

None.

34. COMMENT

The WAP incorrectly states the objectives of the required parameters and rationale. The regulation should be stated correctly.

RESPONSE

The Comment did not request specific wording changes. No change to Section C-2a is warranted.

CHANGE

None.

35. COMMENT

The WAP at C-2a, fails to provide any acceptance (fingerprint) screening for free liquids despite mentioning this method. Considering the number of permitted storage units in the permit for which storage of wastes with free liquids is prohibited, this parameter must be addressed in acceptance screening for all waste received that are expected to have no free liquids.

RESPONSE

Containers with free liquids are discussed in Section C-1a, WAP, page 4. Facility will either use the profile or test using the Paint Filter Test to analyze incoming containers of waste which are exempt from secondary containment requirements because they do not retain liquids, as further discussed in Section 2e, WAP, page 31.

CHANGE

None.

36. COMMENT

Regarding moisture content testing, there is no rationale or demonstration for using moisture content method (Karl Fischer titration method) in lieu of or in combination with heat of combustion (British thermal unit - Btu) testing.

RESPONSE

IDEM concurs. See IDEM responses to Comments 24 and 59.

CHANGE

No change to the WAP is needed. IDEM will require Tradebe to address this comment and similar comments as a compliance condition to the Permit.

37. COMMENT

Regarding pH testing, besides the DOT definition of corrosive, pH testing is used for fingerprint analysis in the full range of pH units. See the units on the Waste Stream Profile Sheet. There should be bins above and below a pH unit of 7.

RESPONSE

The requested change in the Comment is not clear. The General Characteristics section of the Waste Stream Profile Sheet shows several options for denoting pH: <2 (Acid), 2.0-4.0, 4.0-10.0, 10.0-12.5, >12.5 (Base), and N/A.

CHANGE

None.

38. COMMENT

The WAP is missing a uniform method for conducting compatibility testing on materials that will be mixed. Methods refer to a 10°C temperature difference in section C-2a of the WAP as an indication of an adverse result while Appendix C-3 of the WAP refers to a 5° difference on an unspecified scale. No mention is made of ensuring the materials have come to the same temperature before mixing. Compatibility testing should be conducted with a uniform method that addresses these concerns. EPA recommends that ASTM Method D5058-12 be considered for compatibility testing.

RESPONSE

A flow chart in Section C-2a, WAP, page 18 summarizes steps for compatibility testing for tank blending. Appendix C-3 – Lab Pack Characterization includes details for compatibility checks prior to processing (blending or bulking materials). Appendix C-1 – Quality Assurance Plan contains general comments regarding on-site compatibility tests. Additional details regarding on-site compatibility testing are found in facility standard operating procedure (SOP) documents, which are currently not part of the Permit Renewal.

IDEM concurs that compatibility testing should be conducted with a uniform method(s) and that ASTM Method D5058-12 should be considered as a reference for compatibility testing.

CHANGE

ASTM Method D5058-12 was added to Appendix C-1 – Quality Assurance Plan, page 11 of 17 and to the flow chart in Section C-2a, WAP, page 18 as a reference for compatibility testing.

39. COMMENT

The WAP states the facility accepts hazardous wastes for “stabilization” but does not specify that this treatment will be performed off-site. The stabilization description on page 19 should include the statement that no hazardous waste stabilization occurs on-site and all hazardous waste for stabilization will be transferred offsite. Note that any treatment conducted on wastes that are sent off-site for stabilization to meet RCRA Land Disposal Restrictions (LDRs) is still subject to the LDR prohibitions on impermissible dilution throughout the entire treatment process from the original point of generation through any treatment conducted under this permit through subsequent treatment off-site.

RESPONSE

Section C-2a, WAP, page 19 clearly states that all hazardous waste stabilization occurs at an off-site treatment facility (TSDf) and that TRADEBE does not perform stabilization as a treatment to satisfy the LDR treatment standards.

CHANGE

None.

40. COMMENT

The section on off-site facility transfer contains a sentence fragment and is unclear. Furthermore, the WAP must state the procedures for determining if the waste received is the waste expected for all hazardous waste management, including storage.

RESPONSE

The Tradebe general waste management category of "Off-site Facility Transfer" shown in Section C-2a, WAP, page 12 does contain a sentence fragment; however, this sentence fragment is an item on a list and is clear. The Comment did not request specific wording changes. No change to Section C-2a is warranted.

CHANGE

None.

41. COMMENT

The WAP states the Tier II and Tier III fingerprint analysis for fuels blending allows composite sampling of "multiple generators' waste streams." Each waste stream must be analyzed to determine if the waste received is the waste expected.

RESPONSE

The footnote to Table C-2 – Waste Sample Compositing Methods, WAP, page 29 states: "Compositing is done for Tier II and Tier III Fingerprint parameters only. Multiple generators may be composited if they are the same waste management method. Pre-acceptance and Tier I samples are not composited." Pre-acceptance and Tier I samples are analyzed to determine if the waste received is the waste expected.

CHANGE

None.

42. COMMENT

The WAP states the Tier II fingerprint analysis for off-site stabilization allows composite sampling of "multiple generators' waste streams." Each waste stream must be analyzed to determine if the waste received is the waste expected.

RESPONSE

Pre-acceptance and Tier I samples are not composited. Pre-acceptance and Tier I samples are analyzed to determine if the waste received is the waste expected.

CHANGE

None.

Section C-2c, Sampling Methods:

43. COMMENT

Section C-2c Sampling Methods: Include the title and date of all Tradebe Sampling SOPs and Analysis SOPs.

RESPONSE

Section C-2c, WAP, page 28 indicates that TRADEBE sampling SOPs are maintained on-site. Section C-2b, WAP, page 26 states: "The SOPs which are based on these methods [listed on Table C-1 Test Methods] are available upon request." TRADEBE provided copies of several sampling and analysis SOPs to IDEM as supplemental information; however, TRADEBE clarified that the submitted SOPs were not intended to become part of the RCRA Permit application. Therefore, the title and date of all TRADEBE Sampling SOPs and Analysis SOPs are available upon IDEM request, but a list of the titles and dates of the SOPs is not in the WAP.

CHANGE

None.

44. COMMENT

Section C-2c Sampling Methods: composite sampling from different generators is not allowed for Tier II and Tier III fingerprint parameters. Each waste stream must be analyzed to determine if the waste received is the waste expected.

RESPONSE

Pre-acceptance and Tier I samples are not composited. Pre-acceptance and Tier I samples are analyzed to determine if the waste received is the waste expected.

CHANGE

None.

45. COMMENT

Section C-2c Sampling Methods, Page 29, second paragraph after table footer: This paragraph should include the information in the footer for Figure C-2a regarding exceptions to compositing for PCBs. Specifically, the footer for Figure C-2a states "Compositing of multiple generators' waste

streams allowed according to Section C-2c with the exception that no compositing will be done for waste streams that contain only waste oils, soils, or remediation wastes.”

RESPONSE

IDEM concurs. The statement – which is specific to Tier III fingerprint analysis for PCBs - from the footer for Figure C-2a, WAP, page 15 will be added to Section C-2c as requested.

CHANGE

Section C-2c, WAP, page 29 was revised to include the statement: “Compositing of multiple generators' waste streams for Tier III fingerprint testing for PCBs will be allowed with the exception that no compositing will be done for waste streams that contain only waste oils, soils, or remediation wastes.”

46. COMMENT

In Section C-2c, when describing sampling “10% of waste stream,” clarify if this means 10% of waste containers in a waste stream.

RESPONSE

IDEM concurs.

CHANGE

In Section C-2c, WAP, page 30, two instances of “10% of waste stream” changed to “10 % of containers in each waste stream.”

47. COMMENT

On page 30, the language attempting to describe a statistical method to characterize an incoming waste stream shipment is unclear and undefined. The WAP must clearly describe the statistical method and include parameter values or concentrations for each constituent. These should be in a table listing waste codes, constituents, sampling methods, analytical methods, frequency, and rationale.

RESPONSE

IDEM concurs that the use of statistical terms such as “confidence limit,” “normal distribution,” and “Student t-test” in Section C-2c, WAP, page 30 is unclear and these terms are undefined in the WAP. These terms are only found on this page of the WAP. However, the overall language describing the methods for collecting representative samples to characterize an incoming waste stream shipment is clear in the WAP. Sampling methods are further clarified in facility SOPs, and TRADEBE provided copies of these SOPs to IDEM as supplementary information for review of the RCRA Permit application. As indicated in IDEM Response to Comment 43 above, TRADEBE Sampling SOPs are available for review upon IDEM request.

CHANGE

None.

Section C-3a, Waste Analysis

48. COMMENT

In Section C-3a(1), Characteristic Wastes, the WAP states Tradebe will determine whether the generated hazardous waste is subject to LDRs using either analysis or generator knowledge and cites 40 C.F.R. § 268.7(a). Under this language, it is not clear if Tradebe is making the LDR determination on its customers' generated wastes or on the waste after Tradebe treats, blends, or accumulates wastes. If the generator does not make the LDR determination with generator knowledge, it is not clear how Tradebe can use generator knowledge to properly characterize the waste. Section C-3b(2) also attempts to address Tradebe's assertion that it has generator knowledge of LDR concentrations even though Tradebe is not the generator, does not provide any calculations of aggregated waste, nor provide information regarding dilution or concentration of LDR constituents.

RESPONSE

See response to Comment # 27 above. Clarification on who is making the determination will be requested of Tradebe, and any changes to Appendix C-6 - Land Disposal Restriction Form accordingly.

CHANGE

Within 60 days of issuance of the permit, the Permittee shall provide an updated Section C-3a(1) which clarifies who is making the LDR determination – the Permittee or the generator. If not the generator then the Permittee shall provide further revision to as to how they can do so without generator knowledge. The response to this requirement should also include any changes to Appendix C-6.

49. COMMENT

Section C-3a(1), Characteristic Wastes, the WAP requires all waste for fuels blending be screened for a fuel value of 5,000 Btu per pound (Btu/lb) referring to Figure C-2a. However, Figure C-2a states "Meet off-site specifications" instead and does not specify a numeric value. This section also fails to describe and require the documentation that justifying that the hazardous waste of a specified low fuel value is burned for legitimate energy recovery by contributing substantial, useable energy to the specific combustion unit. The section should also make clear the fuel value must be representative of the waste as-generated.

RESPONSE

See responses to #25 and #26 above.

CHANGE

None.

50. COMMENT

The language in the first paragraph of section C-3b(4) is unclear as to the “two manners” to manage wastes generated and treated on-site. This language needs to be clear.

RESPONSE

IDEM does not find the language unclear.

CHANGE

None.

51. COMMENT

Section C-3c does not provide the procedures to “meet the applicable treatment standards” when storing restricted wastes beyond one year.

RESPONSE

Section C-3c does not specify procedures to verify that wastes meet the applicable treatment standards; these procedures are detailed in other sections of the Attachment C-WAP and associated appendices. Revisions to the WAP and appendices are discussed in other responses. Therefore, no specific change is needed in response to this comment.

CHANGE

None.

Appendix C-1, Quality Assurance Plan:

52. COMMENT

Table of Contents: WAP does not include sampling standard operating procedures (SOPs) or analytical SOPs (except solvent scan).

Section 4.0 Project Organization and Responsibility: Under Materials Manager responsibilities, the WAP states “Obtaining a completed analytical profile or equivalent on each type of waste stream that is intended to be shipped to the TRADEBE facility” and “Based on the available data and professional judgment, accepting and/or rejecting of material for TRADEBE.” This language is ambiguous and unclear. This language must address the following regulations:

- 40 C.F.R. § 264.13(a)(1): “Before an owner or operator treats, stores, or disposes of any hazardous wastes, or nonhazardous wastes if applicable under § 264.113(d), he must obtain a detailed chemical and physical analysis of a representative sample of the wastes. At a minimum, the analysis must contain all the information which must be known to treat, store, or dispose of the waste in accordance with this part and part 268 of this chapter.”
- 40 C.F.R. § 264.13 (b): “The owner or operator must develop and follow a written waste analysis plan which describes the procedures which he will carry out to comply with paragraph (a) of this section. He must keep this plan at the facility. At a minimum, the plan must specify:

- (1) The parameters for which each hazardous waste, or non-hazardous waste if applicable under 40 C.F.R. § 264.113(d), will be analyzed and the rationale for the selection of these parameters (i.e., how analysis for these parameters will provide sufficient information on the waste's properties to comply with paragraph (a) of this section); . . .
- (5) For off-site facilities, the waste analyses that hazardous waste generators have agreed to supply.”

RESPONSE

Section C-2c, WAP, page 28 indicates that TRADEBE sampling SOPs are maintained on-site. Section C-2b, WAP, page 26 states: “The SOPs which are based on these methods [listed on Table C-1 Test Methods] are available upon request.” TRADEBE provided copies of several sampling and analysis SOPs to IDEM as supplemental information; however, TRADEBE clarified that the submitted SOPs were not intended to become part of the RCRA Permit application. Therefore, a list of SOPs is not needed in the Table of Contents and the SOPs are not included in Appendix C-1 – Quality Assurance Plan.

IDEM concurs that responsibilities described in the Appendix C-1 – QAPP for the Materials Manager should be updated. These responsibilities have not been revised from the existing (April 2017) Tradebe RCRA Permit, although the Attachment C – WAP has been significantly revised. The regulations noted in the Comment have been addressed in the revised Attachment C – WAP. IDEM will request an update to the Appendix C-1 – QAPP as a compliance item to the RCRA Permit.

CHANGE

No changes to the WAP are needed. For ease of reference, the subtitle of Appendix C-1 has been changed to “Quality Assurance Project Plan (QAPP).” IDEM will request an update to the Appendix C-1 – QAPP as a compliance item to the RCRA Permit.

53. COMMENT

Section 5.0 Quality Assurance Objectives: This section describes four levels of analytical data validity, completeness, and acceptability. There are descriptions of four levels but only three levels include effects. The third tier, “flaws which bring the validity of a measurement into question,” does not include the resulting effect of either to accept or reject the data. This paragraph continues “The data validation procedure presented in Section 10.0, herein, will be used to determine the overall completeness and validity of the data.” Section 10.0 does not include any procedures for determining data validity. The WAP must include the tier-level effects and the procedures for these determinations.

RESPONSE

IDEM concurs that the third level of completeness and acceptability, as described in Section 5.0, Appendix C-1 – QAPP, is missing “the resulting effect of either to accept or reject the data”. The Comment did not recommend a specific change in wording to the Appendix C-1 – QAPP. IDEM will request that Tradebe respond to Comment 51 and provide an update to the Appendix C-1 – QAPP as a compliance item to the RCRA Permit.

IDEM also concurs that Section 10.0, Appendix C-1 - QAPP “does not include any procedures for determining data validity.” Instead, Section 10.0 contains an outline of the quality control

deliverables evaluated for the PCBs, Solvent Scan, Metals, and BTU & Chlorine analyses performed at the Tradebe on-site laboratory. IDEM will request that Tradebe respond to Comment 51, revise references to Section 10.0 found in Section 5.0 as needed, and provide an update to the Appendix C-1 – QAPP as a compliance item to the RCRA Permit.

CHANGE

No changes to the WAP are needed. IDEM will require an update to the Appendix C-1 – QAPP as a compliance item to the RCRA Permit.

54. COMMENT

Section 6.0 Sampling Procedures: The permit and WAP do not specify sampling methods or provide SOPs for sampling. For example, it is not clear if samples are collected from different depths within a container or just the top and under what circumstances that is appropriate. The WAP should cite specific methods or SOPs and those should be available for review. See also comments on WAP Sections C-2c and C-2d above.

RESPONSE

Section C-2c, WAP, page 28 indicates that TRADEBE sampling SOPs are maintained on-site. This statement will be revised to specify that the sampling SOPs are available upon request. TRADEBE provided copies of several sampling and analysis SOPs (e.g., *Sampling Procedures* [dated 5/20/2022] and *Sampling Railcars, Tankers & Tanks* [dated 5/5/2010]) to IDEM as supplemental information; however, TRADEBE clarified that the submitted SOPs were not intended to become part of the RCRA Permit application. Therefore, the Comment was addressed during the RCRA Permit application review.

CHANGE

Section C-2c – Sampling Methods, WAP, page 28 revised to clarify that sampling SOPs “are available upon request.”

55. COMMENT

Section 7.0 Sample Control Procedures/Chain of Custody: The Chain of Custody should be signed, dated, and timed by the relinquisher and the receiver each time custody changes.

RESPONSE

Section 7.4 states that the Chain of Custody is “signed and dated by all persons who retain custody of the samples and it documents the sample identification number, sample description, date and time of sampling, name of the generator, sample location, and number of containers.” Therefore, the Comment is addressed in Appendix C-1 – QAPP.

CHANGE

None.

56. COMMENT

Section 8.0 Calibration Procedures and Frequency: This section describes calibration procedures “according to manufacturer’s specifications and appropriate analytical procedures”. This section should include reference to the appropriate method (e.g. SW-846 methods) and the facility’s analytical standard operating procedures. This section should include calibration procedures for all laboratory instruments and equipment, including analytical balances, graduated measuring devices, and volumetric measuring devices.

RESPONSE

The general descriptions of calibration procedures in Section 8.0 of the Appendix C-1 – QAPP are acceptable. IDEM concurs that ideally this section should include reference to the appropriate method (e.g. SW-846 methods) and the facility’s analytical standard operating procedures. As noted in above responses to WAP Comments, Section C-2b, WAP, page 26 states: “The SOPs which are based on these methods [listed on Table C-1 Test Methods] are available upon request.” For clarification, wording regarding SOPs from Section C-2b, WAP will be added to Section 9.0 – Analytical Protocol and Procedures in the Appendix C-1 – QAPP.

CHANGE

Wording regarding SOPs was added to Section 9.0, Appendix C-1 – QAPP.

57. COMMENT

Section 9.0 Analytical Protocol and Procedures: This section should list all the facility’s SOPs for sample collection, sample analysis and quality control.

RESPONSE

See responses regarding SOPs above.

CHANGE

Wording regarding SOPs was added to Section 9.0, Appendix C-1 – QAPP.

58. COMMENT

Section 9.0 Analytical Protocol and Procedures: This section describes the test protocol for reactive waste as “A waste is considered to be reactive if, upon addition of water, it reacts violently, forms potentially explosive mixture, or generates toxic fumes, vapors, or gases.” This describes only part of the regulation that defines reactive wastes. This procedure must include, among other appropriate criteria, “It is a cyanide or sulfur bearing waste which, when exposed to pH conditions between 2 and 12.5, can generate toxic gases, vapors or fumes in quantity sufficient to present a danger to human health or the environment” (40 C.F.R. § 261.23(a)(5)). The WAP’s example waste profile sheet does not call for generators to report if the waste is cyanide or sulfur bearing. The WAP must address the regulations for determining waste reactivity.

RESPONSE

IDEM concurs with adding the proposed text to Section 9.0, Appendix C-1 – QAPP for clarification. However, Section D of the Appendix C-5 – Waste Information Profile Sheet clearly provides space for generator to indicate reactive cyanide and reactive sulfide concentrations in ppm. Therefore, no additional change to the WAP or Waste Information Profile Sheet is needed.

CHANGE

Proposed text was added to Section 9.0, Appendix C-1 – QAPP for clarification.

59. COMMENT

Section 9.0, Table C-1 Test Methods: The WAP does not give an appropriate rationale for using the Karl Fischer Volumetric Moisture method in lieu of the Heat of Combustion method. This should be explained or the WAP should specify the later method.

RESPONSE

Section C-2a, WAP, page 9 shows that “Moisture content is obtained by using the Karl Fischer titration instrument. The value is used to estimate an associative BTU value based on the relationship between water and heat of combustion.” Footnotes to Figure 2a, WAP, pages 13 and 15 also state: “BTU value is established by either the Heat of Combustion method in Table C-1 (bomb calorimeter) or by calculation based on results from the Moisture Content method in Table C-1 (titration). The Heat of Combustion method is run in addition to the Moisture Content method when verification of the result from the moisture content method is needed.” Further explanation regarding use of the Karl Fischer method value to estimate an associative BTU value was not found in the WAP. Therefore, the Moisture Content method is used in tandem with (rather than in lieu of) the Heat of Combustion method for determining BTU value.

CHANGE

None.

60. COMMENT

Section 14.2 Accuracy: The WAP allows poor recovery of laboratory quality control samples on polychlorinated biphenyl (PCB) samples undergoing florisil cleanup. Sample extraction and cleanup procedures should not allow quality out of control. The extractions and cleanup methods should be included in proper quality control limits.

RESPONSE

IDEM concurs that the description for PCB analysis in Section 14.2, Appendix C-1 – QAPP suggests that when qualitative PCB screening is performed initially on incoming waste AND a florisil cleanup step is part of the qualitative PCB screening, Tradebe may accept surrogate recoveries outside the standard 80% to 120% acceptance criteria. However, as explained in Section 14.2 and shown on the flow chart in Appendix C-9 – When PCBs are Detected, detection of PCBs in waste during qualitative PCB screening triggers a quantitative PCB analysis which does not include a florisil cleanup step. Tradebe explained further that the broader acceptance criteria for surrogate recovery in the qualitative PCB screening “will not impact Tradebe’s classification of the waste.”

IDEM will request that Tradebe respond to Comment 58, revise wording in Section 14.2 if needed to match up with current PCB analysis procedures at the on-site laboratory, and provide an update to the Appendix C-1 – QAPP as a compliance item to the RCRA Permit.

CHANGE

No changes to the WAP are needed. IDEM will require an update to the Appendix C-1 – QAPP as a compliance item to the RCRA Permit.

61. COMMENT

Table C-3 Inventory of Major Laboratory Equipment: This table lists both quantity “three” and quantity “5” number of calorimeters. This should be corrected. There is also a side comment in the pdf document about adding a hexavalent chromium instrument. This should be corrected.

RESPONSE

IDEM concurs.

CHANGE

Requested changes were made to Table C-3, Appendix C-1 – QAPP.

62. COMMENT

Appendix C-2, Solvent Scan Test Method:

Section 5.2 External Standard Calibration Procedures: This section describes the method detection limit from 200 parts per million (ppm) to 10,000 ppm. However, the three-point linear calibration range is from 2,500 ppm to 10,000 ppm. This discrepancy needs to be addressed.

RESPONSE

IDEM concurs that there is a potential discrepancy between the Method Detection Limit range described in Section 2.3 and the 3-point calibration curve described in Section 5.2 of Appendix C-2 – Solvent Scan Test Method. IDEM will request Tradebe to respond to Comment 60, revise wording in Section 2.3 and Section 5.2 if needed, and provide an update to the Appendix C-2 – Solvent Scan Test Method as a compliance item to the RCRA Permit.

CHANGE

IDEM will require that Tradebe provide an update to the Appendix C-2 – Solvent Scan Test Method as a compliance item to the RCRA Permit.

63. COMMENT

Appendix C-3, Lab Pack Waste Characterization:

Section C-2 of the WAP states that lab packs will only be visually examined to ensure consistency with the profile and manifest since they do not undergo treatment or processing at Tradebe; however, the Blending Program section of the WAP also states that lab pack chemicals may be utilized for blending. The WAP goes on to state, “Lab Pack chemicals entering into the blending

program are hazardous waste consisting of pure organic or commercial chemical products known to have high heat value based on chemical composition.” The Lab Pack section of the WAP must be updated to reflect how and when Tradebe will determine if a lab pack will be used for fuels blending. The draft permit should be updated to reflect how lab packs destined for fuels blending will be stored.

RESPONSE

Section C-2, WAP, page 7 states that “Shipments/containers that do not undergo treatment or processing at TRADEBE [i.e., transshipped, drum in and drum out (DIDO)] will only be visually examined to ensure consistency with the profile and manifest” and that “this includes miscellaneous and lab pack waste materials.” However, this does not imply that all miscellaneous and lab pack waste materials are transshipped, DIDO, as suggested in the Comment. As explained in Appendix C-3 – Lab Pack Waste Characterization, Tradebe conducts the lab pack program “with a system of Management Practices and Controls.” Some lab pack waste is utilized in Tradebe’s on-site blending program and undergoes the analytical screening process which includes compatibility analyses. As stated in Appendix C-3, page 8 of 9: “Waste types that are not amenable to Tradebe’s blend program will be treated in an alternate treatment program or shipped off-site to an approved facility.”

Section C-2, WAP, page 7 also states that “Procedures for handling lab pack and miscellaneous wastes are provided in Appendices C-3 and C-8, respectively.” Since Appendix C-3 explains “how and when Tradebe will determine if a lab pack will be used for fuels blending” and the WAP refers to Appendix C-3 regarding handling of lab pack wastes, the WAP does not need to be updated as expressed in the Comment.

The summary description in Appendix C-3, page 8 of 9 regarding lab pack waste movement and storage in the facility also addresses the Comment concern over how lab packs destined for fuels blending will be stored. Therefore, the Comment’s requested update to the draft Permit is not needed.

CHANGE

None.

64. COMMENT

Appendix C-8, Miscellaneous Waste:

Attachment C, Waste Analysis Plan, Appendix C-8 Miscellaneous Waste contains exemptions from sampling that are overly broad and/or unwarranted. For all such potential exemptions, the WAP should require the collection of generator (acceptable- or process-) knowledge consistent with the 2015 WAP Guidance, including but not limited to process knowledge whereby detailed information on the waste is obtained from existing published or documented waste analysis data or studies conducted on hazardous wastes generated by processes similar to that which generated the waste, incidents of human injury or environmental damage attributed to the waste, data on waste composition or properties from analysis or relevant testing performed by the generator, information on the properties of waste constituents, or, in cases of newly listed wastes, data from recent waste analysis performed prior to the effective date of the listing (pages 1-15). Further, generators now have specific requirements to document and keep records on their waste determinations at 40

C.F.R. § 262.11(f) (329 IAC 3.1-7-1). These regulations now describe types of knowledge that can form the basis for the waste determination and require that information to be: sufficient to make the determination; accurate; and maintained as part of recordkeeping for 3 years (since last sent off-site). The following information can form the basis for generator knowledge: process knowledge, information about chemical feedstocks and other inputs to the process, knowledge of the products, by-products, and intermediates produced by the manufacturing process, chemical and physical characterization, information on chemical and physical properties of chemicals used, produced, or contained in the waste, testing that illustrates waste properties, and other reliable and relevant information (i.e., verifiable). The WAP must require that this information be obtained, especially for any waste subject to a sampling exemption.

Exemption c. *Commercial chemical products (ccp): off-specification, outdated, unused, contaminated, or banned* should not apply to those wastes that are not packaged in numerous small containers or are unknowns. Bulk shipments of CCP generally pose no challenge to sampling methods.

Exemption d. *Lab Packs*. The 2015 WAP Guidance recommends that acceptance screening of lab packs could use a visual inspection of the lab pack contents, packing materials, and review of the container inventory in place of sampling and fingerprinting of the contents. The WAP should include the visual inspection of the lab pack contents.

Exemption f. *Chemical-containing equipment removed from service*. The WAP should remove the “etc.” from the list of examples and limit the exemption and explicitly list the items covered. Also, the 2015 WAP Guidance (pages 1-20) also states that such devices could be sampled using wipe samples or by procuring a chip of a coating or residue.

Exemption g. *Waste Produced from the demolition or dismantling of industrial process equipment or facilities contaminated with chemicals from the process destined for off-site treatment*. As noted in response to Exemption f., such materials could be sampled using wipe samples or by procuring a chip of a coating or residue.

Exemption h. *Controlled substances*. Add “as defined in 21 C.F.R. Part 1308” immediately after “controlled substances.”

Exemption i. *Materials designated for storage and subsequent transshipment off-site*. While these wastes may not be “processed”, they are placed into long-term storage. Waste physical and chemical properties directly affect the appropriate treatment, storage, and disposal methods. Even waste storage location and methods hinge upon whether the waste exhibits the properties expected (e.g. the presence of free liquids, incompatible properties, ignitibility, reactivity, among others). This exemption is too broad. Mercury wastes (No. 9) and cyanide wastes (No. 10), reactive sulfides (No. 12) are commonly sampled as RCRA-permitted facilities and should not be exempted.

Exemption j. *Waste from a remedial project*. Chemical wastes such as those that may be generated at a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) emergency-response or time-critical removal action should be subject to the same sampling and fingerprinting procedure required in the WAP. To rely on sampling and analysis plans approved by a federal or state agency for some pre-acceptance analysis for contaminated media (soil, water, etc.), the sampling and analysis plans should include data quality objectives for waste determination and characterization.

Exemption k. *Debris as defined at 40 C.F.R. 268.2*. If acceptable (generator- or process-) knowledge, including that developed by the generator in accordance with 40 C.F.R. § 262.11, is lacking, debris should be sampled and fingerprinted to the extent practical. As noted in response to Exemption f., such materials could be sampled using wipe samples or by procuring a chip of a coating or residue.

RESPONSE

See IDEM response above regarding general concerns that WAP must require Tradebe to obtain acceptable waste determination information, and document and maintain the waste determination information “as part of recordkeeping for 3 years (since last sent off-site).” Concerns regarding specific exemptions cited in Appendix C-8 – Miscellaneous Waste are discussed below.

For Exemption c. Commercial chemical products, Appendix C-8, page 4 of 9 clearly states that “Bulk container shipments of virgin, off-specification, outdated, obsolete, unsalable, or unusable commercial products will also be sampled in accordance with Attachment C” and therefore, addresses the Comment concern regarding this exemption.

For Exemption d. Lab Packs, the Attachment C – WAP specifies “a visual inspection to check consistency of the shipment with the manifest (e.g., container count, proper labeling, etc.), and the integrity of the shipment” in Section C-2, pages 6 and 7. Also, Appendix C-3 – Lab Pack Characterization, page 8 of 9 states: “Visual inspection is performed during and after the depacking process to determine whether the packing material is contaminated or non-contaminated.” Therefore, the WAP addresses the Comment regarding this exemption.

IDEM concurs that for Exemption f. Chemical-containing equipment removed from service, the “etc.” should be removed from the list of examples and Tradebe must explicitly list the items covered by this exemption. However, on-site sampling and analysis of the listed items – cathode ray tubes, batteries, and fluorescent light tubes – is not needed.

For Exemption g. Waste produced from the demolition or dismantling of industrial process equipment or facilities contaminated with chemicals from the process destined for off-site treatment, no on-site sampling and analysis is needed based on the list of seven items checked on-site for this waste category. Sampling and analysis may be needed at the off-site treatment facility depending on the requirements specific to the off-site facility.

IDEM concurs to add “as defined in 21 CFR Part 1308” immediately after “controlled substances” for Exemption h. Controlled substances.

IDEM previously addressed Exemption i issues above. Materials designated for storage and subsequent transshipment off-site. For the twelve items listed for this waste category, IDEM concurs with the Comment statement that mercury wastes (No. 9), cyanide wastes (No. 10), and reactive sulfides (No. 12) are commonly sampled at RCRA-permitted facilities. However, sampling and analysis of such wastes will occur off-site, the results summarized and documented on the Waste Information Profile Sheet, and all waste stream information will be maintained in paper or electronic format with the data uploaded into Tradebe’s electronic database as described in the Attachment C – WAP.

IDEM concurs that clarification is needed regarding Exemption j. Waste from a remedial project. Therefore, IDEM will request that Tradebe respond to this specific exemption item in Comment 62,

revise the wording in Appendix C-8 to explain why an exemption from “typical sampling protocol” as described in Attachment C -WAP is needed for this waste category, and provide an updated/revise Appendix C-8 as a compliance item to the RCRA Permit.

For Exemption k. Debris as defined at 40 CFR 268.2, no on-site sampling and analysis is needed based on the list of seven items checked on-site for this waste category. Sampling and analysis may be needed at the off-site treatment/disposal facility depending on the requirements specific to the off-site facility.

CHANGE

In Appendix C-8 - Miscellaneous Waste, on page 5 of 9 the “etc.” was removed from the list of examples for Exemption f.

A compliance schedule item has been added for the facility to address Exemption j, waste from a remedial project, and submit an updated/revise Appendix C-8 – Miscellaneous Waste for the RCRA Permit.

65. COMMENT

Appendix C-9, When PCBs are Detected:

Each of the two PCB certification forms in this appendix has a certification statement to check if applicable that states the following: “The containers of waste were generated from multiple sources, therefore only containers that contain PCBs greater or equal to 50 ppm are TSCA regulated.” The wording for this certification statement is incorrect. Because the containers have waste generated from multiple sources, any detection of PCBs will be the result of a dilution and in violation of the PCB anti-dilution regulation at 40 C.F.R. § 761.1(b)(5). Therefore, any detection of PCBs in these containers must be considered TSCA regulated if not proven otherwise. Revise this statement in the PCB certification forms to “The containers of waste were generated from multiple sources. Therefore, all the containers generated from multiple sources will be managed as TSCA waste regardless of the PCB value.”

RESPONSE

The comment requests specific changes to forms created and utilized by Tradebe. Therefore, Tradebe will be requested to respond to Comment 63, revise/update as needed the forms in Appendix C-9 – When PCBs are Detected, and submit the revised Appendix C-9 as a compliance item for the RCRA Permit.

CHANGE

IDEM will require Tradebe to submit a revised Appendix C-9 – When PCBs are Detected as a compliance item for the RCRA Permit.

66. COMMENT

40 C.F.R. § 264.13(b)(5) (329 IAC 3.1-9-1) requires that a WAP “must specify . . .the waste analyses that hazardous waste generators have agreed to supply.” The statement at C-1, *Chemical and Physical Analysis*, of the WAP that the waste “profile can take any form as long as it provides the analytical information for TRADEBE to properly . . .” is not specific enough to meet the

requirement. The information required on an alternate profile sheet should be specified in a detailed list within the WAP or identified on the Profile Sheet as mandatory for all profiles, whether they use the form in the WAP or another form.

Furthermore, the provided profile form is technically deficient when referring to waste information needed at the point of generation. 40 C.F.R. § 262.11(a) (329 IAC 3.1-7-1) is explicit that waste determinations must be made at the point of generation “before any dilution, mixing, or other alteration of the waste occurs.” The profile provided in Appendix C-5 fails to provide a clear line item actively affirming the information is representative of the waste at the point of generation. It is not clear that this requirement is specifically applied to brokers of waste who may have mixed wastes after the point of generation and prior to sending waste to the facility. The WAP refers to a “Broker Agreement” in Appendix C-5. However, none was provided other than to require an authorization form if the broker, or agent, will be signing on behalf of the generator. That authorization form was also not provided.

The WAP and Profile form in Appendix C-5 must be revised to clearly define the information that generators have agreed to supply and require all such information be submitted. The information obtained, whether on a profile form or otherwise, must include waste determination information from generators provided for by 40 C.F.R. 262.11, must be attested to be representative of the waste at the original point of waste generation, and waste brokers must be held to the same requirements. The issuance of the final hazardous waste management permit without including conditions that specify required information would be inconsistent with the authorized program.

RESPONSE

IDEM concurs that the phrase “The profile can take any form” in Section C-1, WAP, page 2 is not specific enough. However, the statement “TRADEBE will obtain a TRADEBE’s Generator Waste Profile Sheet or equivalent (profile) for a waste stream” in Section C-1, WAP, page 2 is sufficient. Also, the following statement in Section C-2, WAP, page 9, further indicates that waste stream information on TRADEBE’s Generator Waste Profile Sheet or equivalent will be obtained: “Documentation of waste stream information is completed on the waste profile form provided in Appendix C-5 and may be maintained in paper or electronic format, as described under Sections C-1 and C-2.”

The Comment is correct that Tradebe’s “Broker Agreement” form was not included in the WAP. However, Tradebe provided a copy of a form titled *Generator Authorization for a Third Party to Act as the Authorized Agent in the Management of Hazardous & Non-Hazardous Waste* (dated November 23, 2020) to IDEM during the process of reviewing the RCRA Permit Renewal Application. Tradebe later explained that the “Broker Agreement” form was not intended to become part of the RCRA Permit application.

CHANGE

The phrase “The profile can take any form” was removed in Section C-1, WAP, page 2. The reference to TRADEBE’S Broker Agreement was not removed because the Broker Agreement does not impact the waste determination information at the point of generation required for the waste profile as specified in the WAP.

67. COMMENT

40 C.F.R. § 264.13(b)(4) (329 IAC 3.1-9-1) requires that a WAP must specify “[t]he frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up to date.” The WAP at C-2a, *Parameters and Rationale* fails to specify a frequency (“periodically review” is not an actual frequency). A frequency must be specified, and EPA recommends all waste streams should be reevaluated at least annually. Unless this condition is addressed, the WAP must add “(3) When a year has passed since the last analysis” to the list of minimum criterion for repeating analysis at C-2d of the WAP or the permit must specify an annual reevaluation requirement. The issuance of the final hazardous waste management permit without including conditions that specify the waste reevaluation frequency would be inconsistent with the authorized program.

RESPONSE

IDEM concurs that the “frequency with which the initial analysis of the waste will be reviewed or repeated to ensure that the analysis is accurate and up to date” requires clarification in the WAP. However, the annual reevaluation requirement described in the Comment does not match up with requirements approved for other similar Indiana facilities. A two-year period for reevaluation is typical. Therefore, Section C-2d, WAP, page 31 will be revised to include a minimum two-year reevaluation requirement.

CHANGE

Attachment C – WAP, Section C-2d, page 31 was revised to include: “(3) Two (2) years have passed since the last analytical testing.”

68. COMMENT

Tradebe’s Waste Analysis Plan is deficient and should be improved.

The Waste Analysis Plan (Attachment C) would provide Tradebe with broad discretion in its waste sampling, characterization, and acceptance procedures and would fail to address the range of hazardous materials Tradebe handles. Tradebe has even made several changes to the Waste Analysis Plan in its existing permit to broaden its discretion, changes that have no basis in law. The table below outlines two examples of these changes.

Existing Permit 2017.04.28 – Att. C - VFC No. 80470477	Draft Permit 2024.08.09 – Att. C - VFC No. 83679601
“[T]he Land Disposal Restriction Document(s) may be submitted with the Generator's first shipment. Once the profile sheet has been completed and returned, it will be 1 reviewed by qualified personnel to make a preliminary determination as to whether the material is acceptable for TRADEBE handling or if it must be managed at another approved facility.” (Page 5)	“The Land Disposal Restriction Document(s) may also be submitted with the Generator's first shipment. The TRADEBE contact person will also gather analytical data and process information from the generator if available. Once the profile sheet has been completed and returned, it will be reviewed by qualified Tradebe personnel to make a preliminary determination as to whether the material is

	acceptable for TRADEBE handling or if it must be managed at another approved facility.” (Page 6).
“A sample of the incoming waste will be taken in accordance with this WAP, and incoming trucks may be released prior to completion of analysis, but only after verifying the accuracy and adequacy of the manifest.” Page 2.	“A sample of the incoming waste can be taken in accordance with this WAP, and incoming trucks may be released prior to completion of analysis, but only after verifying the accuracy and adequacy of the manifest.” Page 3.

A. Incoming waste should be accompanied by generator data.

Tradebe’s draft permit includes an additional qualifier clause regarding generator data requirements, which is not in the current permit: “The Land Disposal Restriction Document(s) may also be submitted with the Generator’s first shipment. **The TRADEBE contact person will also gather analytical data and process information from the generator if available.** Once the profile sheet has been completed and returned, it will be reviewed by qualified Tradebe personnel to make a preliminary determination as to whether the material is acceptable for TRADEBE handling or if it must be managed at another approved facility.”

Tradebe does not provide a basis for including the emphasized caveat, which gives Tradebe the option to accept incoming waste without generator data. Tradebe’s Waste Analysis Plan must be modified to reflect its commitment to require generator data for all incoming waste. At a minimum, Tradebe must delete this caveat from its Waste Action Plan

B. Incoming waste must be samples.

Tradebe’s current permit stipulates that samples of all incoming waste must be taken for analysis. “A sample of the incoming waste **will be** taken in accordance with this WAP, and incoming trucks may be released prior to completion of analysis, but only after verifying the accuracy and adequacy of the manifest.” In its draft application, Tradebe changes this language to “[a] sample of the incoming waste **can be** taken in accordance with this WAP, and incoming trucks may be released prior to completion of analysis, but only after verifying the accuracy and adequacy of the manifest.” Tradebe does not provide a basis for making this change, which transitions the statement from a mandate to an option.

The relevant RCRA provision for sampling incoming waste is 40 CFR 264.13, which Tradebe cites in Waste Analysis Plan. The provision stipulates that “[b]efore an owner or operator treats, stores, or disposes of any hazardous wastes, or nonhazardous wastes if applicable under § 264.113(d), **he must obtain a detailed chemical and physical analysis of a representative sample of the wastes.**” 40 CFR 264.13(a)(1) (emphasis added). Tradebe’s Waste Analysis Plan must be modified

to reflect the requirements of 40 CFR 264.13(a)(1). At a minimum, Tradebe must revert its “can be taken” language back to its “will be taken” language.

C. The Pre-Acceptance Test Parameters contain significant gaps.

The Waste Analysis Plan must specify “[t]he parameters for which each hazardous waste...will be analyzed.” These parameters must provide sufficient information to facilitate, “[a]t a minimum,” compliance with both general requirements for TSDFs, and requirements for land disposal. Tradebe’s list of parameters omits dioxins, a serious oversight considering their designation as acute hazardous wastes and the special requirements for their management, both generally and

at Tradebe.¹⁴⁹ Additionally, we urge Tradebe to update the parameters to include fluorinated compounds like PFOA/PFAS and related compounds.

D. The Waste Analysis Plan should not allow broad discretion to accept and/or recharacterize material that deviates from expectations.

The Waste Analysis Plan places responsibility on Tradebe management to determine whether incoming waste material is acceptable without any clear guidance. For instance:

Representative samples of the initial shipment are then subjected to pre-acceptance chemical analysis described in Section C-2a of the WAP based on the prescribed processing method. ***If the results deviate from the expected variation of material to be received, the data will be reviewed by management to determine if the material is acceptable***, requires additional sampling and analysis, or must be rejected. If the entire shipment, or a portion thereof, is not acceptable, TRADEBE will reject the shipment, or a portion thereof, in conformance with Indiana Code 13-22-5-1, et seq, 40 CFR 264.72. ***If the sample results are within the expected variation for that material, the material is deemed acceptable for this and future shipments of this waste stream.*** In addition, when discrepancies are observed as a result of pre-acceptance or fingerprint testing, ***in lieu of rejecting the shipment, the facility may recharacterize the material and generate a new waste profile.***

The Waste Analysis Plan does not clearly explain the extent to which “expected variation” is deemed acceptable by “management.” The vague language is subjective and may allow Tradebe to accept any and all wastes arriving at the facility, regardless of whether it is consistent with the generator’s waste profiles (which is not required to be provided, as discussed above). Further, Section C-2 states that if discrepancies are observed, Tradebe itself will recharacterize the waste instead of rejecting the waste. This is unacceptable. Collectively, these provisions of the Waste Analysis Plan means that Tradebe is empowered to accept or reject any wastes arriving at the facility because the Waste Acceptance Plan contains these fatal loopholes.

RESPONSE

IDEM has partially addressed the general comment that “Tradebe’s Waste Analysis Plan is deficient and should be improved.” IDEM has revised the Attachment C – WAP in the draft RCRA Permit in response to other comments received. IDEM has also required Tradebe to respond to select comments and submit revised/updated Appendices C-1, C-2, C-6, C-8, and C-9 as compliance items to the final RCRA Permit. IDEM responses to the four more specific items follow:

A. The Comment expresses concern regarding a change made to the existing (April 2017) RCRA Permit as noted in Attachment C – WAP, Section C-2, page 6: “The TRADEBE contact person will also gather analytical data and process information from the generator if available.” The specific concern is that this change to the WAP “gives Tradebe the option to accept incoming waste without generator data.” IDEM addressed this concern in response to Comment 22 and concluded that the revised Appendix C-5 (Waste Information Profile Sheet) – required as generator data in the WAP - is an acceptable summary of each required waste determination. Additional analytical data provided by the generator or gathered by the TRADEBE contact person supplements the waste information summarized on the Profile Sheet. Also, as explained in Section C-3b of the WAP, all waste information collected by Tradebe is uploaded into an electronic database and available for review.

B. The Comment also expressed concern regarding a wording change to Section C-1, WAP, page 3. IDEM considers the change from “A sample of the incoming waste will be taken in accordance with this WAP” to “A sample of the incoming waste can be taken in accordance with this WAP” acceptable. As explained in the WAP, specific wastes received and stored at Tradebe are not sampled on-site.

C. The Comment correctly notes that analysis methods for dioxins and per- and polyfluoroalkyl substances (PFAS) are not shown on Table C-1 – Test Methods, Section C-2b, WAP, pages 26-27. The Appendix C-5 – Waste Information Profile Sheet includes check boxes for the generator to indicate whether the waste contains dioxins or PFAS. IDEM will require adding methods for dioxins and PFAS to Table C-1 in the WAP and to a similar table in Appendix C-1 – QAPP. Methods for PFAS analysis of waste will be added similarly when requirements are finalized.

D. IDEM does not agree with the Comment statement “Tradebe is empowered to accept or reject any wastes arriving at the facility” due to loopholes in the wording of the WAP. As indicated above, IDEM revised the Attachment C – WAP in response to other comments received and also required Tradebe to respond to select comments and submit revised/updated Appendices C-1, C-2, C-6, C-8, and C-9 as compliance items to the final RCRA Permit. The intent of these revisions is to provide clarification to the procedures Tradebe follows when evaluating wastes arriving at the facility and not to provide loopholes for Tradebe to avoid 40 CFR 264 requirements.

CHANGE

IDEM will require adding methods for dioxins to Table C-1 in the WAP and to a similar table in Appendix C-1 – QAPP as compliance items to the final RCRA Permit. Methods for PFAS analysis of waste will be added similarly when requirements are finalized. Other changes to the WAP are not needed in response to the Comment.

69. COMMENT

Tradebe’s Quality Assurance Plan (Appendix C-1 to Attachment C) is not in a Condition for Approval. Appendix C-1 to Attachment C, describing Tradebe’s Quality Assurance Project Plan (QAPP) Program appears to be a draft document that has not been finalized. For instance, it still includes editorial comments, such as “Add ‘(July 2024)’?” and “Also, Tradebe may add Hach analysis kit for hexavalent chromium 8023.” Tradebe should not be granted a permit renewal at least until Appendix C-1 is finalized and all outstanding comments are addressed.

RESPONSE

IDEM concurs. The editorial comments were not intended to be included in the final text of the Appendix C-1 - Quality Assurance Project Plan (QAPP).

CHANGE

The editorial comments were removed along with other revisions noted above to the Appendix C-1 – QAPP.

ATTACHMENT D - PROCESS INFORMATION

70. COMMENT

D-1a(2), Container Management Practices:

The last paragraph of Section D-1(a)(2) states “[r]egarding reactive materials, incoming materials that are listed on the incoming paperwork as being stabilized or are not listed on the incoming paperwork at all and are considered a reactive material may be stabilized on-site at TRADEBE. The material’s characteristics and traits will determine how it will be handled.” Attachment B, Table B-II, Summary of Hazardous Waste Management in Containers or Tanks, identifies “Deactivation” processes for D001, D002, and D003 wastes. The activity does not include stabilization. The permit and Attachment D should describe this stabilization process for reactive materials if it is different than “deactivation” with appropriate regulatory and technical analysis and controls specified. If “stabilization” in this context is meant to refer to “deactivation,” the language should be clarified, and the correct term used to describe any treatment of reactive wastes.

RESPONSE

IDEM concurs.

CHANGE

The aforementioned language was removed from Section D-1a(2).

71. COMMENT

D-1a(3), Secondary Containment System Design and Operation:

This section states that Sump 5 is to be inspected quarterly (3 inspection ports on cover over sump). Container areas, including containment structures, are to be inspected at least weekly in accordance with 40 C.F.R. § 264.174. Attachment F, Procedures to Prevent Hazards, Table VIII-I Inspection Schedule indicates daily inspections for sumps and daily and weekly inspections for container areas depending on what is being inspected. Please correct Attachment D or the table in Attachment F to reflect the appropriate inspection schedule that is to be followed by the facility.

RESPONSE

Sump 5 will be inspected daily and weekly for the normal items (e.g., liquids, staining, deterioration) of what can visually be seen from the above but may be limited since it's a confined space. A more detailed inspection will occur quarterly involving entry into this confined space.

CHANGE

The existing forms were not modified, but the quarterly inspection sheet for Sump 5 was included in Attachment F. The final permit includes daily inspection sheets for Area 12 and the weekly inspection sheets for the CSAs containing liquids. A quarterly inspection sheet for Area 12 is also added.

72. COMMENT

D-2a(4), Ignitable, Reactive, and Incompatible Wastes:

The section under Special Requirements for Incompatible Wastes states that incompatible wastes will be "stabilized." Stabilization as a treatment process is specifically defined in RCRA as a process meant for treating metals or inorganics to reduce leaching. Using it here for treating incompatibles is confusing as elsewhere, the permit states that the facility will not be doing stabilization. The permit should be revised to use the term stabilization consistent with RCRA to avoid confusion.

RESPONSE

Tradebe indicated after the last submittal that they will not be stabilizing any waste at the facility. The language will be removed. Additionally, please see response to comment 5.

CHANGE

The following was modified in Section D-2a(4):

"Incompatible wastes will not be co-processed ~~or sequentially stabilized~~ until the previous waste has been removed."

The deletion of the following paragraph:

~~"The appropriate reagent (which may be waste) and the waste to reagent mix for each type of waste to be stabilized will be determined according to the procedures specified in TRADEBE's Waste Analysis Plan, Attachment C, prior to any actual full scale stabilization. The compatibility of each waste will be determined in accordance with the Waste Analysis Plan before a batch is treated. Only wastes with similar waste to reagent mix ratios shall be stabilized at any one time. The temperature will be measured after the initial mixing has begun, then during the approximate midpoint of mixing and again when mixing is completed."~~

73. COMMENT

D-1b(1), Test for Free Liquids:

This Section states that the method to be used to test for free liquids is in the WAP (Attachment C) “or other documentation or information to show that the wastes do not contain free liquids.” The “other documentation or information” should be described and provided for in the WAP. Further, a test for free liquids should be included in acceptance (fingerprint) screening.

RESPONSE

The aforementioned language is deleted.

CHANGE

Section D-1b(1) is changed to the following:

“TRADEBE shall either use test procedures and results from Attachment C ~~or other documentation or information~~ to show that the wastes do not contain free liquids.”

74. COMMENT

D-2a(2), Description of Feed Systems, Safety Cut-off, Bypass Systems and Pressure Controls: Numerous references are made to “grinders” seemingly in the context of “equipment” like pumps and valves. The permit should address why the grinders are not being treated as Subpart X units.

RESPONSE

The grinders referred in this section are grinder pumps. These units are pumps with an integral grinding unit to be able to pump materials and are considered ancillary equipment.

CHANGE

None.

75. COMMENT

D-2f, RCRA Air Emissions Controls:

Section D-2f of Attachment D states “Tradebe is electing to demonstrate compliance with 264 Subpart BB inspection requirements by use of 40 C.F.R. 63 Subpart DD emission controls for equipment leaks, allowed at 40 C.F.R. § 264.1064(m).” The permit should state that Subpart BB requirements are still enforceable under the RCRA permit, even if the facility elects to show compliance with Subpart BB through CAA documentation (See October 2019 EPA publication, 530-R-19-006, *Implementing The RCRA/CAA Air Emission Controls Compliance Exemption/Election Provisions Through RCRA Permits*).

RESPONSE

See the response to General Comment #3.

CHANGE

Attachment D, Section D-2f, the following language was added, "(Note: Subpart BB requirements are still enforceable under the RCRA permit, even if the facility elects to show compliance with Subpart BB through CAA documentation.)"

76. COMMENT

40 C.F.R. § 264.174 (329 IAC 3.1-9-1) requires that container areas, including containment structures, are to be inspected at least weekly. Attachment D, Process Information, D-1a(3) *Secondary Containment System Design and Operation, Additional Details on Proposed Area 12* states that Sump 5 is to be inspected quarterly (3 inspection ports on cover over sump). Attachment F, Procedures to Prevent Hazards, Table VIII-I Inspection Schedule indicates daily inspections for sumps and daily and weekly inspections for container areas depending on what is being inspected. Please correct Attachment D and the table in Attachment F to reflect the appropriate inspection schedule for this containment structure, at least weekly per 40 C.F.R. § 264.174. Unless addressed, the inspection of containment systems must be conducted at least weekly. The issuance of the final hazardous waste management permit without including conditions that provide for the correct inspection schedule would be inconsistent with the authorized program.

RESPONSE

See Response to Comment 71.

CHANGE

None

77. COMMENT

IDEM should not allow Tradebe to build out its physical storage and processing capacity in excess of the volume of wastes it is permitted to process without robust, enforceable measures to ensure Tradebe does not unlawfully utilize this excess capacity.

The Draft Permit would authorize Tradebe to construct hazardous waste storage areas that will give the facility a physical capacity in extreme excess of amount of hazardous waste allowed on site. The Draft Permit would impose virtually no controls to ensure Tradebe does not exceed its allowed volume of hazardous waste. Tradebe's record of conduct, particularly its lack of adherence to limits on its containerized waste inventory, make us doubt that Tradebe will adhere to its allowed volume. Authorizing Tradebe to expand its facilities so far beyond its allowed volume, especially in the absence of robust external controls, invites the excessive and unpermitted accumulation of hazardous waste.

The Draft Permit differentiates between the capacity of the infrastructure authorized for hazardous waste storage and the total volume of waste that Tradebe may store at one time. It would authorize Tradebe to store 1,138,170 gallons of hazardous waste on-site at any given time. However, it would also authorize Tradebe to build a total of 3,305,830 gallons of hazardous waste storage capacity, a 1,426,370-gallon increase over its current capacity, as shown in the table below.

	Draft Permit (Post-Expansion)	Increase Over Current Permit
Permitted Infrastructure Capacity	3,305,830 gallons	1,426,370 gallons
Total Volume Allowed in Storage	1,138,170 gallons	381,920 gallons

Thus, the Draft Permit envisions Tradebe will refrain from using 1,879,460 gallons of available space at its facility. The facility Process Information optimistically states that the extra space will facilitate “movement, storage, and treatment of materials within the facility,” but “total facility-wide container storage [will not] exceed the permitted capacities for total and liquid containerized waste.” As the primary check on the total volume of waste, the Draft Permit would rely on Tradebe’s operating record, in which Tradebe must document “a description, location and quantity of each hazardous waste received, and the method(s) and date(s) of its treatment, storage or disposal.”

This plan strikes us as unrealistic given Tradebe’s pattern of conduct. Tradebe has continually flouted limits on the allowable inventory of containerized wastes. As shown in the tables in Section III above, in the past five years, IDEM and USEPA have identified approximately 700 instances of Tradebe storing liquid waste in solids-only areas; over 80 instances of Tradebe storing materials in excess of applicable time limits; and over 20 instances of Tradebe crowding the aisles of container storage areas. As recently as June 2024, IDEM inspectors documented that “[a]t least 30 containers holding hazardous waste liquids were observed stored in CSA 7 North Apron,” an area permitted for solids only. Furthermore, Tradebe has repeatedly failed to maintain accurate documentation of the wastes on site. As recently as February 2024, IDEM staff found that “Tradebe failed to provide an accurate count of all of the containers at the facility[,]” understating the count by at least hundreds of containers (over 15,000 gallons).

Tradebe has provided us with no reason to believe it will reverse course and respect the permit conditions that govern its allowable inventory of hazardous waste and require it to keep careful track of the waste on site. Tradebe’s disregard for these requirements could lead to excessive accumulation on site without IDEM’s knowledge. It could render Tradebe’s closure plan and cost estimate for closure inaccurate. It could impair the ability of the Emergency Coordinator to assess “the possible hazards to human health and/or the environment that may result from a release, fire, or explosion[.]”

Despite the importance that Tradebe observe limits on the allowable volume of hazardous waste on site, and the history of noncompliance with these types of permit conditions, the Draft Permit relies on Tradebe’s conscientiousness and lacks any robust oversight or enforcement mechanism. We note that the facility Process Information contains no provision to requiring Tradebe to conduct inspections to verify the accuracy of the operating record, but believe such a measure could not suffice, given Tradebe’s pattern of violations.

We therefore respectfully urge IDEM to:

- (a) Amend the permit to require a regular, unannounced third party audit of the facility to assess the amount of hazardous waste on site.
- (b) Commit to conducting frequent inspections to review Tradebe’s compliance with the

permit's limits on hazardous waste volume.

- (c) Delcine to permit areas for hazardous waste storage beyond Tradebe's total allowable volume if the above two measures prove infeasible.

RESPONSE

This facility (Tradebe and Pollution Control Industries) has been permitted to operate with a permitted capacity less than the sum of the permitted capacity of all of the container storage areas since 1996. This requires the facility to monitor the storage volume of hazardous wastes in all of the container storage areas (CSA) to determine that they are not exceeding their permitted capacities of the individual areas and the plant capacity since they have excess capacity in the container storage areas. In addition to offsite hazardous wastes, Tradebe also stores non-hazardous wastes (i.e., solid waste regulated by 329 IAC 11) and their own generated wastes (e.g., hazardous waste and non-hazardous waste) in these container storage areas.

Most of the increase in the storage of liquid waste in containers is due to the addition of Area 12. The permitted volume for the storage of liquids in containers is increasing by 362,120 gallons (Area 12 total volume) from 388,025 gallons to 750,145 gallons.

Most of the volume for CSA are for the storage of solid only areas. With this permit renewal and modification, several of the existing CSA are being modified. Several are being renamed, increased or reduced in size and several new areas are being permitted. Many of these are outdoor areas, so there is not a physical structure for most of these areas.

The following are direct response to the comment:

- a) IDEM cannot require regular, unannounced third party audits of the facility as part of the permit. This may be something that could be in an Agreed Order to resolve some of the outstanding issues at the facility but couldn't be a condition in the permit as there are no regulatory requirements for this to occur.
- b) IDEM currently performs quarterly hazardous waste inspections at Tradebe per year. The volume of wastes in containers is evaluated during these inspections. IDEM Compliance Inspectors perform these inspections, and Tradebe does normally receive more hazardous waste inspections than many other RCRA facilities.
- c) Based upon the design information, IDEM does not have justification for denying the new CSA. The additional capacities with the new CSA should help Tradebe to comply with the requirements of their RCRA permit.

CHANGE

None.

78. COMMENT

The Draft Permit should be modified to ensure that Tradebe will meet RCRA Empty requirements.

As the Draft Permit is currently written, it is insufficient to ensure that Tradebe will comply with RCRA Empty requirements. Attachment D of the Draft Permit discusses meeting RCRA Empty requirements only at the highest level. Nowhere does the Draft Permit impose obligations on

Tradebe to substantiate its claims that drums and containers meet RCRA Empty standard before being shredded or otherwise processed—no monitoring, waste analysis, or record-keeping requirements are present to ensure that the RCRA Empty determination is accurate. Given Tradebe’s history of violations, including, as IDEM knows, for *twenty years* operating one of its Drum Shredders without a permit, IDEM should carefully scrutinize Tradebe’s process for handling RCRA Empty drums and containers that are destined for Drum Shredders. To make matters worse, Tradebe’s history of consistently mislabeling drums and containers increases uncertainty about which drums and containers are actually RCRA Empty.

Without revising the Draft Permit to include requirements that Tradebe prove its drums and containers are RCRA Empty before being shredded, there is a large gap in regulating the facility. While the Drum Shredder has been approved by IDEM in the CAA Minor Source Permit Modification, the permit modification only addresses the process of the Drum Shredder, at which point is assumed to be receiving RCRA Empty drums and containers. If the drums and containers going into the Drum Shredder are not RCRA Empty, then Tradebe would be impermissibly treating the residual waste in the drums. At this point, neither the RCRA Part B Draft Permit nor the CAA Title V Operating Permit contains requirements for showing that drums and containers meet the RCRA Empty definition.

We therefore respectfully urge that IDEM:

- (a) Impose requirements to ensure that the drum shredding operations are permitted, and
- (b) Impose requirements to ensure that the drums and containers processed in the Drum Shredder meet RCRA Empty requirements.

RESPONSE

IDEM agrees that only drums that are “RCRA empty” should be shredded in the drum shredder. (Note: this does not include the shredding of drums with the processing of containers in the SDS units).

CHANGE

Attachment D, Section D-1a(2), Item AC the following sentence is revised to the following: “Containers that are used to perform treatment may contain residue, which will be emptied, when applicable, by pouring, pumping, **or aspiration** ~~or shredding~~. If necessary, based on identified waste characteristics, non-sparking tools will be used to render the containers RCRA empty. ... **Only RCRA empty containers may be shredded in the drum shredder (excluding the containers going to the SDS units).**”

ATTACHMENT H – PERSONNEL TRAINING

79. COMMENT

Tradebe’s training, staffing, management, and operating policies and procedures should be strengthened and incorporated as enforceable permit conditions.

Tradebe has provided a Training Program in Attachment H that is insufficient to show that Tradebe’s training, staffing, management, and operating policies will promote future compliance

with RCRA. The Training Program in Attachment H reflects changes to Tradebe's internal structure that call for further scrutiny and modification in the types of training that employees receive. Attachment H needs further review, especially in light of Tradebe's past RCRA violations which have included failing to adequately train employees. The Training Program in Attachment H provides IDEM with the opportunity to prevent accidents and future violations of RCRA by including strong, enforceable permit conditions and requiring Tradebe to self-audit its Training Program. We urge IDEM to take this opportunity by withdrawing the Draft RCRA Part B permit and rejecting the Class 3 Permit Modification request until these inadequacies have been addressed.

To the best of our knowledge given available public information, the recent updates to Attachment H did not receive feedback in the back-and-forth between IDEM and Tradebe, and they first appeared in Tradebe's response to IDEM's fifth Notice of Deficiency regarding the permit renewal application. Because Tradebe updated Attachment H to reflect changes to its internal structure (i.e., roles have been added and responsibilities have been divided differently), Attachment H should go through a thorough review, with feedback, to address the gaps and inadequacies present in its current form. For instance, Tradebe has included in the updated Attachment H an "environmental Compliance Manager." The Environmental Compliance Manager's job description includes "producing regulatory analysis" and "maintain[ing] a working knowledge of existing and proposed regulations that affect Tradebe." However, the Environmental Compliance Manager only receives the 24-Hour HAZWOPER Training, even when DOT Hazardous Materials Regulation and RCRA Hazardous Waste Training is available and given to other employees, like the Corporate Training Manager. Another example is the Operations Manager, who must "[e]nsure facility compliance of RCRA, DOT, and EPA regulations." The Operations Manager, however, does not receive the available DOT Hazardous Materials Regulation and RCRA Hazardous Waste Training. IDEM should carefully review the training protocols proposed in Attachment H to ensure that the training Tradebe's employees receive will be adequate to perform their duties.

The Training Program in Attachment H also requires close review given that Tradebe has failed to train staff properly as part of its long history of RCRA violations. On multiple occasions, IDEM inspectors at Tradebe found employees handling hazardous waste who had not completed training or who were not properly trained. During IDEM's September 10, 2019 inspection, for example, IDEM discovered Tradebe had failed to train an employee whose duties included handling hazardous waste according to 40 CFR § 264.16. During a March 30, 2022 inspection, IDEM discovered that staff were inadequately trained in "basic hazardous waste labeling requirements and management procedures." This was evident by the multiple labeling violations that were found during the inspection. During an inspection on December 4, 2023, IDEM found that two employees were not properly trained in how to do daily inspections based on daily inspection records. Given this pattern of inadequate training, the Training Program in Attachment H should be reviewed closely and modified to ensure Tradebe's internal training procedures are adequate to produce properly trained employees.

Attachment H should be strengthened beyond "minimum" requirements to show that Tradebe will properly train its employees and as evidence of Tradebe's desire to come into long-term compliance with RCRA. 40 C.F.R. §§ 270.14(b)(12) and 264.16 provide the minimum requirements for the Training Program that a facility must use and submit as part of the RCRA Part B permit application. However, these regulations set a floor not a ceiling, and do not limit what can be included in the Training Program, where IDEM determines additional conditions are necessary to ensure Tradebe's ongoing compliance with its permit conditions. Moreover, as part

of these requirements, employees must be trained in a way that “ensures the facility’s compliance with the requirements of this part.” Attachment H should be strengthened to provide more evidence as to how the Training Program will ensure compliance with RCRA. For example, just as there are appendices in Attachments C, D, and F that provide more detailed information as to how Tradebe will meet requirements in those Attachments, Tradebe can provide appendices of more detailed information as to how training will be completed. This could include examples of training schedules, sample written exams, or on-the-job evaluation criteria.

RESPONSE

A compliance schedule item has been added requiring the facility to provide an updated Attachment H with which includes consistency across levels of staff and training requirements, as well as, more detailed information on how training activities are achieved and evaluated.

CHANGE

Compliance schedule added to Permit Condition VIII. “Within 120 days of the issuance of this permit, the Permittee shall provide an updated Training Plan, Attachment H, which includes consistent training requirements across all job positions and provides information on how training is achieved, tracked and evaluated.”

ATTACHMENT I – CLOSURE

80. COMMENT

Tradebe’s Closure Plan is supposed to provide a plan for any future closure of its facility in accordance with 40 CFR 264.110. Tradebe’s Closure Plan is deficient in at least four ways.

First, Table I-2, which describe Tradebe’s Closure Action levels, is deficient. Closure Action Levels describe pollutant levels in its facility that compel Tradebe to take remediation action after it has ceased operation. “These action levels are concentrations of the analytical parameters of concern above which TRADEBE will take further action; additional sampling and analysis, and/or remedial action.” Tradebe does not describe the basis for the Closure Action Levels. Tradebe should not be granted a permit renewal at least until it provides such bases for the parameters described in Table I-2.

Second, the Action Levels described in Table I-2 are described relative to a “Background.” To the extent that the Action Levels involve comparisons to “Background” levels, the renewal Application does not include details of how such “background” levels will be determined – especially given the long operating history by Tradebe at the site. This should be thoroughly discussed because without a proper background determination, it is entirely possible that a high background level will be determined, making closure meaningless. Tradebe should not be granted a permit renewal at least until it provides such bases for measuring a “Background,” as described in Table I-2.

Third, for VOCs and semi-VOCs, the Action Levels in Table I-2 are stated to be the “Estimated Quantitation Limit.” Appendix I-7 further describe these quantitation limits. However, the listing of such limits provided in Appendix I-7 appears to be very dated, without any dates of determination or laboratory discussions noted. Tradebe should provide an explanation for the bases of these limits and, if necessary, these limits should be updated to reflect lower, current, quantitation limits. All supporting discussions from analytical laboratories should be provided in the record.

Fourth, Tradebe also provides closure costs estimates for its Closure Plan in Appendix I-2. Tradebe's Closure Cost Estimates are deficient. Tradebe does not provide a basis for its estimates. Tradebe does not provide any data sources or methodological descriptions at how it arrives at its numbers. Furthermore, according to an experienced environmental engineer with whom we consulted in the course of preparing these comments, the total closure costs listed for a facility the size and scale of Tradebe is simply not credible. At the very least, Tradebe's Closure Plan should not be approved until Tradebe provides both a description of its data sources and its methodology.

RESPONSE

The Attachment I – Closure Plan and Financial Requirements (CP), Table I-2 – Closure Action Levels for soil samples are acceptable and were previously approved as part of the existing (April 2017) Tradebe RCRA Permit. Also, as noted above Table I-2, “Alternatively, TRADEBE may use risk-based action levels.”

Attachment I – CP, Section I-1e(2), pages 10-11 states: “Four (4) background soil borings will be taken and sampled at locations proposed by TRADEBE and approved by IDEM before closure activities begin. This proposal will be submitted to IDEM at least sixty (60) days before closure is to begin. These locations should be in areas minimally affected by the facility itself.” Since IDEM approval of the background locations is required, it is highly unlikely that a “high background level will be determined, making closure meaningless” as expressed in the Comment.

IDEM concurs that the Estimated Quantitation Limits (EQLs) provided in Appendix I-7 – Practical Quantitation Level (PQL) Guidance Document appear “to be very dated, without any dates of determination or laboratory discussions noted.” However, these EQLs are considered examples and are not expected to be the specific EQLs utilized at time of closure. Sampling methods shown in Appendix I-5 – Sampling likewise appear to be very dated. IDEM will require additional information regarding collection and laboratory analysis of samples for closure purposes as a compliance schedule item to the RCRA Permit.

The Appendix I-2 – Closure Cost Estimate will also be updated as a compliance schedule item to reflect any changes to the Attachment I – CP.

CHANGE

No changes to Attachment I – CP and appendices. IDEM will require Tradebe to submit additional information regarding collection and laboratory analysis of samples for closure purposes as a compliance schedule item to the RCRA Permit, as well as submittal of updated cost estimates.

ATTACHMENT J – CORRECTIVE ACTION

81. COMMENT

Tradebe's proposed Corrective Action Plan is legally deficient and must be strengthened before the Draft Permit is approved.

In the process of responding to Tradebe's permit renewal and modification requests, IDEM staff undertook a file review to assess Tradebe's history of releases and potential releases of hazardous waste and hazardous waste constituents. This file review uncovered numerous instances of releases and potential releases, including many issues that IDEM staff directly observed and documented. The numerosity of these instances, coupled with Tradebe's "significant noncompliance," raise our suspicion that these were not isolated incidents.

The file review led IDEM to include a corrective action plan in the Draft Permit,⁸³ but we doubt the sufficiency of the corrective action plan to address the risks to the environment and human health. First, Tradebe has failed to provide thorough and consistent information about the history and evidence of releases at its facility, and this deficiency necessarily impairs IDEM's ability to craft appropriate corrective action conditions. Second, the Draft Permit takes the encouraging step of requiring Tradebe to undertake groundwater monitoring at some parts of its facility, but the groundwater monitoring plan lacks detail and threatens to operate to the exclusion of other necessary measures. Third, the Draft Permit lacks clarity about what affirmative steps Tradebe must take, apart from groundwater monitoring, to address its historical releases and potential releases. Fourth, the Draft Permit largely leaves the community out of the corrective action activities and includes only sparse provisions for public notification and participation.

Because of these doubts, we request that IDEM take additional steps to ensure Tradebe submits complete and accurate information about the history and evidence of releases from all of its hazardous waste management units. We also request that IDEM modify the groundwater monitoring requirements to integrate the details of the plan into the permit terms and conditions and to avoid unduly limiting other necessary corrective action measures. Additionally, we request that IDEM require Tradebe to take specific, affirmative steps to comprehensively address the concerning pattern that IDEM identified. Finally, we request that IDEM revise the Draft Permit to reflect a commitment to providing the public with accurate information and opportunities for participation.

- A. The Draft Permit and supporting documentation generate uncertainty about the history and evidence of releases at Tradebe.

We value the careful consideration that led IDEM to determine that Tradebe must take corrective actions, but we worry that gaps and contradictions in Tradebe's descriptions of the history and evidence of releases at Tradebe will impair the efficacy of any interventions. First, we object to the exclusion of the former Marport facility (the intended location of Area 12) from Attachment J of the Draft Permit. Second, we take issue with Tradebe's failure to offer a rationale for its assertions that "No Further Action" is needed for its solid waste management units. Third, we note confusion and inconsistencies between IDEM's assessment of releases and potential releases and the characterizations in Attachment J.

Since at least 2022, Tradebe has been using the former Marport facility not only as the site of "Tradebe Transportation," a hazardous waste transfer facility, but also for the unpermitted storage of hazardous waste. Though IDEM and Tradebe have entered into an Agreed Order to regulate this unpermitted activity, the Agreed Order does not contain terms and conditions equivalent to the requirements for a permitted hazardous waste Treatment, Storage, or Disposal Facility, particularly surrounding secondary containment strategies. Furthermore, Tradebe has repeatedly violated the terms of the Agreed Order, including by failing to maintain the required fail-safes to contain releases. This trailer storage activity clearly meets the Draft Permit's definition of a "Solid Waste Management Unit."

Despite this ongoing use of the former Marport facility, Attachment J does not include any units on that property in its lists and descriptions of Solid Waste Management Units. Instead, the Draft Permit provides Tradebe with 120 days after the issuance of the permit to “submit updated Attachments J-1 and J-2 that include information regarding historical activities that occurred on the former Marport property” and to update Attachment J-3 to reflect the locations of those activities. We see no reason to exclude these updates from the permitting process, which would presumably help IDEM to craft appropriate terms and conditions for corrective action. Furthermore, this delay prevents the public from reviewing and commenting on Tradebe’s submission a consequence particularly troubling in light of Tradebe’s history of unpermitted activities at this property.

In addition, we are concerned that the information Tradebe has submitted does not provide the clear and frank discussion necessary to identify and remediate releases of hazardous waste. Appendix J-1 provides a table of historical and current solid waste management units, and includes a column to indicate if there is “evidence of release” from that unit. Appendix J-2 promises to “detail[] the history of each [Solid Waste Management Unit], along with a photo[.]” Tradebe has failed to explain its reasoning for its conclusions in these appendices. With respect to the data sheets in Appendix J-2, Tradebe has provided no detail about the investigations that led to the determinations of “No Further Action.” In most instances, the data sheets reference to a 1999 RCRA Facility Assessment. However, it is not clear how this 1999 RFA was used in support of the “No Further Action” determination.

To make matters more opaque, the appendices in Attachment J contradict each other. Appendix J-1 represents that no hazardous waste management unit at Tradebe has shown evidence or release. Appendix J-2 denies any “history or evidence or release” from all units except for Area 7 and the Area 5 Lab Pack Building.

The Attachment J appendices not only contradict each other, but they also appear to contradict IDEM’s assessment. In IDEM’s file review, Mr. Stilz not only identified numerous instances of potential release, but also instances in which IDEM staff documented actual spills, leaks, and releases into the environment. For example, Mr. Stilz identified the following:

- May 12, 2015: “A 20 yd³ roll-off labeled Box 959 located in the South Apron Truck Dock. It was labeled “Hazardous Waste” and was dated 4-1-2014. It contained multicoded shredded metal drums and was leaking liquid into the containment dock. The tarp covering it was torn and the contents of the box were exposed to the elements.”
- September 20, 2017: “The following containers were leaking hazardous waste during storage and stored in the indicated area.
Unit/Drum #: Area #:
D002800865 Area 7 A-4
D002798298 Area 11 20 yd³ Box 7001 South Apron”
- October 7, 2019: “At the time of the previous inspection, there were numerous roll-off containers of hazardous waste char dust stored in rolloff containers in the trailer leg.

Some of the roll off containers were not covered (torn tarps, tarps not covering the boxes), two (2) containers had liquids dripping from the bottom of the container, and one container had a hole in the side. Additionally, there was an accumulation of

hazardous waste char dust on the concrete and on the sides of the roll-off containers.”

- February 27, 2024: “[Remediation Work Plan] shows TCE in [Monitoring Well] MW-8, which is perceived to be downgradient of Area 1 North East Pad, as well as PCE above R2’s Published Level in two of four quarters.”

With the possible exception of its discussion of Area 7, Tradebe’s documentation of releases does not reflect this information.

RCRA permits must specify the corrective action needed to “protect human health and the environment for all releases of hazardous waste or constituents from any solid waste management unit at the facility[.]” Furthermore, IDEM has the authority to suspend processing of a permit to give Tradebe the opportunity to provide “adequate information for the department to process the application.” The deficiencies in Tradebe’s submission regarding the history and evidence of releases of hazardous waste, and the impossibility of crafting an appropriate corrective action plan based on incomplete information, require that IDEM make significant changes to strengthen the Draft Permit’s proposed Corrective Action Plan.

We therefore respectfully urge IDEM to:

- (a) Require Tradebe to update Attachment J with information about the former Marport facility before IDEM issues the final permit. These updates should include information about Tradebe’s use of the former Marport facility to store incinerator-bound waste.
- (b) Require Tradebe to provide details of the assessments that led to determinations that “No Further Action” is needed, including discussion of any sampling conducted. If applicable, Tradebe should explain how the 1999 RCRA Facility Assessment supported each determination.
- (c) Require Tradebe to address inconsistencies within its Attachment J submission.
- (d) Require Tradebe to correct its Attachment J submission in light of IDEM’s inspections, or to explain the reasons for its contradictory account.
- (e) Re-Assess the adequacy of the Draft Permit’s terms and conditions in light of the above information from Tradebe.

RESPONSE

A Compliance Schedule item will be added to the permit that requires Tradebe to submit a Current Conditions Report (CCR) for Marport.

Regarding the releases that IDEM identified to the original TSD footprint (see VFC # [83678518](#)), required corrective actions will first focus on groundwater quality at the facility boundary, with SWMU-specific release assessments being conducted pursuant to Permit Condition VI.F. as necessary to ensure human health and the environment are protected. The permit includes these requirements. IDEM will include as a Compliance Schedule item the requirement that Tradebe update Attachment J to list all releases that have occurred and to identify the sources of those releases.

CHANGE

Compliance schedule items have been added to require a CCR for the Marport parcel and a facility-wide accounting for releases, linking the releases to SWMUs or AOCs.

- B. The proposed groundwater monitoring plan is promising but insufficient to address Tradebe's pattern of releases and potential releases.

We commend IDEM for proactively including a groundwater monitoring requirement to assess groundwater quality at the existing TSDF for Areas 1-11. However, we are concerned that this plan is insufficient to address the extensive history of releases and potential releases at the facility.

First, the Draft Permit fails to include actual terms of a groundwater monitoring plan and instead directs Tradebe to submit its own plan ninety days after the permit is issued. It references a "groundwater monitoring network" without describing the network or providing any information about it. This arrangement gives Tradebe the first opportunity to specify the method, frequency, and location of groundwater sampling and the contaminants of concern, despite its record of conduct that suggests a lack of regard for the environment and residents of East Chicago. Furthermore, this method excludes the public from reviewing and commenting on the groundwater monitoring plan.

Second, the permit inappropriately limits the geographic scope of the groundwater monitoring plan. Tradebe intends to begin construction on Area 12 as early as March 2025. The groundwater monitoring network would cover Areas 1-11, and offers no discussion of how the groundwater monitoring network will be expanded to include Area 12.

Third, without clear justification, the Draft Permit appears to allow groundwater monitoring to supplant some or all of the usual required corrective action activities. Condition VI(D)(1) states that groundwater monitoring will function "in lieu of assessing individual SWMUs... for releases, and until the Permittee conducts total closure[.]" The corrective action program operates through a sequence of planning and analysis activities designed to move a facility from the recognition of a release of hazardous waste to its remediation. We believe the permit lacks clarity about what aspects of this process the groundwater monitoring will supplant, and whether groundwater monitoring will satisfy these obligations not only for past releases but also for future ones. Moreover, we are concerned that the permit would absolve Tradebe of crucial aspects of the corrective action process for either past or future releases, including those required under Conditions VI(D)(2) ("Interim Measures"), VI(D)(3) ("RCRA Facility Investigation"), VI(D)(5) ("Community Relations Plan"), and VI(D)(6) ("Corrective Measures Study (CMS) and Remedy Selection").

Finally, and on a closely related note, by allowing groundwater monitoring to supplant other assessments, we are concerned that Tradebe will fail to detect and respond to environmental impacts other than those evident in groundwater. IDEM's Risk-Based Closure Guide describes sampling as "vital" to developing a comprehensive understanding of the releases and potential remedy and avers that "[i]n the absence of compelling lines of evidence showing that it is not necessary to do so, IDEM will require delineation efforts to follow releases wherever they go, regardless of medium." IDEM further explained that "[a]ppropriate sample media will depend on project-specific factors and the exposure scenarios under evaluation." The Draft Permit does not explain why IDEM has singled out groundwater to the exclusion of other media. For example, situations like the release of hazardous waste char identified by IDEM inspectors in their

inspection of Tradebe in September 2019 may warrant surficial soil sampling as well as groundwater sampling.

RCRA requires the owner or operator of a facility seeking a permit for the treatment, storage or disposal of hazardous waste to “institute corrective action as necessary to protect human health and the environment for all releases of hazardous waste or constituents from any solid waste management unit at the facility, regardless of the time at which waste was placed in such unit.” Furthermore, federal and state regulations delineate that this corrective action “will be specified in the permit[.]” In light of these requirements, significant changes to the Draft Permit are required.

We therefore respectfully urge IDEM to:

- (a) Integrate the groundwater monitoring plan into the permit conditions, so as to ensure the development of an effective plan and to meet the requirements that “[c]orrective action will be specified in the permit[.]”
- (b) Provide the public with the opportunity for notice and comment on the groundwater monitoring plan.
- (c) Specify in the permit conditions that the groundwater monitoring will not relieve Tradebe of its other obligations under part (D), unless IDEM has determined that the usual corrective action program requirements are not necessary to “protect human health and the environment.”
- (d) Specify in the permit conditions that the groundwater monitoring will not relieve Tradebe of any obligations under part (D) for future releases.
- (e) Amend the corrective action plan to require Tradebe to develop and implement a plan for evaluating the effects of releases in any appropriate medium, not merely groundwater.

RESPONSE

In order for the permit's Corrective Action conditions to apply to a variety of possibilities regarding groundwater quality, correct monitoring depths, etc. (i.e., characteristics that must be field-verified) and to do so in a timely manner, the details of the groundwater monitoring network are better left to deliverables required by the permit (e.g., work plans) rather than being specified as a permit condition, which then could be subject to a lengthy modification process.

IDEM follows the RCRA Public Participation Manual and invites public input at crucial junctures in the Corrective Action process. Further, the permit requires Tradebe to disseminate a Community Relations Plan if offsite investigations are needed, including to address a potential release.

Permit Condition VI.D.1 states that VI.D. is in effect and that IDEM's chief of the Hazardous Waste Permit Section can require Tradebe to address releases beyond VI.D.1's groundwater monitoring requirements.

If evidence of a release is identified, its effect on environmental media, including being transported via those media, will be evaluated. See VI.C.3.

CHANGE

None.

- C. The Corrective Action conditions lack the clarity and specificity needed to ensure Tradebe effectively responds to past and future releases.

We wholeheartedly agree with IDEM's determination that the history of releases and potential releases at Tradebe necessitate a corrective action program, but deficiencies in the Draft Permit's terms and conditions undermine that program.

In his file review, Mr. Stiliz found that "available information was sufficient to justify the potential need for corrective actions across the facility, *including the facility's 10-day transfer station to the north*, which the facility proposes to add to the TSD via the current permit renewal." Yet the Draft Permit fails to provide Tradebe with clear directives to address its history of releases across both properties, and only specifies groundwater monitoring for Areas 1-11. The permit conditions state that "[t]he Permittee *may* undertake interim measures to prevent or minimize the further spread of contamination while long-term remedies are pursued. They require Tradebe to conduct a RCRA Facility Investigation "to thoroughly evaluate the nature and extent of the release" only "as required by IDEM," and give Tradebe 90 days to submit a RCRA Facility Investigation work plan after receiving IDEM's notice. Even though IDEM has already determined that the history of releases and potential releases make a corrective action program necessary, the Draft Permit does not appear to require Tradebe to implement any of the standard corrective action steps to address that history.

Relatedly, Permit Condition VI(D)(4)(b) states that IDEM can revisit previously issued determinations that "No Further Action" is needed. We are not aware of whether IDEM has ever done so, in spite of the many inspections that have noted violations. This condition offers no insight into what standard IDEM currently uses or will use to determine that "a release or likelihood of release...is likely to pose a threat to human health or the environment."

Finally, the Draft Permit fails to specify what a RCRA Facility Investigation must involve. The permit conditions provide only that the RCRA Facility Investigation report must "describe the procedures, methods, and results of the RFI." Although IDEM must approve the RCRA Facility Investigation work plan, the Draft Permit's lack of detail threatens to stymie remediation efforts. In contrast, Tradebe's current RCRA permit incorporates detailed requirements of the RCRA Facility Investigation in Attachment J.

We do not believe the Draft Permit contains the terms and conditions necessary "to protect human health and the environment[.]" and we respectfully urge IDEM to modify the permit to require Tradebe to engage in specific, affirmative steps to address its history of releases and potential releases.

We therefore respectfully urge IDEM to:

- (a) Amend the Draft Permit to require Tradebe to undertake a RCRA Facility Investigation in response to any credible evidence of releases, including past releases.

- (b) Clarify its process for determining when to revisit a “No Further Action” determination.
- (c) Amend the Draft Permit to specify the nature and scope of RCRA Facility Investigations.

RESPONSE

Permit Condition VI.C.2. requires Tradebe to submit to IDEM information regarding releases. That information will be evaluated by IDEM pursuant to VI.C.3. to determine if further investigations or corrective measures are needed. With Tradebe’s submission of the CCR, a requirement of the Compliance Schedule, IDEM will evaluate that additional information for application of VI.C.3.

When information, including different risk assumptions, becomes known to IDEM’s commissioner that a release is likely to pose a threat to human health or the environment, IDEM will seek a permit modification to rescind the No Further Action determination, leading to an array of possibilities that include implementing interim measures, a release investigation, and a corrective measure study as appropriate to address the threat.

There is not enough information currently available to specify the nature and scope of any RCRA Facility Investigation (RFI) that may be required. As environmental data and information regarding releases are collected, IDEM will review it to determine an appropriate response. That response may include implementing interim measures, an RFI, or a corrective measure study.

CHANGE

None.

D. Corrective Action Activities

In Section VI(D)(4) there should be a requirement for Tradebe to notify the community about any Corrective Action Activities, including the notification about a RCRA Facility Investigation (RFI), RFI Work Plan, and completion of the plan. This should be in addition to any Community Relations Plan.

Moreover, any Corrective Measures Study (CMS) should be accompanied by a public notification from both Tradebe and, ideally, IDEM. Actions related to the Corrective Measures Study should trigger public notice as well.

Public engagement with Corrective Action Activities should be encouraged throughout the entire process. The permit should be strengthened by including more opportunities for public comment in the Corrective Action Activities Schedule.

The public should also be notified of any disputes by Tradebe related to the Corrective Action Activities, and, if possible, be given an opportunity to provide comments. In assessing proposed corrective actions and disputes by Tradebe, IDEM should consider Tradebe’s long history of non-compliance as a factor in determining whether the corrective action proposed will provide the public with sufficient protection from actual or potential harm.

We therefore respectfully urge IDEM to:

- (a) Amend the Draft Permit to include enhanced public notice requirements related to Corrective Action Activities, including but not limited to: (1) notifying the community about any Corrective Action Activities, (2) notifying the community about any Corrective Measures Study being undertaken, and (3) notifying the community about the actual corrective measures undertaken after IDEM has made its final determination.
- (b) Amend the Draft Permit to include opportunities for public comment in the Corrective Action Activities schedule, including opportunities to comment if Tradebe disputes a proposed correction action.

RESPONSE

IDEM follows the RCRA Public Participation Manual and invites public input at crucial junctures in the Corrective Action process. Further, the permit requires Tradebe to disseminate a Community Relations Plan if offsite investigations are needed, including to address a potential release.

CHANGE

None.

PUBLIC HEARING COMMENTS

Commenter: Connie Wachala

“Tradebe solids distillation system be regulated by its facility waste permit and no longer be exempt from meeting that requirement.

RESPONSE

The Solid Distillation Systems (SDS) units are not being granted an exemption by IDEM, the SDS units are exempt from RCRA permitting per 40 CFR 261.6(c)(1) which was adopted by Indiana. IDEM does not permit exempt units.

CHANGE

None.

Commenter: Jennie Rudderham

There was also a conversation I had around the solids distillation systems, and I was led to understand that IDEM has had, several times, people go out and look at it and determine that that piece of equipment was exempt. I would encourage that IDEM routinely, with every permit renewal, continue to take a look at that and ensure if that is still the case with each permit renewal, and to make sure that what is being rolled off from there is being properly handled. And I know this probably doesn't relate exactly to the permit, but you did have on here about training -- something about the training, personnel training, which I've heard some people

speak about. Weird facts, like I know they had a summer internship program for high schoolers. had no idea at the time when I got that notice, and almost like considered signing up my son, that this was a hazardous waste processing facility. So, I have no idea what those young people were doing there, but that seems concerning. And then, you know, kind of reading that the staff there aren't even really up to speed on what -- you know, what is appropriate and what is not appropriate when handling these materials just brings up sort of like further community concern that we're now also exposing, you know, potentially our young people to those issues.

RESPONSE

The Solid Distillation Systems (SDS) units are exempt units per 40 CFR 261.6(c)(1) and are not included in the hazardous waste permit. The units, generating hazardous waste char, have been reviewed during hazardous waste generator inspections conducted by IDEM and/or by the US EPA. IDEM will continue to inspect the SDS units for compliance with the exemption requirements.

CHANGE

None.

INDIVIDUAL COMMENTS

Commenter: Gary W. Lee

Tradebe's Solids Distillation Systems Should be Regulated Under its Hazardous Waste Permit
Tradebe uses equipment called Solids Distillation Systems (SDS) as part of its hazardous waste processing. SDS units must be regulated by a facility's hazardous waste permit unless they meet certain exemptions. Tradebe claims its SDS units are exempt from regulation based on a 2002 letter from IDEM, written before either unit was in operation.

Questions and Concerns:

- What investigation has IDEM done since 2002 to confirm Tradebe's SDS units meet the requirements for being exempt from its hazardous waste permit?
- Tradebe has a track record of improperly operating equipment without a permit. For example, Tradebe was recently caught operating a drum shredder since 2004 without the proper air emissions permit. Why should IDEM take Tradebe at its word about the SDS units?

RESPONSE

The Solid Distillation Systems (SDS) units are exempted from RCRA permitting per 40 CFR 261.6(c)(1) which was adopted by Indiana. The SDS units have been reviewed at onset and determined to meet the exemption. No changes in the SDS activities have been noted in the state or federal inspections prompting additional evaluation. IDEM considered the shredding operation to be the first steps in the reclamation process. As such, the shredder is also a unit exempt from RCRA permitting.

CHANGE

None.

FACILITY COMMENTS

Tradebe submitted the following comments in accordance with the public comment procedures. The comments are described in the following sections along with the IDEM's response and any changes made as a result of the comments.

Attachment A

82. COMMENT

Waste codes given in Appendices A-1 and A-4 contain explosive waste codes K044, K045 and K047 which Tradebe stated are not accepted at this facility.

These waste codes were removed from some sections but inadvertently left in the listed Appendices. Tradebe has revised those Appendices for use in Attachment A, Appendix C-4, Appendix 1, and as a general reference to waste codes that may be accepted at this Tradebe facility.

This revision was made to correct a typographical error that would otherwise misrepresent the policies and procedures used to operate this facility in compliance with federal, state and local requirements.

RESPONSE

IDEM concurs with the facility's proposed revision to correct a typographical error. However, IDEM noted an additional error on the facility's revised Appendix A-1 waste code list. A row of acceptable waste codes D003, F003, ... U236 (12 total) was inadvertently removed from the list when removing code K047.

CHANGE

Added waste codes D003, F003, K003, K118, P003, P104, U003, U048, U093, U138, U183, and U236 back to the facility's revised Appendix A-1 waste code list. This new, revised waste code list replaces the list in Permit Condition VII. IDEM has included a Compliance Schedule item for Tradebe to provide a complete updated Part A form.

Attachment B – Facility Description

83. COMMENT

IDEM removed from section B-1 the following language regarding railcars and the exception to the 50' set back requirements.

"Pursuant to the Agreed Order H-12947, rail cars storing hazardous waste are not required to comply with 50-foot requirement. As stated in the order "The railcars will not be required to be stored at least 50 feet from the facility's property line, as long as the land use of the property adjacent to the railcars does not change. In the area where the railcars are located, the adjoining property consists of additional rail yards, and therefore,

the intent of the 50-foot set back is being met by providing a protective distance between the waste management area and persons or public building. Drawing 502402 identifies the facility's 50-foot set back. TRADEBE shall ensure that the railcars are managed in a manner that they do not constitute a recognized hazard to life or the adjoining property."

Tradebe is requesting IDEM re-insert the revised language below that describes Tradebe's exception to the 50' setback requirement for its railcars and includes the regulatory requirements pursuant to 40 CFR 262.17.

"Pursuant to the Agreed Order H-12947, rail cars storing hazardous waste are not required to comply with 50-foot requirement. As stated in the order "The railcars will not be required to be stored at least 50 feet from the facility's property line, as long as the land use of the property adjacent to the railcars does not change. In the area where the railcars are located, the adjoining property consists of additional rail yards, and therefore, the intent of the 50-foot set back is being met by providing a protective distance between the waste management area and persons or public building. Drawing 502402 identifies the facility's 50-foot set bac TRADEBE shall ensure that the railcars are managed in a manner that they do not constitute a recognized hazard to life or the adjoining property."

Tradebe's railcars are a large and very visible part of the facility's operation. The 1998 Agreed Order H-12947 sets a legal standard for the Tradebe facility that is an essential component of the authorized conditions for those railcars Excluding this exception would mislead the reader and leave the appearance that Tradebe's railcars are not operating in compliance with 40 CFR 262.17. This will lead to confusion during inspections and cause Tradebe to explain and demonstrate this exception. Including this language will provide notice to the public, to federal and state regulators, local official or others who might question the distance between the property line and Tradebe's railcars containing ignitable waste.

RESPONSE

IDEM does not agree that the additional language is appropriate to show compliance with the rule.

CHANGE

None.

84. COMMENT

On page 13 of 17 IDEM re-created a table that lists the waste handling processes conducted at this facility. The IDEM version did not included solidification which was included in the original Tradebe Version.

This facility performs solidification both incidentally and deliberately in its waste handling processes. The solidification process was not removed from other sections of this Attachment B (see page 3). Nor was it removed from Attachment C (see page 22).

This revision is being requested to correct what appears to be a typographical error that would otherwise misrepresent the policies and procedures used to operate this facility in compliance with federal, state and local requirements.

RESPONSE

IDEM concurs.

CHANGE

Add "Solidification" to the list of waste handling processes in Attachment B, Section B-5a.

Attachment C – Waste Analysis Plan (WAP)

85. COMMENT

On page 6 of 37 IDEM added the following statement: "(Recharacterization of waste should include analysis at off-site laboratory. Tradebe should minimize or eliminate characterization, recharacterization, or pre-acceptance analyses at on-site laboratory.)"

The language added by IDEM implies an interpretation of "recharacterization" that differs from the interpretation intended by Tradebe. To clarify this term, Tradebe made the following revision which is intended to address (and/or eliminate) the need for IDEM's comment and add clarity to this topic. If the sample results are within the expected variation for that material, the material is deemed acceptable for this and future shipments of this waste stream. If the sample results are outside the expected variation for that material the deviation will be considered a discrepancy that has to be resolved. In addition, when discrepancies are observed as a result of pre-acceptance or fingerprint testing, in lieu of rejecting the shipment, the facility may inform the generator of the discrepancy and give the generator the opportunity to make a new waste determination using generator knowledge of the waste or obtaining third party analytical and amending the waste profile.

This revision is being requested to clarify the interpretation of "recharacterize" so it reflects the regulatory requirement for the generator to make a waste determination (40 CFR 262.11) and the regulatory requirement that Tradebe obtain all the information needed to properly treat, store and dispose of waste (40 CFR 264.13)

RESPONSE

IDEM concurs. The statement was a review comment and was not intended to be included in the text of the Waste Analysis Plan.

CHANGE

The statement was removed from Attachment C - Waste Analysis Plan.

Attachment D – Process Description

86. COMMENT

IDEM states on page 51 that "The liquid removed is analyzed or knowledge of waste is applied. A waste determination will be made by following the waste determination requirements of 40 CFR 261."

This statement should cite 40 CFR 262 instead of 261. This correction as well as a revision inserting the word "either" for additional clarity. Tradebe's revision states, "The liquid removed is either analyzed or knowledge of waste is applied. This waste determination will

be made by following the waste determination requirements of 40 CFR 262.”

This revision is being requested to cite the correct regulatory requirement and add additional clarity to the topic.

RESPONSE

IDEM concurs.

CHANGE

Change “40 CFR 261” to “40 CFR 262” in the last paragraph of Attachment D, Section D-1a(3)(e).

IDEM removed from page 6 of 34 which listed timeframes for staging inbound and outbound loads as well as timeframes for transferring material between storage areas. This information was under the bullet point header “12-A6, 12-A7, 12-A8 (Uncovered)” The timeframes allotted for staging and movement of material is stated in various other parts of this Attachments as well as other Attachments. Therefore, in order in be consistent with the other Attachments, this topic was removed from this bullet header and placed below that in the 4th paragraph of the container receiving section on page 7. To add additional clarity, the following language was inserted. “Offloaded inbound loads will be staged temporarily while undergoing the receiving and acceptance procedures described in Attachment C. The process will be completed within 72 hours. When preparing a load for outbound shipment, material will be staged temporarily until the load is completely assembled. The outbound load assembly process will be completed within 72 hours. When the outbound assembly process is takes longer than 72 hours, the partially assembled load will be moved to a designated storage area. Material that is removed from storage for processing at this facility will be placed back into a designated storage area if that processing does not occur within 12 hours.

RESPONSE

IDEM agrees there should be language regarding interim and outbound staging, but the proposed language could result in containers being out of storage for over 72 hours. The facility does not get an additional 12 hours to move containers back into storage if they cannot perform all of the loading activities within 72 hours. Additionally, the proposed language included language about partial loaded trucks being placed into permitted storage if it could not be loaded within 72 hours. At first this appears fine, but then the facility would receive an additional 72 hours to finish loading the truck (or more if the truck took multiple times of getting partial loads filled). This would result in containers being outside of permitted storage areas for prolonged periods, which is not acceptable.

CHANGE

Add to the end of Section D-1a Containers with Free Liquids the following language :
“Interim movement: When moving containers from container storage area to another container storage area or tank system (e.g., consolidation, processing, etc.), containers may be out of permitted storage area for a maximum of one operating shift (12 hours), and must complete movement during that operating shift.
Outbound shipment: When preparing a load for outbound shipment, material will be staged temporarily until the load is completely assembled. The outbound load assembly process will be completed within the maximum staging time period of 72 hours.”

Attachment J – Corrective Action and Permit Condition VI

87. COMMENT

IDEM either intentionally or inadvertently removed the narrative portion of Attachment J “Corrective Action for Solid Waste Management Units.” Corrective Action is now only addressed in Section VI of the permit conditions to address this topic.

In Section VI.D.1 of section IDEM describes Groundwater Monitoring activities that were not part of Tradebe’s Attachment J.

Respectfully, Tradebe does not agree with IDEM’s requirement as specified in permit condition VI.D.1 that requires Tradebe to install and monitor an IDEM-approved groundwater monitoring network down gradient of Areas 1-11. Groundwater monitoring network should not currently be warranted since there is no indication or evidence to support current or past operation of Tradebe’s Solid Waste Management Units (SWMUs) impacted shallow soil or the groundwater beneath. This is especially true considering this site is in a heavily industrialized area of East Chicago where known groundwater contamination from multiple off-site sources exists.

Tradebe’s proposes that as a first step a shallow soil investigation of Tradebe’s SWMUs be conducted to determine if shallow soil at these SWMUs has been negatively impacted by past or current Tradebe operations. Any impact noted must not be attributable to contaminated background fill material known to exist throughout the East Chicago, Indiana area. Only upon a determination that Tradebe has negatively impacted shallow soil, and that impact has/had the potential to impact groundwater at any of the SWMUs, shall the option for further investigation using an IDEM approved groundwater monitoring network be considered.

Proper evaluation of the potential impact of Tradebe’s operation on soil and groundwater requires a systematic process from which logical and scientifically defensible conclusions may be drawn. The process proposed by Tradebe provides such an approach.

Based on the historical industrialized nature of the entire East Chicago, Indiana area and the known groundwater contamination from nearby, upgradient sources, it would be impossible to accurately determine if Tradebe is contributing to any detected groundwater constituent concentrations without first knowing whether SWMUs operated by Tradebe have impacted the shallow subsurface soils which then may potentially be contributing to any detected groundwater contamination.

RESPONSE

IDEM removed the narrative portion of Attachment J because it was duplicative of language found in Section VI of the permit conditions, which directs the reader to specific sub-attachments of Attachment J.

IDEM found numerous accounts of documented releases and potential releases of hazardous waste and/or hazardous constituents have occurred over the past nine years from various waste management areas that comprise the present day permitted facility (see VFC # 83678518). Due to the age of these releases, or potential releases, and the density of the facility’s waste management activities, IDEM finds property line groundwater monitoring downgradient of the waste management areas will yield the most useful information to determine if human health and the environment are protected or if a nature and extent

investigation is warranted. As Tradebe noted, contaminated backfill material exists throughout this area, so soil investigations of individual SWMUs are likely to be inconclusive, thereby potentially leading to a delay in responding to a groundwater threat. With acknowledgement of the presence of fill material that potentially could be the source of contaminants detected in downgradient monitoring wells and to account for offsite upgradient sources of contaminants, Tradebe is encouraged to install appropriately located upgradient monitoring wells. At the same time, this groundwater evaluation does not relieve Tradebe of its obligations to investigate and address releases to other environmental media, as directed via VI.D.2. et seq.

CHANGE

None.

ADDITIONAL CHANGES TO THE FINAL PERMIT

The Indiana Department of Environmental Management (IDEM) has determined that some additional State conditions should be revised and/or clarified. The following table lists the permit conditions that have been changed or changes made.

Attachment B: Section B-1 General Description, Table including solids only container storage areas: Change “SDS-II Apron ¹ and SDS-II Shredder Room” to “SDS-II Apron ³ (*Area 10*) and SDS-II Shredder Room ³ (*Area 10*).”

Table D-1a: The capacity was modified to include the SDSII Shredder Room

Attachment F: Weekly Inspection Forms for Liquids only container storage areas added

Permit Condition VI.D.3.a: The word “Plan” was added to the first paragraph. That paragraph now reads “The Permittee must submit a written RFI Work Plan within 90 days after written notification that further investigation is necessary.”