

STATE OF TENNESSEE AIR POLLUTION CONTROL BOARD DEPARTMENT OF ENVIRONMENT AND CONSERVATION NASHVILLE, TENNESSEE

PERMIT TO CONSTRUCT / MODIFY AIR CONTAMINANT SOURCE(S)

Permit Number:	981211
Facility (Permittee):	Dynamic Recycling, LLC
Facility ID:	82-1020
Facility Address:	220 N. Industrial Drive, Bristol Sullivan County
Facility Classification:	Conditional Major
Federal Requirements:	NSPS (40 CFR 60 Subparts NNN and VVa)
Facility Description:	Ethanol Recycling Facility

Conditional Major Construction Permit 981211, consisting of 42 pages is hereby issued March 26, 2024, pursuant to the Tennessee Air Quality Act and by the Technical Secretary, Tennessee Air Pollution Control Board, Department of Environment and Conservation. This permit expires on March 26, 2026. The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations (TAPCR).

ichelhe W. averly

Michelle W. Owenby Technical Secretary Tennessee Air Pollution Control Board

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

Rev. 02/10/2023

RDA-1298

Section I – Sources Included in this Permit

FACILITY DESCRIPTION			
Source Number	Source Description	Status	Control Device/Equipment
04	Wiped Film Evaporator and Tanks	New	None

<u>Section II – Permit Record</u>

Permit Type	Description of Permit Action	Issue Date
Initial	Initial Construction Permit Issuance	March 26, 2024

Section III - General Permit Conditions

G1. Responsible Person

The application that was utilized in the preparation of this conditional major construction permit is dated May 31, 2023, and is signed by Brian Potter, COO, the Responsible Person for the permittee. The Responsible Person may be the owner, president, vice-president, general partner, plant manager, environmental/health/safety coordinator, or other person that is able to represent and bind the facility in environmental permitting affairs. If this Responsible Person terminates their employment or is assigned different duties and is no longer the person to represent and bind the permittee in environmental permitting affairs, the new Responsible Person for the permittee shall notify the Technical Secretary of the change in writing. The Notification shall include the name and title of the new Responsible Person assigned by the permittee to represent and bind the permittee in environmental permitting affairs, and the date the new Responsible Person was assigned these duties.

Should a change in the Responsible Person occur, the new Responsible Person must submit the Notification provided in Appendix 1 of this permit no later than 30 days after being assigned as the Responsible Person. A separate notification shall be submitted for each subsequent change in Responsible Person.

TAPCR 1200-03-09-.03(8)

G2. Application and Agreement Letters

This source shall operate in accordance with the terms of this permit, the information submitted in the approved permit application(s) referenced in **Condition G1**, and any documented agreements made with the Technical Secretary.

TAPCR 1200-03-09-.01(1)(d)

G3. Submittals

Unless otherwise specified within this permit, the permittee shall submit, preferably via email and in Portable Document format (PDF), all applicable plans, checklists, certifications, notifications, test protocols, reports, and applications to the attention of the following Division Programs at the email addresses indicated in the table below:

	Permitting Program	Compliance Validation Program	Field Services Program
• • • •	Notifications Startup certifications Applications NSPS reports MACT/GACT/NESHAP reports Emission statements Construction permit extension requests	 Test protocols Emission test reports Visible emission evaluation reports 	 Semiannual reports Annual compliance certifications/status reports
Division of Air Pollution Control William R. Snodgrass TN Tower, 15 th Floor 312 Rosa L. Parks Avenue Nashville, TN 37243 <u>Air.Pollution.Control@tn.gov</u>		ol r, 15 th Floor	Johnson City Environmental Field Office Division of Air Pollution Control 2305 Silverdale Road Johnson City, TN 37601-2162 <u>APC.JCEFO@tn.gov</u>

The permittee shall submit the information identified above as requested in this permit. In lieu of submitting this information to the email addresses above, the permittee may submit the information to the attention of the respective Division Programs at the mailing addresses listed above.

TAPCR 1200-03-09-.03(8)

G4. Notification of Changes

The permittee shall notify the Technical Secretary for any of the following changes to a permitted air contaminant source which would not be a modification requiring a new construction permit:

- change in air pollution control equipment that does not result in an increase or otherwise meet the definition of a modification.
- change in stack height or diameter.
- change in exit velocity of more than 25 percent or exit temperature of more than 15 percent based on absolute temperature.

The permittee must submit the Notification provided in Appendix 2 of this permit 30 days before the change is commenced.

TAPCR 1200-03-09-.02(7)

G5. Permit Transference

A. This permit is not transferable from one air contaminant source to another air contaminant source or from one location to another location. The permittee must submit a construction permit application for a new source to the Permitting Program not less than 90 days prior to the estimated starting date of these events. If the new source will be subject to major New Source Review, the application must be submitted not less than 120 days in advance of the estimated starting date of these events.

TAPCR 1200-03-09-.03(6)(b) and 1200-03-09-.01(1)(b)

B. In the event an ownership change occurs at this facility, the new owner must submit the notification provided in Appendix 3 of this permit. The written notification must be submitted by the new owner to the Permitting Program no later than 30 days after the ownership change occurs. If the change in ownership results in a change in Responsible Person for the facility, notification of the change in Responsible Person must also be submitted, as specified in **Condition G1**.

TAPCR 1200-03-09-.03(6)(a) and (b)

G6. Operating Permit Application Submittal

The permittee shall submit an application for an amended conditional major operating permit with the results of the performance test required by **Condition G17** and source-specific **Conditions S1-8 and S1-22** in Section V. The operating permit application and performance test report shall be submitted within 60 days following completion of the performance test.

TAPCR 1200-03-09-.02(1) and 1200-03-09-.02(3)

G7. Temporary Operating Permit

A. This construction permit shall serve as a temporary operating permit from the date of issuance, until the Technical Secretary issues an operating permit provided the permittee submits an operating permit application within the timeframe specified in **Condition G6**.

TAPCR 1200-03-09-.02(1), 1200-03-09-.02(2) and 1200-03-09-.02(3)(b)1

B. If construction of the air contaminant source(s) cannot be completed and/or an operating permit application cannot be filed with the Technical Secretary by the expiration date of this permit, the permittee must submit a permit extension request 30 days prior to permit expiration.

TAPCR 1200-03-09-.02(1) and 1200-03-09-.02(3)

G8. Startup Certification for New or Modified Source(s)

The startup certification provided in Appendix 4 shall be submitted to the Permitting Program once an air contaminant source has started up. Startup of the air contaminant source shall be the date the new or modified air contaminant source began operation for the production of product for sale, use as raw materials, or steam or heat production under the terms of this permit.

TAPCR 1200-03-09-.03(8)

Compliance Method: The startup certification provided in Appendix 4 shall be submitted no later than 30 days after each air contaminant source has begun startup.

G9. Fees

The air contaminant source(s) identified in this permit shall comply with the requirements for payment of applicable annual emission fees and annual conditional major review fees to the Tennessee Division of Air Pollution Control based on the Administrative Fees SCHEDULE I provided in Appendix 5 of this permit. The fee must be paid to the Division in full by the first (1st) day of the month that the fee is due (determined from Appendix 5). (Note: not all facilities are required to pay annual emission fees)

TAPCR 1200-03-26-.02

G10. General Recordkeeping Requirements

A. All recordkeeping requirements for all data required to be recorded shall follow the following schedules:

For Daily Recordkeeping	For Weekly Recordkeeping	For Monthly Recordkeeping
No later than seven days from the end of the day for which the	No later than seven days from the end of the week for which	No later than thirty days from the end of the month for which the
data is required.	the data is required.	data is required.

B. The information contained in logs, records, and submittals required by this permit shall be kept at the facility's address, unless otherwise noted, and provided to the Technical Secretary or a Division representative upon request or as required in this permit. Computer-generated logs are acceptable. Compliance is assured by retaining the logs, records, and submittals specified in this permit for a period of not less than five years at the facility's address.

TAPCR 1200-03-10-.02(2)(a)

G11. Routine Maintenance Requirements

The permittee shall maintain and repair the emission source, associated air pollution control device(s), and compliance assurance monitoring equipment as required to maintain and assure compliance with the specified emission limits.

TAPCR 1200-03-09-.03(8)

Compliance Method: Records of all repair and maintenance activities required above shall be recorded in a suitable permanent form and kept available for inspection by the Division. These records must be retained for a period of not less than five years. The date each maintenance and repair activity began shall be entered in the log no later than seven days following the start of the repair or maintenance activity, and the completion date shall be entered in the log no later than seven days after activity completion.

G12. Visible and Fugitive Emissions

A. Unless otherwise specified, visible emissions from this facility shall not exhibit greater than 20% opacity, except for one six-minute period in any one-hour period, and for no more than four six-minute periods in any 24-hour period. A stack is defined as any chimney, flue, conduit, exhaust, vent, or opening of any kind whatsoever, capable of, or used for, the emission of air contaminants.

TAPCR 1200-03-05-.01(1) and 1200-03-05-.03(6)

Compliance Method: When required to demonstrate compliance, visible emissions shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (six-minute average).

- B. The permittee shall not cause, suffer, allow, or permit any materials to be handled, transported, or stored; or a building, its appurtenances, or a road to be used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Reasonable precautions shall include, but are not limited to, the following:
 - (a) Use, where possible, of water or chemicals for control of dust in demolition of existing buildings or structures, construction operations, grading of roads, or the clearing of land;
 - (b) Application of asphalt, water, or suitable chemicals on dirt roads, material stockpiles, and other surfaces which can create airborne dusts;
 - (c) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods shall be employed during sandblasting or other similar operations.

The permittee shall not cause, suffer, allow, or permit fugitive dust to be emitted in such manner to exceed five minutes per hour or 20 minutes per day as to produce a visible emission beyond the property line of the property on which the emission originates, excluding malfunction of equipment as provided in TAPCR 1200-03-20. A malfunction is defined as, any sudden and unavoidable failure of process equipment or for a process to operate in an abnormal and unusual manner. Failures that are caused by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

TAPCR 1200-03-08-.01(1) and 1200-03-08-.01(2)

Compliance Method: When required to demonstrate compliance, fugitive emissions shall be determined by Tennessee Visible Emissions Evaluation Method 4 as adopted by the Tennessee Air Pollution Control Board on April 16, 1986.

C. Fugitive emissions from roads and parking areas shall not exhibit greater than 10% opacity.

TAPCR 1200-03-08-.03

Compliance Method: When required to demonstrate compliance, fugitive emissions from roads and parking areas shall be determined by utilizing Tennessee Visible Emissions Evaluation (TVEE) Method 1, as adopted by the Tennessee Air Pollution Control Board on April 29, 1982, as amended on September 15, 1982, and August 24, 1984.

G13. NSPS/NESHAP/MACT/GACT Standards

A. The following source(s) are subject to and shall comply with all applicable requirements of each NSPS/NESHAP/ MACT/GACT standard as indicated in the table below, including the General Provisions identified in Appendices 10 and 11. The applicable requirements of each standard are incorporated into this permit pursuant to TAPCR 1200-03-09-.03(8) and TAPCR 0400-30-38-.01.

Source Number	NESHAP/MACT/GACT	NSPS
04	Not Applicable	40 CFR 60 Subpart NNN and VVa

TAPCR 1200-03-09-.03(8) and 0400-30-38-.01

Compliance Method: Compliance methods are provided in the conditions in Section V of this permit.

B. NSPS Reporting: Semi-annual reports shall be submitted to the Division for any reporting required by 40 CFR 60 Subpart NNN and 40 CFR 60 Subpart VVa. These reports shall cover the six-month periods from February 1 to July 31 and August 1 to January 31 and shall be submitted within 60 days after the end of each six-month period. These semiannual reports shall include any recordkeeping required by Conditions S1-11 and S1-24 of this permit and the applicable conditions in Permit 478102. The semi-annual reports following issuance of this permit shall cover the following permits and reporting periods. The report(s) must include the compliance certification statement included in Appendix 7. Report(s) submitted with unsigned certification statements will be deemed incomplete.

Permit Number	Reporting Period Begins	Reporting Period Ends
981211	March 26, 2024	July 31, 2024
478102	February 1, 2024	July 31, 2024

G14. VOC and NO_x Emission Statement - Not Applicable

G15. Facility-wide Limitations (Other Than Conditional Major) – Not Applicable

G16. Permit Supersedes Statement

This permit supersedes all previously issued permits for this/these source(s).

TAPCR 1200-03-09-.03(8)

G17. Source Testing Requirements

- A. The permittee shall conduct or have conducted the test(s) necessary to determine the amount of VOC emitted from **Source 04** within 180 days of startup of the source. The permittee shall provide, at no expense to the Technical Secretary:
 - a) Sampling ports adequate for test methods applicable to such facility.
 - b) Safe sampling platform(s)
 - c) Safe access to sampling platform(s)
 - d) Utilities for sampling and testing equipment.

TAPCR 1200-03-10-.01

B. Each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under conditions specified in the applicable standard or regulation. For the purpose of determining compliance with the applicable standard, the arithmetic means of the results of the three runs shall apply.

TAPCR 1200-03-10-.01(1)(a), (b), and (c)

C. The permittee shall notify the Technical Secretary in writing of their intention to conduct the performance test at least 30 days before the performance test is initially scheduled to begin to allow the Technical Secretary to have an observer(s) present during the test.

In the event the permittee is unable to conduct the performance test on the date specified in the notification requirement in this condition, the permittee must notify the Technical Secretary as soon as practical prior to the

scheduled performance test date and specify the date when the performance test is rescheduled. This notification of delay in conducting the performance test shall not relieve the permittee of legal responsibility for compliance with any other applicable provisions of any other applicable Federal, State, or local requirement, nor will it prevent the Technical Secretary from implementing or enforcing the terms of this permit.

TAPCR 1200-03-10-.01 and 1200-03-10-.02(c)

- D. The permittee shall develop and submit a site-specific test plan for approval to the Technical Secretary at least 30 calendar days before the performance test is scheduled to take place, simultaneously with the notification of intent to conduct a performance test required by **Conditions G17C, S1-8,** and **S1-22.**
- E. The site-specific test plan shall include a test program summary, the test schedule, data quality objectives, and both an internal and external quality assurance (QA) program. (Data quality objectives are the pretest expectations of precision, accuracy, and completeness of data.)

TAPCR 1200-03-10-.01

F. The performance test shall be conducted, and data reduced in accordance with the methods and procedures specified in 40 CFR part 60 Appendix A, other federally approved test methods, or consistent with TAPCR 1200-03-12-.03(5)(c).

TAPCR 1200-03-10-.01

G. The permittee shall report the results of the performance test to the Technical Secretary within 60 days following the completion of the performance test. The report shall include the relevant process data (fuel type and usage, material input rate[s], production rate, etc. as appropriate) recorded during the test.

TAPCR 1200-03-10-.01

Compliance Method: Compliance is assured by the permittee conducting the performance testing, notifying the Technical Secretary in writing of their intention to conduct the performance test, developing, and submitting a site-specific test plan, and submitting the results of the performance test all within the established time frames.

<u>Section IV – Conditional Major Conditions</u>

C1. Major Source Opt-Out Requirements

The permittee has elected to opt-out of being issued a major source operating permit pursuant to TAPCR 1200-03-09-.02(11)(a). The permittee would be considered a major source because their potential to emit value(s) for Volatile Organic Compounds (VOCs) and a single Hazardous Air Pollutant (HAP) was greater than 100 tons per year / 10 tons per year at the time of application. The permittee has agreed to be subject to limitations in order to be below the major source applicability threshold for VOC of 100 tons per year and individual HAP of 10 tons per year.

TAPCR 1200-03-09-.02(11)(a)

C2. Notification of Non-Compliance

Any non-compliance with any condition(s) of this permit set to restrain the potential to emit below the applicability threshold(s) of 1200-03-09-.02(11) of the Tennessee Air Pollution Control Regulations, shall be reported in writing to the Technical Secretary within 15 working days of such discovery. This notification, at a minimum, shall include the identification of the source, identification of the permit condition(s) violated, and details of the violation.

TAPCR 1200-03-09-.03(8) and 1200-03-09-.02(11)(a)

C3. Failure to Abide by Conditional Major Emission Limit(s)

The permittee is placed on notice that **Condition C4**, of this permit contain(s) limitations that allow the permittee to opt-out of the major source operating permit program requirements specified in paragraph 1200-03-09-.02(11) of the Tennessee Air Pollution Control Regulations. Failure to abide by these limits will not only subject the permittee to enforcement action by the State of Tennessee, but it may also result in the imposition of federal enforcement action by the United States Environmental Protection Agency and the loss of being federally recognized as a conditional major source.

TAPCR 1200-03-09-.02(11)(e)1(vi)(I)

C4. Conditional Major Emission Limit(s)

A. Emissions from the entire facility shall not exceed the following federally enforceable maximum emission rate(s), including emissions from exempt and insignificant emission units:

Pollutant(s)	Maximum Emission Rate(s) (tons during any period of 12 consecutive months)
Volatile Organic Compounds (VOC)	99.4
Individual Hazardous Air Pollutants (listed pursuant to Section 112(b) of the Federal Act)	9.9

TAPCR 1200-03-09-.02(11)(a), TAPCR 1200-03-09-.01(4), and the permittee's agreement letter(s) dated March 11, 2024. (Appendix 8)

The VOC emission limitation was taken to avoid Prevention of Significant Air Quality Deterioration (PSD).

Compliance Method:

- 1. The permittee shall assure compliance with the/these emission rate(s) by calculating actual VOC and actual HAP emissions emitted during each calendar month and each period of 12-consecutive months for Source 01 under **Condition S1-4B** of permit number 478102, by complying with the compliance methods outlined for Source 03 under **Condition S3-4** of permit number 478102, and by calculating actual VOC emissions emitted during each calendar month and each period of 12-consecutive months for Source 04 of this permit. The permittee shall maintain records of the emissions in the log found in Appendix 9, or in an alternative format, which readily provides the same information.
- 2. VOC emissions from fugitive sources and tank venting (Source 01) are estimated to be 3.48 tons during any period of 12 consecutive months under maximum operating conditions. HAP emissions from fugitive sources and tank venting are estimated to be 1.16 tons during any period of 12 consecutive months under maximum operating conditions. In order to simplify recordkeeping, these values (3.48 tons VOC and 1.16 tons total HAP for all sources) shall be added to the VOC and HAP Total for all Sources, respectively (tons per 12 consecutive months).
- 3. VOC emissions from fugitive sources and tank venting (Source 04) are estimated to be 1.07 tons during any period of 12 consecutive months under maximum operating conditions. In order to simplify

recordkeeping, the value (1.07 tons) shall be added to the VOC Total for All Sources (tons per 12 consecutive months).

4. At the time of permit issuance, the facility has reported no insignificant or exempt activities/emission units that emit VOC and HAPs.

If the facility adds insignificant or exempt activities/emission units that emit VOC and HAPs, the permittee shall provide notification to the Division of the change in facility VOC and HAP emissions at least 30 days prior to the installation of each insignificant activity/ emission unit [TAPCR 1200-03-09-.04(4)(a)] or at least 30 days prior to the installation of each exempt air contaminant source [TAPCR 1200-03-09-.04(4)(b), (c), or (d)].

B. The stated production rate for this facility is 6 million gallons per year of 200 proof alcohol. Should the permittee need to modify the source(s) in a manner that increases the stated production rate a construction permit shall first be applied for and received in accordance with TAPCR 1200-03-09-.01 prior to making the change.

TAPCR 1200-03-09-.03(8) and the permittee's agreement letter(s) dated March 11, 2024. (Appendix 8)

Compliance Method: The permittee shall assure compliance with the production rate by annual certification as outlined in **Condition C5**.

C5. Annual Compliance Status Report

The permittee shall submit a written report stating the compliance status of this facility with permit **Condition(s) C4(A)** & **(B)** by March 31 of every year. The report shall cover the preceding calendar year and shall include the records and certification required by **Condition(s) C4**. The first report following issuance of this permit is due March 31, 2025, and shall cover the time period from the date of issuance of this permit to December 31, 2024. In addition, the report shall include the annual compliance status report for Permit 478102. A summary of the next reports due for the permits at this facility are listed below. Each report must include the compliance certification statement included in Appendix 7. Reports submitted with unsigned certification statements will be deemed incomplete.

Permit Number	Reporting Period Begins	Reporting Period Ends	Report Due Date
981211	March 26, 2024	December 31, 2024	March 31, 2025
478102	January 1, 2024	December 31, 2024	March 31, 2025

TAPCR 1200-03-09-.03(8), 1200-03-09-.02(11)(a), and 1200-03-10-.02(2)(a)

Section V - Source Specific Permit Conditions

Source Number	Source Description
04	Wiped Film Evaporator - Continuously separates volatile compounds by introducing a mechanically agitated thin film of feed material to a heated surface for processing the reclamation of ethanol. This source
	includes additional tanks central to the process.

S1-1. Input Limitation(s) or Statement(s) of Design

A. The stated material input rate for the wiped film evaporator is 1,804 pounds per hour (lbs./hr.) of sunscreen feedstock. Should the permittee need to modify the source(s) in a manner that increases the stated material input rate a construction permit shall first be applied for and received in accordance with TAPCR 1200-03-09-.01 prior to making the change.

TAPCR 1200-03-09-.03(8) and the application dated May 31, 2023, from the permittee.

Compliance Method: The permittee shall maintain documentation to demonstrate the material input rate for the wiped film evaporator. Documentation shall include, but is not limited to, manufacturer's specifications, purchase records, operating manuals, or a tag affixed to the unit by the manufacturer. These documents shall be kept readily available/accessible and made available upon request by the Technical Secretary or a Division representative.

S1-2. Production Limitation(s) – *Not Applicable*

S1-3. Operating Hour Limitation(**s**) – *Not Applicable*

S1-4. Emission Limitation(s)

Volatile organic compounds (VOC) are emitted from this source and are included in the facility-wide emission limitation in **Condition C4**.

TAPCR 1200-03-07-.07(2), 1200-03-09-.02(11)(a), and 1200-03-09-.01(4)

S1-5. Source-Specific Visible Emissions Limitation(s) – *Not Applicable*

40 CFR 60 Subpart NNN: Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations

S1-6. Sources 04 is subject to and must comply with 40 CFR 60 Subpart NNN: Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations. The below listed conditions are identified as applicable to meet the requirements of 40 CFR 60 Subpart NNN.

TAPCR 1200-03-09-.03(8)

S1-7. If the facility demonstrates that the vent stream flow rate is less than 0.008 scm/min, then Source 04 is exempt from all provisions of 40 CFR 60, Subpart NNN except for the test method and procedure and the recordkeeping and reporting requirements in §60.664(g) and paragraphs (i), (1)(5), and (o) of §60.665.

Compliance Method: Compliance is assured by Conditions G17(F), S1-10, S1-11, and S1-12.

TAPCR 1200-03-09-.03(8) and 40 CFR §60.660(c)(6)

- **S1-8.** Each owner or operator of any affected facility shall comply with paragraph (a), (b), or (c) of this condition for each vent stream on and after the date on which the initial performance test required by §§60.8 and 60.664 is completed, but not later than 60 days after achieving the maximum production rate at which the affected facility will be operated, or 180 days after the initial start-up, whichever date comes first. Each owner or operator shall either:
 - (a) Reduce emissions of TOC (less methane and ethane) by 98 weight-percent, or to a TOC (less methane and ethane) concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen, whichever is less stringent. If a boiler or process heater is used to comply with this paragraph, then the vent stream shall be introduced into the flame zone of the boiler or process heater; or
 - (b) Combust the emissions in a flare that meets the requirements of § 60.18; or
 - (c) Maintain a TRE index value greater than 1.0 without use of VOC emission control devices.

TAPCR 1200-03-09-.03(8) and 40 CFR §60.662

Compliance Method: Compliance is assured by the permittee conducting the performance testing required by this condition and **Condition G17**, notifying the Technical Secretary in writing of their intention to conduct the performance test, developing, and submitting a site-specific test plan, and submitting the results of the performance test all within the established time frames.

Recordkeeping

- **S1-9.** Each owner or operator of an affected facility seeking to comply with 40 CFR §60.660(c)(4) or §60.662(c) shall recalculate the TRE index value for that affected facility whenever process changes are made. Examples of process changes include changes in production capacity, feedstock type, or catalyst type, or whenever there is replacement, removal, or addition of recovery equipment. The TRE index value shall be recalculated based on test data, or on best engineering estimates of the effects of the change to the recovery system.
 - (a) Where the recalculated TRE index value is less than or equal to 1.0, the owner or operator shall notify the Administrator within 1 week of the recalculation and shall conduct a performance test according to the methods and procedures required by 40 CFR §60.664 in order to determine compliance with 40 CFR §60.662(a). Performance tests must be conducted as soon as possible after the process change but no later than 180 days from the time of the process change.
 - (b) Where the initial TRE index value is greater than 8.0 and the recalculated TRE index value is less than or equal to 8.0 but greater than 1.0, the owner or operator shall conduct a performance test in accordance with 40 CFR §§60.8 and 60.664 and shall comply with 40 CFR §§60.663, 60.664 and 60.665. Performance tests must be conducted as soon as possible after the process change but no later than 180 days from the time of the process change.

TAPCR 1200-03-09-.03(8) and 40 CFR §60.664(g)

S1-10. Each owner or operator of an affected facility that seeks to comply with the requirements of 40 CFR 60 Subpart NNN by complying with the flow rate cutoff in § 60.660(c)(6) shall keep up-to-date, readily accessible records to indicate that the vent stream flow rate is less than 0.008 scm/min (0.3 scf/min) and of any change in equipment or

process operation that increases the operating vent stream flow rate, including a measurement of the new vent stream flow rate.

TAPCR 1200-03-09-.03(8) and 40 CFR §60.665(i)

Compliance Method: Stated in the condition.

S1-11. Each owner or operator that seeks to comply with the requirements of 40 CFR 60 Subpart NNN by complying with the requirements of 40 CFR60.660 (c)(4), (c)(5), or (c)(6) or 60.662 shall submit to the Administrator semiannual reports of the following recorded information (*see Condition G13B*). The initial report shall be submitted within 6 months after the initial start-up date.

Any change in equipment or process operation that increases the operating vent stream flow rate above the low flow exemption level in 60.660(c)(6), including a measurement of the new vent stream flow rate, as recorded under 60.665(i). These must be reported as soon as possible after the change and no later than 180 days after the change. These reports may be submitted either in conjunction with semiannual reports or as a single separate report. A performance test must be completed with the same time period to verify the recalculated flow value and to obtain the vent stream characteristics of heating value and E_{TOC} . The performance test is subject to the requirements of 60.8 of the General Provisions. Unless the facility qualifies for an exemption under the low-capacity exemption status in 60.660(c)(5), the facility must begin compliance with the requirements set forth in § 60.662.

TAPCR 1200-03-09-.03(8) and 40 CFR §60.665(1)(5)

Compliance Method: Stated in the condition.

S1-12. Each owner or operator that seeks to demonstrate compliance with §60.660(c)(6) must submit to the Administrator an initial report including a flow rate measurement using the test methods specified in §60.664.

Any owner or operator subject to the provisions of 40 CFR 60 Subpart NNN seeking to demonstrate compliance with 60.660(c)(6) shall use Method 2, 2A, 2C, or 2D as appropriate, for determination of volumetric flow rate.

TAPCR 1200-03-09-.03(8), 40 CFR §60.664(h), and 40 CFR §60.665(o)

40 CFR 60 Subpart VVa: Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006

S1-13. Sources 04 is subject to and must comply with 40 CFR 60 Subpart VVa: Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006. The below listed conditions are identified as applicable to meet the requirements of 40 CFR 60 Subpart VVa.

TAPCR 1200-03-09-.03(8)

S1-14. Standards: General

(a) Each owner or operator subject to the provisions of 40 CFR 60, Subpart VVa shall demonstrate compliance with the requirements of §§60.482–1a through 60.482–10a or §60.480a(e) for all equipment within 180 days of initial startup.

- (b) Compliance with §§60.482–1a to 60.482–10a will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in §60.485a.
- (c)
- (1) An owner or operator may request a determination of equivalence of a means of emission limitation to the requirements of §§60.482–2a, 60.482–3a, 60.482–5a, 60.482–6a, 60.482–7a, 60.482–8a, and 60.482–10a as provided in §60.484a.
- (2) If the Administrator makes a determination that a means of emission limitation is at least equivalent to the requirements of §60.482–2a, §60.482–3a, §60.482–5a, §60.482–6a, §60.482–7a, §60.482–8a, or §60.482–10a, an owner or operator shall comply with the requirements of that determination.

TAPCR 1200-03-09-.03(8) and 40 CFR §60.482-1a

Compliance Method: Stated in the condition.

S1-15. Standards: Pumps in Light Liquid Service

- (a)
- (1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in § 60.485a(b), except as provided in § 60.482–1a(c) and (f) and paragraphs (d), (e), and (f) of this condition. A pump that begins operation in light liquid service after the initial startup date for the process unit must be monitored for the first time within 30 days after the end of its startup period, except for a pump that replaces a leaking pump and except as provided in § 60.482–1a(c) and paragraphs (d), (e), and (f) of this condition.
- (2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal, except as provided in § 60.482–1a(f).
- (b)
- (1) The instrument reading that defines a leak is specified in paragraphs (b)(1)(i) and (ii) of this condition.
 - i. 5,000 parts per million (ppm) or greater for pumps handling polymerizing monomers;
 - ii. 2,000 ppm or greater for all other pumps.
- (2) If there are indications of liquids dripping from the pump seal, the owner or operator shall follow the procedure specified in either paragraph (b)(2)(i) or (ii) of this condition. This requirement does not apply to a pump that was monitored after a previous weekly inspection and the instrument reading was less than the concentration specified in paragraph (b)(1)(i) or (ii) of this condition, whichever is applicable.
 - i. Monitor the pump within 5 days as specified in § 60.485a(b). A leak is detected if the instrument reading measured during monitoring indicates a leak as specified in paragraph (b)(1)(i) or (ii) of this condition, whichever is applicable. The leak shall be repaired using the procedures in paragraph (c) of this condition.
 - ii. Designate the visual indications of liquids dripping as a leak, and repair the leak using either the procedures in paragraph (c) of this condition or by eliminating the visual indications of liquids dripping.
- (c)
- (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in § 60.482–9a.
- (2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the practices described in paragraphs (c)(2)(i) and (ii) of this condition, where practicable.
 - i. Tightening the packing gland nuts;
 - ii. Ensuring that the seal flush is operating at design pressure and temperature.
- (d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a) of this condition, provided the requirements specified in paragraphs (d)(1) through (6) of this condition are met.
 - (1) Each dual mechanical seal system is:

- i. Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or
- ii. Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of \$60.482–10a; or
- iii. Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.
- (2) The barrier fluid system is in heavy liquid service or is not in VOC service.
- (3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

(4)

- i. Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.
- ii. If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the owner or operator shall follow the procedure specified in either paragraph (d)(4)(ii)(A) or (B) of this condition prior to the next required inspection.
 - A. Monitor the pump within 5 days as specified in § 60.485a(b) to determine if there is a leak of VOC in the barrier fluid. If an instrument reading of 2,000 ppm or greater is measured, a leak is detected.
 - B. Designate the visual indications of liquids dripping as a leak.

(5)

- i. Each sensor as described in paragraph (d)(3) is checked daily or is equipped with an audible alarm.
- ii. The owner or operator determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.
- iii. If the sensor indicates failure of the seal system, the barrier fluid system, or both, based on the criterion established in paragraph (d)(5)(ii) of this condition, a leak is detected.

(6)

- i. When a leak is detected pursuant to paragraph (d)(4)(ii)(A) of this condition, it shall be repaired as specified in paragraph (c) of this condition.
- ii. A leak detected pursuant to paragraph (d)(5)(iii) of this condition shall be repaired within 15 days of detection by eliminating the conditions that activated the sensor.
- iii. A designated leak pursuant to paragraph (d)(4)(ii)(B) of this condition shall be repaired within 15 days of detection by eliminating visual indications of liquids dripping.
- (e) Any pump that is designated, as described in § 60.486a(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a), (c), and (d) of this condition if the pump:
 - (1) Has no externally actuated shaft penetrating the pump housing;
 - (2) Is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in § 60.485a(c); and
 - (3) Is tested for compliance with paragraph (e)(2) of this condition initially upon designation, annually, and at other times requested by the Administrator.
- (f) If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of § 60.482–10a, it is exempt from paragraphs (a) through (e) of this condition.
- (g) Any pump that is designated, as described in § 60.486a(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of paragraphs (a) and (d)(4) through (6) of this condition if:
 - (1) The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a) of this condition; and

- (2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in paragraph (c) of this condition if a leak is detected.
- (h) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of paragraphs (a)(2) and (d)(4) of this condition, and the daily requirements of paragraph (d)(5) of this condition, provided that each pump is visually inspected as often as practicable and at least monthly.

TAPCR 1200-03-09-.03(8) and 40 CFR §60.482-2a

Compliance Method: Compliance with 40 CFR §60.482-1a through 60.482-11a will be determined by review of records and reports, review of performance test results, and inspections using the methods and procedures specified in 40 CFR §60.485a.

S1-16. Standards: Pressure Relief Devices in Gas/Vapor Service

- (a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in §60.485a(c).
- (b)
- (1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in §60.482–9a.
- (2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in §60.485a(c).
- (c) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in §60.482–10a is exempted from the requirements of paragraphs (a) and (b) of this condition.
- (d)
- (1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of paragraphs (a) and (b) of this condition, provided the owner or operator complies with the requirements in paragraph (d)(2) of this condition.
- (2) After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in §60.482–9a.

TAPCR 1200-03-09-.03(8) and 40 CFR §60.482-4a

Compliance Method: Compliance with 40 CFR §60.482-1a through 60.482-11a will be determined by review of records and reports, review of performance test results, and inspections using the methods and procedures specified in 40 CFR §60.485a.

S1-17. Standards: Open-ended Valves or Lines

- (a)
- (1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in § 60.482–1a(c) and paragraphs (d) and (e) of this condition.
- (2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

- (b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.
- (c) When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (a) of this condition at all other times.
- (d) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of paragraphs (a), (b), and (c) of this condition.
- (e) Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in paragraphs (a) through (c) of this condition are exempt from the requirements of paragraphs (a) through (c) of this condition.

TAPCR 1200-03-09-.03(8) and 40 CFR §60.482-6a

Compliance Method: Compliance with 40 CFR §60.482-1a through 60.482-11a will be determined by review of records and reports, review of performance test results, and inspections using the methods and procedures specified in 40 CFR §60.485a.

S1-18. Standards: Valves in Gas/Vapor Service and Light Liquid Service

- (a)
- (1) Each valve shall be monitored monthly to detect leaks by the methods specified in § 60.485a(b) and shall comply with paragraphs (b) through (e) of this condition, except as provided in paragraphs (f), (g), and (h) of this condition, § 60.482–1a(c) and (f), and §§ 60.483–1a and 60.483–2a.
- (2) A valve that begins operation in gas/vapor service or light liquid service after the initial startup date for the process unit must be monitored according to paragraphs (a)(2)(i) or (ii), except for a valve that replaces a leaking valve and except as provided in paragraphs (f), (g), and (h) of this condition, § 60.482– 1a(c), and §§ 60.483–1a and 60.483–2a.
 - i. Monitor the valve as in paragraph (a)(1) of this condition. The valve must be monitored for the first time within 30 days after the end of its startup period to ensure proper installation.
 - ii. If the existing valves in the process unit are monitored in accordance with § 60.483–1a or § 60.483–2a, count the new valve as leaking when calculating the percentage of valves leaking as described in § 60.483–2a(b)(5). If less than 2.0 percent of the valves are leaking for that process unit, the valve must be monitored for the first time during the next scheduled monitoring event for existing valves in the process unit or within 90 days, whichever comes first.
- (b) If an instrument reading of 500 ppm or greater is measured, a leak is detected.
- (c)
 - (1)
- i. Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.
- ii. As an alternative to monitoring all of the valves in the first month of a quarter, an owner or operator may elect to subdivide the process unit into two or three subgroups of valves and monitor each subgroup in a different month during the quarter, provided each subgroup is monitored every 3 months. The owner or operator must keep records of the valves assigned to each subgroup.
- (2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.
- (d)
- (1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in § 60.482–9a.
- (2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

- (e) First attempts at repair include, but are not limited to, the following best practices where practicable:
 - (1) Tightening of bonnet bolts;
 - (2) Replacement of bonnet bolts;
 - (3) Tightening of packing gland nuts;
 - (4) Injection of lubricant into lubricated packing.
- (f) Any valve that is designated, as described in § 60.486a(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (a) of this condition if the valve:
 - (1) Has no external actuating mechanism in contact with the process fluid,
 - (2) Is operated with emissions less than 500 ppm above background as determined by the method specified in § 60.485a(c), and
 - (3) Is tested for compliance with paragraph (f)(2) of this condition initially upon designation, annually, and at other times requested by the Administrator.
- (g) Any valve that is designated, as described in § 60.486a(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of paragraph (a) of this condition if:
 - (1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a) of this condition, and
 - (2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.
- (h) Any valve that is designated, as described in § 60.486a(f)(2), as a difficult-to-monitor valve is exempt from the requirements of paragraph (a) of this condition if:
 - (1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.
 - (2) The process unit within which the valve is located either:
 - i. Becomes an affected facility through § 60.14 or § 60.15 and was constructed on or before January 5, 1981; or
 - ii. Has less than 3.0 percent of its total number of valves designated as difficult-to-monitor by the owner or operator.
 - (3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

TAPCR 1200-03-09-.03(8) and 40 CFR §60.482-7a

Compliance Method: Compliance with 40 CFR §60.482-1a through 60.482-11a will be determined by review of records and reports, review of performance test results, and inspections using the methods and procedures specified in 40 CFR §60.485a.

S1-19. Standards: Delay of Repair

- (a) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. Monitoring to verify repair must occur within 15 days after startup of the process unit.
- (b) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.
- (c) Delay of repair for valves and connectors will be allowed if:
 - (1) The owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and
 - (2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with § 60.482–10a.
- (d) Delay of repair for pumps will be allowed if:

- (1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and
- (2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.
- (e) Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.
- (f) When delay of repair is allowed for a leaking pump, valve, or connector that remains in service, the pump, valve, or connector may be considered to be repaired and no longer subject to delay of repair requirements if two consecutive monthly monitoring instrument readings are below the leak definition.

TAPCR 1200-03-09-.03(8) and 40 CFR §60.482-9a

Compliance Method: Compliance with 40 CFR §60.482-1a through 60.482-11a will be determined by review of records and reports, review of performance test results, and inspections using the methods and procedures specified in 40 CFR §60.485a.

S1-20. Standards: Connectors in Gas/Vapor Service and in Light Liquid Service

- (a) The owner or operator shall initially monitor all connectors in the process unit for leaks by the later of either 12 months after the compliance date or 12 months after initial startup. If all connectors in the process unit have been monitored for leaks prior to the compliance date, no initial monitoring is required provided either no process changes have been made since the monitoring or the owner or operator can determine that the results of the monitoring, with or without adjustments, reliably demonstrate compliance despite process changes. If required to monitor because of a process change, the owner or operator is required to monitor only those connectors involved in the process change.
- (b) Except as allowed in § 60.482–1a(c), § 60.482–10a, or as specified in paragraph (e) of this condition, the owner or operator shall monitor all connectors in gas and vapor and light liquid service as specified in paragraphs (a) and (b)(3) of this condition.
 - (1) The connectors shall be monitored to detect leaks by the method specified in § 60.485a(b) and, as applicable, § 60.485a(c).
 - (2) If an instrument reading greater than or equal to 500 ppm is measured, a leak is detected.
 - (3) The owner or operator shall perform monitoring, subsequent to the initial monitoring required in paragraph (a) of this condition, as specified in paragraphs (b)(3)(i) through (iii) of this condition, and shall comply with the requirements of paragraphs (b)(3)(iv) and (v) of this condition. The required period in which monitoring must be conducted shall be determined from paragraphs (b)(3)(i) through (iii) of this condition using the monitoring results from the preceding monitoring period. The percent leaking connectors shall be calculated as specified in paragraph (c) of this condition.
 - i. If the percent leaking connectors in the process unit was greater than or equal to 0.5 percent, then monitor within 12 months (1 year).
 - ii. If the percent leaking connectors in the process unit was greater than or equal to 0.25 percent but less than 0.5 percent, then monitor within 4 years. An owner or operator may comply with the requirements of this paragraph by monitoring at least 40 percent of the connectors within 2 years of the start of the monitoring period, provided all connectors have been monitored by the end of the 4-year monitoring period.
 - iii. If the percent leaking connectors in the process unit was less than 0.25 percent, then monitor as provided in paragraph (b)(3)(iii)(A) of this condition and either paragraph (b)(3)(iii)(B) or (b)(3)(iii)(C) of this condition, as appropriate.
 - A. An owner or operator shall monitor at least 50 percent of the connectors within 4 years of the start of the monitoring period.
 - B. If the percent of leaking connectors calculated from the monitoring results in paragraph (b)(3)(iii)(A) of this condition is greater than or equal to 0.35 percent of

the monitored connectors, the owner or operator shall monitor as soon as practical, but within the next 6 months, all connectors that have not yet been monitored during the monitoring period. At the conclusion of monitoring, a new monitoring period shall be started pursuant to paragraph (b)(3) of this condition, based on the percent of leaking connectors within the total monitored connectors.

- C. If the percent of leaking connectors calculated from the monitoring results in paragraph (b)(3)(iii)(A) of this condition is less than 0.35 percent of the monitored connectors, the owner or operator shall monitor all connectors that have not yet been monitored within 8 years of the start of the monitoring period.
- iv. If, during the monitoring conducted pursuant to paragraphs (b)(3)(i) through (iii) of this condition, a connector is found to be leaking, it shall be re-monitored once within 90 days after repair to confirm that it is not leaking.
- v. The owner or operator shall keep a record of the start date and end date of each monitoring period under this condition for each process unit.
- (c) For use in determining the monitoring frequency, as specified in paragraphs (a) and (b)(3) of this condition, the percent leaking connectors as used in paragraphs (a) and (b)(3) of this condition shall be calculated by using the following equation:

 $%C_{L} = C_{L} / C_{t} * 100$

Where:

 $%C_L$ = Percent of leaking connectors as determined through periodic monitoring required in paragraphs (a) and (b)(3)(i) through (iii) of this condition.

 C_L = Number of connectors measured at 500 ppm or greater, by the method specified in 60.485a(b).

 C_t = Total number of monitored connectors in the process unit or affected facility.

- (d) When a leak is detected pursuant to paragraphs (a) and (b) of this condition, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in § 60.482–9a. A first attempt at repair as defined in 40 CFR 60, Subpart VVa shall be made no later than 5 calendar days after the leak is detected.
- (e) Any connector that is designated, as described in § 60.486a(f)(1), as an unsafe-to-monitor connector is exempt from the requirements of paragraphs (a) and (b) of this condition if:
 - (1) The owner or operator of the connector demonstrates that the connector is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraphs (a) and (b) of this condition; and
 - (2) The owner or operator of the connector has a written plan that requires monitoring of the connector as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in paragraph (d) of this condition if a leak is detected.
- (f) Inaccessible, ceramic, or ceramic-lined connectors.
 - (1) Any connector that is inaccessible or that is ceramic or ceramic-lined (e.g., porcelain, glass, or glass-lined), is exempt from the monitoring requirements of paragraphs (a) and (b) of this condition, from the leak repair requirements of paragraph (d) of this condition, and from the recordkeeping and reporting requirements of §§ 63.1038 and 63.1039. An inaccessible connector is one that meets any of the provisions specified in paragraphs (f)(1)(i) through (vi) of this condition, as applicable:
 - i. Buried;
 - ii. Insulated in a manner that prevents access to the connector by a monitor probe;
 - iii. Obstructed by equipment or piping that prevents access to the connector by a monitor probe;
 - iv. Unable to be reached from a wheeled scissor-lift or hydraulic-type scaffold that would allow access to connectors up to 7.6 meters (25 feet) above the ground;
 - v. Inaccessible because it would require elevating the monitoring personnel more than 2 meters (7 feet) above a permanent support surface or would require the erection of scaffold; or
 - vi. Not able to be accessed at any time in a safe manner to perform monitoring. Unsafe access includes, but is not limited to, the use of a wheeled scissor-lift on unstable or uneven terrain,

the use of a motorized man-lift basket in areas where an ignition potential exists, or access would require near proximity to hazards such as electrical lines, or would risk damage to equipment.

- (2) If any inaccessible, ceramic, or ceramic-lined connector is observed by visual, audible, olfactory, or other means to be leaking, the visual, audible, olfactory, or other indications of a leak to the atmosphere shall be eliminated as soon as practical.
- i. Except for instrumentation systems and inaccessible, ceramic, or ceramic-lined connectors meeting the provisions of paragraph (f) of this condition, identify the connectors subject to the requirements of 40 CFR 60, Subpart VVa. Connectors need not be individually identified if all connectors in a designated area or length of pipe subject to the provisions of 40 CFR 60, Subpart VVa are identified as a group, and the number of connectors subject is indicated.

TAPCR 1200-03-09-.03(8) and 40 CFR §60.482-11a

Compliance Method: Compliance with 40 CFR §60.482-1a through 60.482-11a will be determined by review of records and reports, review of performance test results, and inspections using the methods and procedures specified in 40 CFR §60.485a.

S1-21. Alternative Standards for Valves

The permittee may elect to comply with an alternate standard for valves in accordance with 40 CFR §60.483-1a or §60.483-2a. An owner or operator must notify the Administrator that the owner or operator has elected to comply with an alternate standard as specified in 40 CFR §60.487(d), and meet all applicable requirements listed in the relevant subpart before implementation.

TAPCR 1200-03-09-.03(8) and 40 CFR §60.483-1a and §60.483-2a

Compliance Method: This condition is informational only.

S1-22. Test methods and procedures

- (a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR 60, Subpart VVa or other methods and procedures as specified in this condition, except as provided in §60.8(b).
- (b) The owner or operator shall determine compliance with the standards in §§60.482–1a through 60.482–11a, 60.483a, and 60.484a as follows:
 - (1) Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 of appendix A–7 of 40 CFR 60, Subpart VVa. The following calibration gases shall be used:
 - i. Zero air (less than 10 ppm of hydrocarbon in air); and
 - ii. A mixture of methane or n-hexane and air at a concentration no more than 2,000 ppm greater than the leak definition concentration of the equipment monitored. If the monitoring instrument's design allows for multiple calibration scales, then the lower scale shall be calibrated with a calibration gas that is no higher than 2,000 ppm above the concentration specified as a leak, and the highest scale shall be calibrated with a calibration gas that is approximately equal to 10,000 ppm. If only one scale on an instrument will be used during monitoring, the owner or operator need not calibrate the scales that will not be used during that day's monitoring.
 - (2) A calibration drift assessment shall be performed, at a minimum, at the end of each monitoring day. Check the instrument using the same calibration gas(es) that were used to calibrate the instrument before use. Follow the procedures specified in Method 21 of appendix A–7 of40 CFR 60, Subpart VVa, Section 10.1, except do not adjust the meter readout to correspond to the calibration gas value. Record the

instrument reading for each scale used as specified in §60.486a(e)(7). Calculate the average algebraic difference between the three meter readings and the most recent calibration value. Divide this algebraic difference by the initial calibration value and multiply by 100 to express the calibration drift as a percentage. If any calibration drift assessment shows a negative drift of more than 10 percent from the initial calibration value, then all equipment monitored since the last calibration with instrument readings below the appropriate leak definition and above the leak definition multiplied by (100 minus the percent of negative drift/divided by 100) must be re-monitored. If any calibration drift assessment shows a positive drift of more than 10 percent from the initial calibration value, then all equipment monitored with instrument readings discretion, all equipment since the last calibration with instrument readings above the appropriate leak definition multiplied by (100 plus the percent of positive drift/divided by 100) may be re-monitored.

- (c) The owner or operator shall determine compliance with the no-detectable-emission standards in §§60.482–2a(e), 60.482–3a(i), 60.482–4a, 60.482–7a(f), and 60.482–10a(e) as follows:
 - (1) The requirements of paragraph (b) shall apply.
 - (2) Method 21 of appendix A–7 of 40 CFR 60, Subpart VVa shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.
- (d) The owner or operator shall test each piece of equipment unless he demonstrates that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used:
 - (1) Procedures that conform to the general methods in ASTM E260–73, 91, or 96, E168–67, 77, or 92, E169–63, 77, or 93 (incorporated by reference—see §60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment.
 - (2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid.
 - (3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, paragraphs (d)(1) and (2) of this condition shall be used to resolve the disagreement.
- (e) The owner or operator shall demonstrate that a piece of equipment is in light liquid service by showing that all the following conditions apply:
 - (1) The vapor pressure of one or more of the organic components is greater than 0.3 kPa at 20 °C (1.2 in. H2O at 68 °F). Standard reference texts or ASTM D2879–83, 96, or 97 (incorporated by reference—see §60.17) shall be used to determine the vapor pressures.
 - (2) The total concentration of the pure organic components having a vapor pressure greater than 0.3 kPa at 20 °C (1.2 in. H2O at 68 °F) is equal to or greater than 20 percent by weight.
 - (3) The fluid is a liquid at operating conditions.
- (f) Samples used in conjunction with paragraphs (d), (e), and (g) of this condition shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.
- (g) [Reserved]
- (h) The owner or operator shall determine compliance with § 60.483–1a or § 60.483–2a as follows:
 - (1) The percent of valves leaking shall be determined using the following equation:

 $%V_{\rm L} = V_{\rm L} / V_{\rm T} * 100$

Where:

- $% V_L =$ Percent leaking values.
- V_L = Number of valves found leaking.
- V_T = The sum of the total number of valves monitored.
- (2) The total number of valves monitored shall include difficult-to-monitor and unsafe-to-monitor valves only during the monitoring period in which those valves are monitored.
- (3) The number of valves leaking shall include valves for which repair has been delayed.

- (4) Any new valve that is not monitored within 30 days of being placed in service shall be included in the number of valves leaking and the total number of valves monitored for the monitoring period in which the valve is placed in service.
- (5) If the process unit has been subdivided in accordance with § 60.482–7a(c)(1)(ii), the sum of valves found leaking during a monitoring period includes all subgroups.
- (6) The total number of valves monitored does not include a valve monitored to verify repair.

TAPCR 1200-03-09-.03(8) and 40 CFR §60.485a

Compliance Method: Stated in the condition.

S1-23. Recordkeeping Requirements

- (a)
- (1) Each owner or operator subject to the provisions of 40 CFR 60, Subpart VVa shall comply with the recordkeeping requirements of this condition.
- (2) An owner or operator of more than one affected facility subject to the provisions of 40 CFR 60, Subpart VVa may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility.
- (3) The owner or operator shall record the information specified in paragraphs (a)(3)(i) through (v) of this condition for each monitoring event required by §§60.482–2a, 60.482–3a, 60.482–7a, 60.482–8a, 60.482–11a, and 60.483–2a.
 - i. Monitoring instrument identification.
 - ii. Operator identification.
 - iii. Equipment identification.
 - iv. Date of monitoring.
 - v. Instrument reading.
- (b) When each leak is detected as specified in §§60.482–2a, 60.482–3a, 60.482–7a, 60.482–8a, 60.482–11a, and 60.483–2a, the following requirements apply:
 - (1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
 - (2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in §60.482–7a(c) and no leak has been detected during those 2 months.
 - (3) The identification on a connector may be removed after it has been monitored as specified in § 60.482–11a(b)(3)(iv) and no leak has been detected during that monitoring.
 - (4) The identification on equipment, except on a valve or connector, may be removed after it has been repaired.
- (c) When each leak is detected as specified in §§60.482–2a, 60.482–3a, 60.482–7a, 60.482–8a, 60.482–11a, and 60.483–2a, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:
 - (1) The instrument and operator identification numbers and the equipment identification number, except when indications of liquids dripping from a pump are designated as a leak.
 - (2) The date the leak was detected and the dates of each attempt to repair the leak.
 - (3) Repair methods applied in each attempt to repair the leak.
 - (4) Maximum instrument reading measured by Method 21 of appendix A–7 of 40 CFR 60, Subpart VVa at the time the leak is successfully repaired or determined to be nonrepairable, except when a pump is repaired by eliminating indications of liquids dripping.
 - (5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
 - (6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.
 - (7) The expected date of successful repair of the leak if a leak is not repaired within 15 days.
 - (8) Dates of process unit shutdowns that occur while the equipment is unrepaired.

- (9) The date of successful repair of the leak.
- (d) The following information pertaining to the design requirements for closed vent systems and control devices described in § 60.482–10a shall be recorded and kept in a readily accessible location:
 - (1) Detailed schematics, design specifications, and piping and instrumentation diagrams.
 - (2) The dates and descriptions of any changes in the design specifications.
 - (3) A description of the parameter or parameters monitored, as required in §60.482–10a(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.
 - (4) Periods when the closed vent systems and control devices required in §§60.482–2a, 60.482–3a, 60.482–4a, and 60.482–5a are not operated as designed, including periods when a flare pilot light does not have a flame.
 - (5) Dates of startups and shutdowns of the closed vent systems and control devices required in §§60.482–2a, 60.482–3a, 60.482–4a, and 60.482–5a.
- (e) The following information pertaining to all equipment subject to the requirements in §§60.482–1a to 60.482–11a shall be recorded in a log that is kept in a readily accessible location:
 - (1) A list of identification numbers for equipment subject to the requirements of 40 CFR 60, Subpart VVa.
 - (2)
- i. A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of \$\$60.482-2a(e), 60.482-3a(i), and 60.482-7a(f).
- ii. The designation of equipment as subject to the requirements of §60.482–2a(e), §60.482–3a(i), or §60.482–7a(f) shall be signed by the owner or operator. Alternatively, the owner or operator may establish a mechanism with their permitting authority that satisfies this requirement.
- (3) A list of equipment identification numbers for pressure relief devices required to comply with \$60.482-4a.
- (4)
- i. The dates of each compliance test as required in \$&0.482-2a(e), 60.482-3a(i), 60.482-4a, and 60.482-7a(f).
- ii. The background level measured during each compliance test.
- iii. The maximum instrument reading measured at the equipment during each compliance test.
- (5) A list of identification numbers for equipment in vacuum service.
- (6) A list of identification numbers for equipment that the owner or operator designates as operating in VOC service less than 300 hr/yr in accordance with §60.482–1a(e), a description of the conditions under which the equipment is in VOC service, and rationale supporting the designation that it is in VOC service less than 300 hr/yr.
- (7) The date and results of the weekly visual inspection for indications of liquids dripping from pumps in light liquid service.
- (8) Records of the information specified in paragraphs (e)(8)(i) through (vi) of this condition for monitoring instrument calibrations conducted according to sections 8.1.2 and 10 of Method 21 of appendix A–7 of 40 CFR 60, Subpart VVa and §60.485a(b).
 - i. Date of calibration and initials of operator performing the calibration.
 - ii. Calibration gas cylinder identification, certification date, and certified concentration.
 - iii. Instrument scale(s) used.
 - iv. A description of any corrective action taken if the meter readout could not be adjusted to correspond to the calibration gas value in accordance with section 10.1 of Method 21 of appendix A–7 of 40 CFR 60, Subpart VVa.
 - v. Results of each calibration drift assessment required by 60.485a(b)(2) (i.e., instrument reading for calibration at end of monitoring day and the calculated percent difference from the initial calibration value).
 - vi. If an owner or operator makes their own calibration gas, a description of the procedure used.
- (9) The connector monitoring schedule for each process unit as specified in (60.482-11a)(3)(v).
- (10) Records of each release from a pressure relief device subject to §60.482–4a.

- (f) The following information pertaining to all valves subject to the requirements of §60.482–7a(g) and (h), all pumps subject to the requirements of §60.482–2a(g), and all connectors subject to the requirements of §60.482–11a(e) shall be recorded in a log that is kept in a readily accessible location:
 - (1) A list of identification numbers for valves, pumps, and connectors that are designated as unsafe-tomonitor, an explanation for each valve, pump, or connector stating why the valve, pump, or connector is unsafe-to-monitor, and the plan for monitoring each valve, pump, or connector.
 - (2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.
- (g) The following information shall be recorded for valves complying with §60.483–2a:
 - (1) A schedule of monitoring.
 - (2) The percent of valves found leaking during each monitoring period.
- (h) The following information shall be recorded in a log that is kept in a readily accessible location:
 - (1) Design criterion required in §§60.482-2a(d)(5) and 60.482-3a(e)(2) and explanation of the design criterion; and
 - (2) Any changes to this criterion and the reasons for the changes.
- (i) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in §60.480a(d):
 - (1) An analysis demonstrating the design capacity of the affected facility,
 - (2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol, and
 - (3) An analysis demonstrating that equipment is not in VOC service.
- (j) Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.
- (k) The provisions of §60.7(b) and (d) do not apply to affected facilities subject to 40 CFR 60, Subpart VVa.

TAPCR 1200-03-09-.03(8) and 40 CFR §60.486a

Compliance Method: Stated in the condition.

S1-24. Reporting Requirements

- (a) Each owner or operator subject to the provisions of 40 CFR 60, Subpart VVa shall submit semiannual reports to the Administrator beginning 6 months after the initial startup date.
- (b) The initial semiannual report to the Administrator shall include the following information:
 - (1) Process unit identification.
 - (2) Number of valves subject to the requirements of \$60.482–7a, excluding those valves designated for no detectable emissions under the provisions of \$60.482–7a(f).
 - (3) Number of pumps subject to the requirements of §60.482–2a, excluding those pumps designated for no detectable emissions under the provisions of §60.482–2a(e) and those pumps complying with § 60.482–2a(f).
 - (4) Number of compressors subject to the requirements of §60.482–3a, excluding those compressors designated for no detectable emissions under the provisions of §60.482–3a(i) and those compressors complying with §60.482–3a(h).
 - (5) Number of connectors subject to the requirements of §60.482–11a.
- (c) All semiannual reports to the Administrator shall include the following information, summarized from the information in § 60.486a:
 - (1) Process unit identification.
 - (2) For each month during the semiannual reporting period,
 - i. Number of valves for which leaks were detected as described in §60.482–7a(b) or § 60.483–2a,
 - ii. Number of valves for which leaks were not repaired as required in §60.482–7a(d)(1),

- iii. Number of pumps for which leaks were detected as described in §60.482–2a(b), (d)(4)(ii)(A) or (B), or (d)(5)(iii),
- iv. Number of pumps for which leaks were not repaired as required in (d)(6), (d)(6),
- v. Number of compressors for which leaks were detected as described in §60.482–3a(f),
- vi. Number of compressors for which leaks were not repaired as required in §60.482–3a(g)(1),
- vii. Number of connectors for which leaks were detected as described in §60.482–11a(b)
- viii. Number of connectors for which leaks were not repaired as required in 60.482-11a(d), and ix. (ix)–(x) [Reserved]
- xi. The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.
- (3) Dates of process unit shutdowns which occurred within the semiannual reporting period.
- (4) Revisions to items reported according to paragraph (b) of this condition if changes have occurred since the initial report or subsequent revisions to the initial report.
- (d) An owner or operator electing to comply with the provisions of §§60.483–1a or 60.483–2a shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions.
- (e) An owner or operator shall report the results of all performance tests in accordance with § 60.8 of the General Provisions. The provisions of § 60.8(d) do not apply to affected facilities subject to the provisions of 40 CFR 60, Subpart VVa except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests.
- (f) The requirements of paragraphs (a) through (c) of this condition remain in force until and unless EPA, in delegating enforcement authority to a state under section 111(c) of the CAA, approves reporting requirements or an alternative means of compliance surveillance adopted by such state. In that event, affected sources within the state will be relieved of the obligation to comply with the requirements of paragraphs (a) through (c) of this condition, provided that they comply with the requirements established by the state.

TAPCR 1200-03-09-.03(8) and 40 CFR §60.487a

Compliance Method: Stated in the condition.

(End of conditions)

The permit application gives the location of this source as 36.561958° Latitude and -82.170657° Longitude.

Appendix 1: Notification of Change in Responsible Person

Facility (Permittee):	Dynamic Recycling, LLC	
Facility ID: 82-102	20	
Former Responsible Person:	Name	Title
		The
New Responsible Person:	Name	Title
-	Email	
-	Mailing A	Address
-	Phone (office)	Phone (cell)
Date New Responsible Person was	assigned this duty:	

I certify that the information contained in this Notification is accurate and true to the best of my knowledge. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Signature		Date
Signer's name (print)	Title	Phone (with area code)

Appendix 2: Notification of Changes

Facility (Permittee):	Dynamic Recycling, LLC
•	

Facility ID:

82-1020

Source Number:

	Control	Stack Height	Stack Diameter	Exit Velocity	Exit
	Equipment	(Feet)	(reel)	(Feet/Second)	Temperature (°F)
Current					
Proposed					
Current					
Proposed					
Current					
Proposed					

Comments:		

As the Responsible Person of the above-mentioned facility (permittee), I certify that the information contained in this Notification is accurate and true to the best of my knowledge. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Signature		Date	
Signer's name (print)	Title	Phone (with area code)	

Appendix 3: Notification of Ownership Change

Facility (Permittee):	Dynamic Recycling, LLC	(Previous Owner)
Facility ID:	82-1020	
Facility (Permittee):		(New Owner) Date of Ownership Change
Secretary of State Control	Number:	[as registered with the TN Secretary of State (SOS)]
Responsible Person/Authoriz	ed Contact	Email Address
Mailing Address		Phone with area code
Principal Technical Contact		Email Address
Mailing Address		Phone with area code
Billing Contact		Email Address
Mailing Address		Phone with area code

As the responsible person for the new owner or operator of the above-mentioned facility (permittee):

- I agree to not make any changes to the stationary source(s) that meet the definition of modification as defined in Division 1200-03 or Division 0400-30¹, and
- I agree to comply with the conditions contained in **the permits listed below**, Division 1200-03 and Division 0400-30 of the Tennessee Air Pollution Control Regulations, the Tennessee Air Quality Act, and any documented agreements made by the previous owner to the Technical Secretary.

List all active permits issued to the facility for which the owner wishes to assume ownership:

The information contained in this Notification is accurate and true to the best of my knowledge. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Signature		Date	
Signer's name (print)	Title	Phone (with area code)	

¹ Appropriate application forms must be submitted prior to modification of the stationary source(s).

Appendix 4: Startup Certification

Facility (Permittee):	Dynamic Recyc	ling, LLC			
Facility ID:	82-1020				
Startup Certification for	s Source Number:				
The permittee shall certify permit 981211 by submitt	y the startup date for each n ing this document.	ew or modified air contaminant source regulated by construction			
Date of startup:		_//			
MonthDayYearAs the Responsible Person of the above-mentioned facility (permittee), I certify that the information contained in this Startup Certification is accurate and true to the best of my knowledge. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.					
Signature		Date			
Signer's name (print)	Title	Phone (with area code)			
	I				

Appendix 5: Fees

All minor and conditional major source annual emission fees are due and payable to the Division in full according to SCHEDULE I below². The county that a source is located in determines when the minor source annual emission fee is due. Fees are due the first day of the month listed. If a source is located on contiguous property in more than one county, the county appearing earliest in the calendar year shall be used to determine the due date of the annual emission fee.

SCHEDULE I Month the Annual Emissions Fee is Due (Accounting Period) Counties in the Monthly Grouping

January	Anderson, Bedford, Benton, Bledsoe, Blount, Bradley, and Campbell
February	Cannon, Carroll, Carter, Cheatham, Chester, Claiborne, Clay, and Cocke
March	Coffee, Crockett, Cumberland, Davidson, Decatur, DeKalb, Dickson, Dyer, and Fayette
April	Fentress, Franklin, Gibson, Giles, Grainger, Greene, and Grundy
May	Hamblen, Hamilton, Hancock, Hardeman, Hardin, Hawkins, Haywood, and Henderson
June	Henry, Hickman, Houston, Humphreys, Jackson, Jefferson, Johnson, Knox, Lake, Lauderdale, Lawrence, and Lewis
July	Lincoln, Loudon, McMinn, McNairy, Macon, and Madison
August	Marion, Marshall, Maury, Meigs, Monroe, Montgomery, Moore, and Morgan
September	Obion, Overton, Perry, Pickett, Polk, Putnam, and Rhea
October	Roane, Robertson, Rutherford, Scott, Sequatchie, Sevier, and Shelby
November	Smith, Stewart, Sullivan, Sumner, Tipton, Trousdale, Unicoi, and Union
December	Van Buren, Warren, Washington, Wayne, Weakley, White, Williamson, and Wilson

² Note that some sources with allowable emissions below specific thresholds are not subject to the requirement to pay annual emission fees. Contact the Emission Inventory Program at apc.inventory@tn.gov if you have any questions.

Appendix 6: Emission Statement for VOC and NOx

Not Applicable

Appendix 7: Compliance Certification Statement

Facility (Permittee):		Dynamic Recycling, LLC	
Facility Address:			
Facility ID:	82-1020		

Conditional Major Permit Number	Reporting Period	Report Deadline

This report is required pursuant to TAPCR 1200-03-09-.02(11)(a).

Responsible Person Certification

I, the undersigned, am a Responsible Person (as described in **Condition G1**) of the facility for which this report is being submitted. This document consists of ______ pages and they are numbered from page _____ to _____. As a Responsible Person of the above-mentioned facility (permittee), I certify that the information contained in this Annual Compliance Status Report is accurate and true to the best of my knowledge. As specified in Tennessee Code Annotated Section 39-16-702(a)(4), this declaration is made under penalty of perjury.

Signature		Date
Signer's name (print)	Title	Phone (with area code)

Appendix 8: Agreement Letters

Permit Number: 981211 Issuance Date: March 26, 2024 Expiration Date: March 26, 2026

Dynamic Recycling LLC 220 N. Industrial Dr.

Bristol TN 37620

11 March, 2024

Tennessee Department of Environment and Conservation Division of Air Pollution Control William R. Snodgrass Tennessee Tower, 15th Floor 312 Rosa L. Parks Avenue Nashville, TN 37243

RE: Permit Agreement Letter Dynamic Recycling 220 North Industrial Drive Bristol, Tennessee 37620 Emission Source Reference No. 82-1020/ Permit No.981211

Dear Ms. Owenby:

On behalf of Dynamic Recycling the following permit limitations are agreed upon for the ethanol reclamation operation located at the above referenced facility:

- Individual Hazardous Air Pollutants [HAPs] emitted by this facility shall not exceed 9.9 tons during any period
 of 12-consecutive months.
- Volatile Organic Compounds [VOC] emitted by this facility shall not exceed 99 tons during any period of 12consecutive months. The VOC emission limitation was taken to avoid Prevention of Significant Air Quality Deterioration (PSD).
- The stated production rate for this facility is 6 million gallons per year of 200 proof alcohol.

Dynamic Recycling shall demonstrate compliance with these limitations by maintaining a log of monthly and annual ethanol production in gallons. AP-42 emissions factors identified in the air permit application will be utilized to determine emissions from ethanol production.

Should you have any questions or require additional information, please contact Brian Potter via phone at 276-698-5941 or via e-mail at brianp@mxiinc.com

On behalf of Dynamic Recycling, I agree to the above limitations. I am authorized to represent and bind the facility in environmental affairs.

Signature: Orin Attos

Name: Brian Potter

Title: COO

Date: 3/11/2024

Appendix 9: Example Logs

Monthly VOC Calculation Table for Source 04

[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
Material ID	Material Name	Material Produced (gal/month or ton/mo.)	Material Density (lb./gal)	VOC Emission Factor* (lb. VOC/ton EtOH)	VOC Content (wt.% or lb. VOC/gal)	VOC (lb./mo.)	VOC (ton/mo)
Total							

*VOC Emission Factors from Ethanol produced found from EPA AP-42 Chapter 4.7, Evaporation Loss Sources, Table 4.7-1.

[7] VOC Emissions (lb./mo.) = [3] Material Produced (gal/mo.) * [4] Material Density (lb./gal) * 1 ton/2000 lb. * [5] VOC Emission Factor (lb. VOC/ton EtOH)
[7] VOC Emissions (lb./mo.) = [3] Material Produced (ton/mo.) * [5] VOC Emission Factor (lb. VOC/ton EtOH)

[8] VOC Emissions (ton/mo.) = [7] VOC Emissions (lb./mo.) / 2,000 lb./ton

	VOC		
Month/Year	[8] (ton/mo.)	(ton/12 consecutive months) ¹	

Annual VOC Calculation Table for Source 04

¹ The tons per 12-consecutive month values are the sum of the emissions in the 11 months preceding the month just completed + the emissions in the month just completed. If data is not available for the 11 months preceding the initial use of this table, this value will be equal to the value for tons per month. For the second month, it will be the sum of the first month and the second month. Indicate in parentheses the number of months summed [i.e., 6 (2) represents 6 tons emitted in 2 months].

Appendix 10: General Provisions for 40 CFR Part 60, Subpart NNN

You are required to comply with the following General Provisions of the federal Standards of Performance for New Stationary Sources (NSPS):

General Provisions Citation 40 CFR	Subject of citation	Applies to subpart	Explanation
§60.1	General applicability of the General Provisions	Yes 🛛 No 🗆	General/Initial applicability determination; applicability after standard established.
§60.2	Definitions	Yes 🛛 No 🗆	General Definitions. Additional terms defined in §60.661.
§60.3	Units and abbreviations	Yes 🛛 No 🗆	General units and abbreviations.
§60.4	Address	Yes 🛛 No 🗆	Addresses for regional EPA offices and state/local agencies.
§60.5	Determination of construction or modification	Yes 🛛 No 🗆	Outlines Administrator's (Technical Secretary) authority on whether actions by the owner/operator are construction or modification.
§60.6	Review of plans	Yes 🛛 No 🗆	Outlines Administrator's (Technical Secretary) authority to review plans and provide technical advice to owner/operator due to construction or modification.
§60.7	Notification and Recordkeeping	Yes 🛛 No 🗆	Applies as required in §60.665. Notification shall be submitted with the notification of initial start-up required by §60.7(a)(3).
§60.8	Performance tests	Yes 🛛 No 🗆	
§60.9	Availability of information	Yes 🛛 No 🗆	Availability of information to the public.
§60.10	State Authority	Yes 🛛 No 🗆	Outlines the state/local authority regarding emission standards, limitations, permit approvals, etc.
§60.11	Compliance with standards and maintenance requirements	Yes 🛛 No 🗆	
§60.12	Circumvention	Yes 🛛 No 🗆	Circumventing standards applicable to a source.
§60.13	Monitoring requirements	Yes 🛛 No 🗆	
§60.14	Modification	Yes 🛛 No 🗆	General requirement pertaining to modification of a source.
§60.15	Reconstruction	Yes 🛛 No 🗆	General requirement pertaining to reconstruction of a source.
§60.16	Priority list	Yes 🛛 No 🗆	

§60.17	Incorporations by reference	Yes 🛛 No 🗆	Outline of materials incorporated by reference per the Director of Federal Register.
§60.18	General control device requirements	Yes 🛛 No 🗆	
§60.19	General notification and reporting requirements	Yes 🛛 No 🗆	General requirements for notification and reporting.

TAPCR 1200-03-09-.03(8)

Appendix 11: General Provisions for 40 CFR Part 60, Subpart VVa

You are required to comply with the following General Provisions of the federal Standards of Performance for New Stationary Sources (NSPS):

General provisions citation 40 CFR	Subject of citation	Applies to subpart	Explanation
§60.1	General applicability of the General Provisions	Yes 🛛 No 🗌	General/Initial applicability determination; applicability after standard established.
§60.2	Definitions	Yes 🛛 No 🗆	General Definitions. Additional terms defined in §60.481a.
§60.3	Units and abbreviations	Yes 🛛 No 🗆	General units and abbreviations.
§60.4	Address	Yes 🛛 No 🗆	Addresses for regional EPA offices and state/local agencies.
§60.5	Determination of construction or modification	Yes 🛛 No 🗌	Outlines Administrator's (Technical Secretary) authority on whether actions by the owner/operator are construction or modification.
§60.6	Review of plans	Yes 🛛 No 🗆	Outlines Administrator's (Technical Secretary) authority to review plans and provide technical advice to owner/operator due to construction or modification.
§60.7	Notification and Recordkeeping	Yes 🛛 No 🗆	Applies as required in §60.486a and §60.487a
§60.8	Performance tests	Yes 🛛 No 🗆	Yes, except as provided in §60.8(b).
§60.9	Availability of information	Yes 🛛 No 🗆	Availability of information to the public.
§60.10	State Authority	Yes 🛛 No 🗆	Outlines the state/local authority regarding emission standards, limitations, permit approvals, etc.
§60.11	Compliance with standards and maintenance requirements	Yes 🛛 No 🗆	
§60.12	Circumvention	Yes 🛛 No 🗆	Circumventing standards applicable to a source.
§60.13	Monitoring requirements	Yes 🛛 No 🗆	General monitoring requirements.
§60.14	Modification	Yes 🛛 No 🗆	General requirement pertaining to modification of a source.
§60.15	Reconstruction	Yes 🛛 No 🗆	General requirement pertaining to reconstruction of a source.
§60.16	Priority list	Yes 🛛 No 🗆	

§60.17	Incorporations by reference	Yes 🛛 No 🗌	Outline of materials incorporated by reference per the Director of Federal Register.
§60.18	General control device requirements	Yes ⊠ No □	Requirements listed in §60.485a for leaks and §60.482-10a for control devices. Flares used to comply with subpart VVa shall comply with the requirements of §60.18.
§60.19	General notification and reporting requirements	Yes 🛛 No 🗆	General requirements for notification and reporting.

TAPCR 1200-03-09-.03(8)