TENTATIVE AGENDA STATE OF TENNESSEE REGULAR MEETING AIR POLLUTION CONTROL BOARD Conference Room A, 3rd Floor Tennessee Tower 312 Rosa L. Parks Avenue In Person and Remote Access Via WebEx link

Wednesday, January 11, 2023 9:30 A.M.

	Item	Presenter	Page
1.	Elect Vice-Chair for 2023		
2.	Roll Call		
3.	Approval of the October 11, 2022, Board Meeting		
	Minutes		2
4.	Conflict of Interest 2023	Steve Stout OGC	7
5.	Eastman Chemical Variance BO 23-001	Travis Blake	13
	General Business		
	1. Title V Financial & Fee Diversification Update	Mary-Margaret Chandler	15
	Shelby County Local Program Second Quarterly Progress Report	Marc Corrigan	19

The meeting will be held in compliance with Tennessee Code Annotated Section 8-44-108, as amended by Chapter 490 of the 1999 Public Acts of the Tennessee General Assembly. The meeting will be conducted permitting participation by electronic or other means of communication. Consequently, some members of the Tennessee Air Pollution Control Board are allowed to and may participate by electronic or other means of communication and may not be physically present at the announced location of the meeting.

Air Pollution Control Board of the State of Tennessee Regular Meeting

On Wednesday October 12, 2022, at 9:30 A.M., the Air Pollution Control Board of the State of Tennessee, (hereinafter, referred to as the "Board"), began its meeting on the 3rd Floor of the Tennessee Tower in the Nashville Room. The following Board members were physically present.

Dr. Ronne' Adkins Dr. John Benitez Dr. Shawn Hawkins Mr. Richard Holland Ms. Caitlin Jennings Mayor Ken Moore Ms. Amy Spann Mayor Larry Waters Mr. Jimmy West

The following Board members joined the meeting via WebEx:
Dr. Joshua Fu
Mr. Stephen Moore

The following Board members were absent:

Mr. Mike Haverstick

Dr. Chunrong Jia

Since the Chairman, David Salyers, P.E., could not attend the meeting, Dr. Ronne' Adkins represented the Chairman by proxy. Ms. Michelle Owenby, Director, Division of Air Pollution Control, served as Technical Secretary.

The Vice-Chairman, Mayor Larry Waters, called the meeting to order and asked for a roll call and the response was as follows:

Dr. Adkins	Present	Dr. Benitez	Present
Dr. Fu	WebEx	Mr. Haverstick	Absent
Dr. Hawkins	Present	Mr. Holland	Present
Ms. Jennings	Present	Dr. Jia	Absent
Mayor Moore	Present	Mr. Moore	Webex
Ms. Spann	Present	Mayor Waters	Present
Mr. Jimmy West	Present		

Nine (9) Board members were present, two (2) participated via WebEx and two (2) were absent.

The next item on the agenda was the approval of the minutes from the September 14, 2022, Board meeting. The Vice-Chairman requested a motion to approve the minutes. Mayor Waters made a motion to approve the minutes and Mr. Richard Holland seconded the motion. The Vice-Chairman asked if there were any additions or corrections to the minutes. Hearing none, the Vice-Chair asked for a roll call and the response was as follows:

Dr. Adkins	Yes	Dr. Benitez	Yes
Dr. Fu	Yes	Mr. Haverstick	Absent
Dr. Hawkins	Yes	Mr. Holland	Yes
Ms. Jennings	Yes	Dr. Jia	Absent
Mayor Moore	Yes	Mr. Moore	Yes
Ms. Spann	Yes	Mayor Waters	Yes
Mr. West	Yes		

The motion carried with Eleven (11) affirmative votes; the minutes were approved as presented.

The Vice-Chairman called on Mr. Mark Reynolds with Air Pollution Control to provide an update on the NSPS Incorporation by Reference Rule Revision. Mr. Reynolds stated that the Division proposes to incorporate by reference the federal NSPS rules into the state rules. This would include all the NSPS rules in 40 CFR Part 60, except the emission guidelines. Currently, most NSPS rules are placed in the state rules on a word-for-word basis, which makes it difficult to keep up to date if a federal rule is amended. Currently, the requirements of a NSPS that are not reproduced through the current regulations must be placed in a permit before they can be enforced. By adopting federal NSPS rules by reference, the Board will be able to keep the state regulations in line with the federal regulations and will be able to enforce the federal regulations directly. As part of the rule revision, the Division proposes to repeal the current NSPS rules that are in the state rules. The Division proposes to incorporate by reference the July 1, 2022, CFR version of the NSPS rules into the state rules. Mr. Reynolds concluded by showing a timeline for the completion of the rule revision and answering a few questions from the Board members.

The Vice-Chairman called on Mr. Mark Reynolds with Air Pollution Control to provide an update on the Ambient Air Quality Standards Rule Revision. Mr. Reynolds stated that the state ambient air quality standards are out-of-date. The Division proposes to update the state standards so that they match the current federal National Ambient Air Quality Standards (NAAQS). Mr. Reynolds also stated that the current standards are in Chapter 1200-03-03 and would be moving to Chapter 0400-30-03. Mr. Reynolds showed the current NAAQS for particulate matter, sulfur dioxide, carbon monoxide, ozone, nitrogen dioxide, and lead. Mr. Reynolds concluded by answering a few questions from the Board members.

The Vice-Chairman called on Wayne Gregory with Office of General Counsel to discuss the TDEC Rule Retrospective. Mr. Gregory briefed the Board on the Legislator Mandate to review the departments 34 Chapters and 266 Rules by December 1st, 2023. The Rules will either need to be amended, or appealed, or continue in effective without amendment under current state and federal law.

The Vice-Chairman called on Mr. Marc Corrigan with Air Pollution Control to provide an update on the Shelby County Local Program Quarterly Progress Report. Mr. Corrigan

provided some background regarding an earlier board order. On June 8th, the Board approved the renewal of the Certificates of Exemption (COE) for Tennessee's four local air pollution control agencies. In Board Order 22-008 the Board included conditional language with respect to the renewal of the COE for Shelby County.

The Board included a directive to Shelby County to address the findings of EPA's 2019 Technical Systems Audit, or TSA. The TSA was an audit of the air monitoring program in Shelby County. In the board order, the Board included some specific language to help remedy the issues.

In the order, the Board encouraged the Shelby County Health Department to take whatever action may be most appropriate to quickly resolve the outstanding findings and concerns in the 2019 TSA, including, but not limited to supplementing current staffing with contract labor; addressing staffing concerns by finding and hiring qualified staff; and ultimately provide the Technical Secretary a close out letter from EPA no later than 12 months from the date of the order.

In addition, the Board encouraged the Shelby County Health Department to address whatever factors were contributing to the significant backlog of Title 5 permitting activities as soon as practical.

Also, the Board directed Shelby County Health Department to prepare quarterly reports, the first due September 30th, to the Technical Secretary to show progress being made. That first quarterly report is included in the board packet beginning on page 34.

The Division has reviewed the Shelby County Health Department's Q1 Progress Report and would like to provide the board the following comments:

The Q1 Progress Report demonstrates progress has been made by Shelby County Health Department to satisfy items listed in Board Order 22-008, Section III-I, concerning EPA's 2019 TSA.

Since the board order was issued, Shelby County Health Department has been able to revise and submit some of the outdated SOPs to EPA, begin the bidding and awarding process for contractors or consultants, hire one new staff member, and reclassify the remaining positions to attract more applicants. Positive progress was made to increase the base pay of some positions to attract more qualified applicants, and we would encourage Shelby County Health Department to follow through with offering hiring bonuses to attract qualified individuals in this competitive market.

The Shelby County Health Department acknowledges that the submitted SOPs will need to be revised further and appears to be prepared to do that through a combination of consultants and Shelby County Health Department staff. This path forward with combined staffing to revise and draft SOPs reflects that Shelby County Health Department understands the need for staff to inform the SOPs so they reflect what is being done by the operators on the network with the equipment. The Division has advised Shelby County Health Department that SOP revisions can often take multiple review rounds with EPA; therefore, engaging the consultants to start work with the Shelby County Health Department staff as early as possible is critical.

The Shelby County Health Department also noted that Michael Goldstein, a meteorologist with the Shelby County Health Department, is aiding the air monitoring branch with some critical functions. The State Air Division staff have assisted in training Mr. Goldstein in data validation and loading. While he is still learning, the Division is encouraged to see this work

being conducted and we will remain available to assist as needed. EPA has provided the Shelby County Health Department a 2-week extension for the loading of Q2 data.

We would also like to note that State Air Division Quality Assurance staff performed audits on the Shelby County Health Department ambient air monitoring network during the month of September with satisfactory results.

Shelby County Health Department's performance and continued progress throughout the next quarter will be critical in determining their ability to meet the requirements of Board Order 22-008 by the June 2023 deadline.

The Q1 Progress Report demonstrates progress has been made by Shelby County Health Department to satisfy the concern noted in Board Order 22-008, Section III-II, concerning Title 5 permitting activities.

Shelby County Health Department noted that the Title 5 fee ordinance has completed two readings by the Shelby County Commission, at the time of the writing of the report. Also, a position was posted on September 8th, to hire two engineers.

Mr. Corrigan then welcome to the podium Dr. Michelle Taylor, Director of the Shelby County Health Department to provide further details and answer any questions the Board might have.

Michelle Taylor, Director of Health Shelby County introduced Kasia Smith- Alexander, Administrator Environmental Health, and she presented the Board with an update for the Q1 report.

Public comment regarding Shelby County Health Dept. Local Program were given by: Pamela Jackson, Director of Environmental and Safety Affairs Valero-Memphis Refinery, Katherine Terry, Environmental, Health & Safety and Compliance Manager GP Cellulose, Kelvin Weldon, Environmental Supervisor with Nucor Steel, and Bobby White, Chief Public Policy Office with Greater Memphis Chamber.

There being no further business to discuss before the Board, nor members of the public wishing to address the Board, the meeting was adjourned at 10:37am.

(Signed) Michelle Owenby, Technical Secretary
Tennessee Air Pollution Control Board

Approved at Nashville, Tennessee on 01/11/2023

(Signed) Mayor Larry Waters, Vice-Chairman
Tennessee Air Pollution Control Board

(Signed) David Salyers, Chairman

Tennessee Air Pollution Control Board

TENNESSEE AIR POLLUTION CONTROL BOARD

Disclosure of Financial Interests or Other Potential Conflicts of Interest

Pursuant to the terms of Tenn. Code Ann. § 68-201-105(e) and Tenn. Comp. R. & Regs. 0400-30-17-.05(2), the undersigned member of the Air Pollution Control Board ("Board") discloses financial interests as of the date below that are or have the potential to become a conflict of interest (in terms of "significant portion of income") in handling a matter that may arise before the Board. The undersigned also discloses any other potential conflicts of interest (as of the date below) with regard to matters that may come before the Board.

DIRECTIONS: Check the appropriate response(s), provide any required explanation(s) in the lines below, and sign and date.

() The undersigned member has none of the financial interests listed below that are or could have the potential to be a conflict of interest.

() The undersigned member falls into one or more of the following financial categories that does or could pose a conflict of interest with a particular source because the member derives a "significant portion of income" from a particular source, as defined in rule 0400-30-17-.02(b).

Please identify all of the following which are applicable and in the space below identify the name of the source(s) in which there is financial interest. Note the exception for mutual funds and other diversified investments.*

- () Receives 10% or more of gross personal income for a calendar year, including retirement benefits, consultant fees, and stock dividends, from persons subject to Division of Air Pollution Control permits or enforcement orders (or 50% or more of gross personal income for a calendar year if the recipient is over 60 years of age and receiving such portion pursuant to retirement, pension, or similar arrangement).
- () Receives more than \$5,000 annually in investment income from a source. Said investment is limited to those that arise from the purchase of shares of stock in the source that were purchased on the open market and generally available to any person at that price.
- () Receives more than \$100 annually due to a private investment made in a source. Said private investment is one where the purchase of stock or interest in a partnership was made directly with the source and such opportunity was not generally available to the public as a whole.

	() Receives a salary in any amount from a source for services rendered.
	() Sells or is about to sell property or equipment to a source. For the purposes of this part, equipment does not include consumer goods that are offered to the public at the same price offered to the source.
	() Buys or is about to buy property or equipment from a source. For the purposes of this part, equipment does not include consumer goods that can be purchased by the public at the same price the source offered to the Technical Secretary or Board Member.
	() Has taken out a loan from a source in any amount unless:
	(i) The loan is from a financial institution whose deposits are insured by an entity of the federal government, or such loan is made in accordance with existing law and is made in the ordinary course of business. A loan is made in the ordinary course of business if the lender is in the business of making loans, and the loan bears the usual and customary interest rate of the lender for the category of loan involved is made on a basis which assures repayment, is evidenced by a written instrument, and is subject to a due date or amortization schedule;
	(ii) The loan is secured by a recorded security interest in collateral bears the usual and customary interest rate of the lender for the category of loan Involved, is made on a basis which assures repayment, is evidenced by a written instrument, and is subject to a due date or amortization schedule.
	*For purpose of the categories above, income derived from mutual-fund payments, or from other diversified investments as to which the recipient does not know the identity of the primary sources of income, shall be considered part of the recipient's gross personal income but shall not be treated as income derived from persons subject to permits or enforcement orders under this rule division 0400-30 or rule division 1200-03 (i.e., shall not be treated as a "significant portion of income"). Tenn. Comp. R. & Regs. 0400-30-1702(b).
2	Name of Source(s):
() Tl	ne undersigned has the following other potential conflicts of interest:

() The undersigned has no other potential co	onflicts of interest.
= 4	
Signature of Board Member	Date
Please Print Name	

TENNESSEE AIR POLLUTION CONTROL BOARD

Acknowledgement -

Policy of Ethics and Conflicts of Interest Rule

Pursuant to Tenn. Code Ann. § 68-201-105(e) and Tenn. Comp. R. & Regs. 0400-30-17-.05(2), the undersigned member of the Air Pollution Control Board ("Board") acknowledges that, as of the date below, he or she has read and understands all aspects of the Board's Policy of Ethics and the Avoidance of Conflicts of Interest rule, found at Tenn. Comp. R. & Regs. 0400-30-17-.05 (the "Rule"). The undersigned also states, as a condition to serving on the Board, that he or she is not in conflict with the conditions of the Rule.

Signature of Board Member		
Please Print Name		
Date		

TENNESSEE AIR POLLUTION CONTROL BOARD

Board Member Determination - Representing the Public Interest

To enable the Air Pollution Control Board ("Board") to determine whether a majority of Board members "represent the public interest", as required by Tenn. Comp. R. & Regs. 0400-30-17-.02(1), the undersigned board member indicates whether, as of the date below, he or she "represents the public interest."*

DIRECTIONS: Check the appropriate response and sign and date below. I do (__) / I do not (__): Own a controlling interest in: Have 5% or more of capital invested in: Serve as an attorney for; Act as a consultant for: Serve as an officer or director of; or Hold any other official or contractual relationship with: (1) Either a person subject to permits or enforcement orders under this rule division, 0400-30- or rule division 1200-03**; or (2) Any trade or business association of which such person is a member. Signature of Board Member Date

Please Print Name

*"Represent the public interest" means not owning a controlling interest in, having 5% or more of his or her capital invested in, serve as attorney for, act as a consultant for, serve as officer or director of, or hold any other official or contractual relationship with, either a person subject to permits or enforcement orders under this rule division, 0400-30 or rule division 1200-03, or a trade or business association of which such a person is a member. Tenn. Comp. R. & Regs. 0400-30-17-.02(2)(a)

**"Persons subject to permits or enforcement orders under this rule division, 0400-30 or rule division 1200-03" or a "source," as used in this chapter, includes any individual, corporation, partnership, or association who holds, is an applicant for, or is subject to any permit, or who is or may become subject to any enforcement order under this rule division, 0400-30 or rule division 1200-03, except that it does not include:

- 1. An individual who is or may become subject to an enforcement order by reason of his or her ownership or operation of a motor vehicle,
- 2. Any department or agency of a state, local, or regional government; or
- 3. Any individual who is involved in the program of an institute of higher learning whose duties do not include the institute's compliance with this rule division, 0400-30 or rule division 1200-03. Tenn. Comp. R. & Regs. 0400-30-17-.02(2)(c).

TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION BUREAU OF ENVIRONMENT DIVISION OF AIR POLLUTION CONTROL

IN THE MATTER OF)	
)	
Eastman Chemical Company)	Order Number: 23-001
(82-0003))	Order (valider: <u>25 001</u>
`)	
)	
Variance Request)	

The following matter came before the Tennessee Air Pollution Control Board on January 11, 2023.

On November 3, 2022, Eastman Chemical Company requested that the Technical Secretary renew an existing variance (Board Order 22-004, issued February 9, 2022) pursuant to Tennessee Code Annotated §68-201-118 from the applicability provisions of Tennessee Air Pollution Control Regulations 1200-03-20-.03 (Notice Required When Malfunction Occurs) for excess sulfur dioxide emissions.

BOARD ORDER

This rule states that when an air contaminant source malfunctions in such a manner as to cause emissions in excess of an applicable standard or permit condition, the owner or operator must promptly notify the Technical Secretary of the malfunction within 24 hours and must provide a statement of all pertinent facts, including the estimated duration of the malfunction. The rule also requires the owner or operator to notify the Technical Secretary when the malfunction has been corrected. Notification is not required for:

- Violations of the visible emission standard (excluding visible emissions caused by hazardous air pollutants named in Chapter 1200-03-11) which occur for less than 20 minutes in one day (midnight to midnight); or
- Emissions from sources located in attainment and unclassified areas that are not designated as significantly impacting on a nonattainment area, provided that emissions in excess of the standards will not and do not occur over more than a 24-hour period (or will not recur over more than a 24-hour period) and no damage to property and or public health is anticipated.

Any malfunction that creates an imminent hazard to health must be reported by telephone immediately to the Division's Nashville office and to the State Civil Defense.

The variance request states that because Eastman's Tennessee Operations facility is located in an area classified as nonattainment for the sulfur dioxide National Ambient Air Quality Standard (NAAQS), the rule and related Title V Operating Permit conditions require prompt notification to the Technical Secretary on any event (malfunction or breakdown) that results in emissions of sulfur dioxide in excess of applicable emission standards. For facilities located in attainment areas, only excess emission events that occur for more than 24 hours (or recur over more than a 24-hour period) require notification. Due to the type of process, Eastman's Coal Gasification facility experiences several short-term events a year that result in excess sulfur dioxide emissions that require these notifications. Eastman believes these notifications serve no useful purpose and that the administrative burden for both Eastman and the Division should be relieved. Any such events will be reported in Eastman's Title V semiannual compliance reports.

Rule 1200-03-20-.03 was adopted in 1979 and revised several times prior to the adoption of a final rule in 1994. Prior to the implementation of the Title V Operating Permit program in Tennessee, this rule ensured that excess emissions events would be reported to the Division.

Board Order #23-001 Variance Request for Eastman Chemical Company (82-0003) Page **2** of **2**

Because Title V Operating Permits require facilities to semiannually report all deviations from permit conditions, the requirements of 1200-03-20-.03 are made redundant. The Division believes that the notification requirements should remain for longer term malfunction events (greater than 24 hours), but requiring facilities in nonattainment areas to immediately report short-term exceedances places an unnecessary administrative burden upon the facility and the Division. The Technical Secretary supports the granting of this variance to Eastman Chemical Company, subject to the following stipulations:

- 1. During the time period of this variance, the notification requirements of Tennessee Air Pollution Control Regulations 1200-03-20-.03, and any permit condition implementing this regulation, shall not apply to malfunction events resulting in excess sulfur dioxide emissions, provided that:
 - (a) Such events do not and will not occur over more than a 24-hour period (or will not recur over more than a 24-hour period);
 - (b) No damage to property and or public health is anticipated; and
 - (c) This variance shall not apply to any malfunction event(s) at emission sources 82-0003-01 (B-83 and B-253 powerhouses) or at emission source 82-0003-131 (B-325 powerhouse).
- 2. If notification is required for any malfunction event, prompt notification shall be provided by telephone to the Division's Nashville office within 24 hours of the malfunction. Any malfunction, regardless of duration, that creates an imminent hazard to health must be reported by telephone immediately to the Division's Nashville office and to the State Civil Defense.

In consideration of the Technical Secretary's recommendation, the Board grants the Eastman Chemical Company

- 3. This variance shall become effective on January 11, 2023.
- 4. This variance shall expire on January 10, 2024.

variance request subject to the stipulations specified above. on January 11, 2023.	Entered and approved by the following Board Members

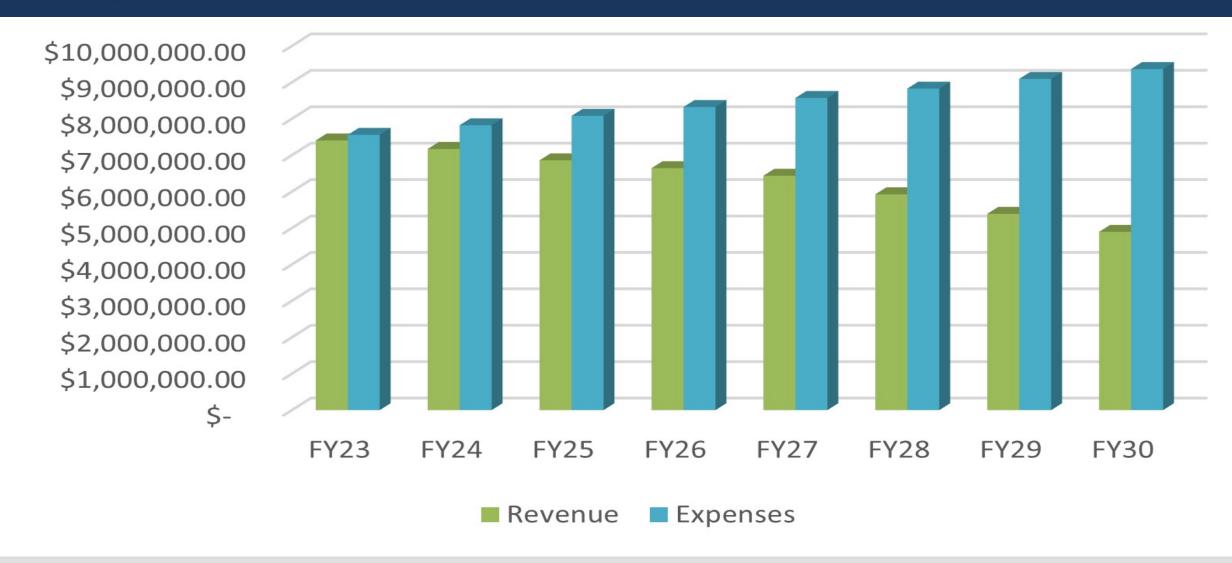


Title V Financial & Fee Diversification Briefing

January 11, 2023

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PROJECTED TITLE V FEE REVENUE & EXPENDITURES







Title V Fee Elements	Op	tion A	Or	otion B
Non-Variable:				
Base Fee - number of federal regulations/no minimum fee	\$	4,050,000		
Base Fee - complexity of regulations/no minimum fee			\$4	,060,000
Initial Title V operating permit fee	\$	45,000	\$	45,000
Title V modification fee	\$	195,300	\$	195,300
Variable:				
Dollar per Ton Fee - current rates	\$	4,200,000	\$4	,200,000
Revised construction application permit fees	\$	175,000	\$	175,000
PSD construction application fee	\$	140,000	\$	140,000
Initial Plant-wide Applicability Limit (PAL) fee (per pollutant)	\$	20,000	\$	20,000
Permit application fee - going from Title V to Conditional Major	\$	36,000	\$	36,000
Estimated Title V Revenue	\$	8,861,300	\$8	3,871,300

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STAGES OF ENGAGEMENT

DATE	ACTIVITY
August 11, 2022 10:30AM-noon Central	Meeting with Chamber
August 23, 2022 9:00AM-10:30AM Central	Webinar with Stakeholders to Present Background Information and Consider Many Non-Variable Funding Sources
September 14, 2022 9:30AM Central	Briefing with APC Board Meeting
October 27, 2022 9:00AM-10:30AM Central	Webinar with Stakeholders to Present Refined Fee Structure Diversification Options
November, 2022 – January, 2023	Continued Stakeholder Engagement
December 13, 2022 11:30AM-12:30PM Central	Meeting with Chamber
January 11, 2023 9:30AM Central	Board Update
February 2023	Begin Formal Rulemaking Process: Including a Formal Public Hearing





SHELBY COUNTY HEALTH DEPARTMENT



MICHELLE A. TAYLOR, MD DRPH, MPA HEALTH DIRECTOR BRUCE RANDOLPH, MD, MPH HEALTH OFFICER

December 30, 2022

Michelle B. Walker Technical Secretary Air Pollution Control Board 312 Rosa L. Parks Ave Nashville, TN. 37243

RE: Second Quarterly Report for Board Order 22-008 Shelby County Health Department Air Pollution Control Program

Per Board Order 22-008 related to the conditional Certificate of Exemption (COE) issued June 8, 2022, this report provides the information required for Shelby County's Second quarterly report. This report addresses the continued progress toward resolving the issues presented in the Board Order.

Michelle Taylor, MD, DrPH, MPA Director

Division of Health Services, Shelby County Government

idulle and

Shelby County Health Department

814 Jefferson Ave. Memphis, TN. 38105 Office: (901) 222-9080

Email: michelle.taylor@shelbycountytn.gov

Mission

To promote, protect and improve the health of ALL in Shelby County.

814 Jefferson Avenue ♦ Memphis, TN 38105 ♦ 901 222-9000 ♦ w w w . shelbytnhealth.com

- Findings and Concerns Shelby County Health Department (SCHD) Technical System Audit
 (TSA) Report The chart titled "2019 TSA Audit Report Findings/Concerns &SCHD Response"
 (page 4) is a list the remaining finding and concerns and their progress towards resolution in red.
 - **Finding 4.5.2 Out of Date Standard Operating Procedures (SOPS)** The EPA required additional technical information for the SOPs and on October 26, 2022, the technical consulting work with Joel Craig Environmental Consulting began. On October 28, 2022, SCHD received the first revised and updated SOP to evaluate for accuracy and usability. To date, we have received six (6) revised SOP's and one (T640X) was created using EPA guidance documents.

Of the thirteen (13) SOPs, SCHD has received seven (7). SCHD submitted two (2) for EPA approval on 12/13/2022, and SCHD will submit the remaining five (5) on 12/30/2022. The two (2) SOPs submitted received a cursory review from the EPA (email attached). Standard Operating Procedure creation and revision will continue until all SOPs utilized by the SCHD air program have been revised/updated and approved by the Environmental Protection Agency (EPA).

The Quality Assurance Project Plan (QAPP) will also be updated and submitted for approval by the EPA after the SOP revision process in March 2023.

Concerns 4.3.1, 4.3.2 All data validation, instrument certification/verification, quality control and any other air monitoring related forms will be updated to capture all pertinent information as the SOP's are updated. The consultant will ensure forms meet or exceed EPA standards.

Concern 4.4.3 List of Standard Operating Procedures used by the SCHD Air Program

- 1. Ozone Transfer Standard Verification
- 2. Mass Flow Controller Calibration/Verification (Teledyne API 700/750 Series Gas Dilution Calibrators)
- 3. Carbon Monoxide Monitoring Using the Teledyne API Models 300EU and T300U
- 4. PM₁₀ Monitoring using the Thermo Environmental 1405 Tapered Element Oscillating Microbalance
- 5. PM₁₀/PM_{2.5}/PM_{coarse} Monitoring using the Teledyne Model T640X
- 6. Sulfur Dioxide (SO₂) Monitoring using Teledyne API Models 100EU and T100U
- 7. Ozone Monitoring using Teledyne API Models 400E and T400
- 8. NO₂ and NO_y Monitoring using Teledyne API Models T200 and T200U
- 9. Monitoring PM_{2.5} Speciation using Met One SASS Sampler
- 10. Standard Operating Procedure for Sequential Particulate Speciation System URG 300N
- 11. Monitoring PM_{2.5} using the R&P Sequential Model 2025/2025i
- 12. Monitoring Nitrogen Dioxide (NO₂) Using the Teledyne API T500
- 13. Standard Operating Procedure for Processing and Validating Air Quality Monitoring Data

Standard Operating Procedures listed above, shaded yellow, have been revised and reviewed by current air monitoring staff for accuracy and usability and were submitted to EPA Region 4 Quality Support office for review and approval on 12/13/2022. Items 3-8 shaded in blue have been created or revised and are currently being reviewed by staff for accuracy and usability. Items 9-13 are the remaining SOPs under technical review with the consultant and have a tentative completion date of 03/31/2023. A schedule has been created and attached to this report.

2. Air Monitoring Branch Staffing Update

Joonki Yoon (Technical Specialist) was hired 09/19/2022. Xinya Miao (Technical Specialist) will start on 01/03/2023. Vacant positions remain posted on employment platforms (Indeed, AAPCA weekly, and LinkedIn) and our local website. All qualified applicants are interviewed.

Yong Cai (Lead Technical Specialist) will continue training new employees and contract workers. Joonki Yoon has been trained on both Air Monitoring regulations and site operations. He currently can work independently with all filter-based (PM, ozone) analyzers. Training and supervised work continue for the remainder of the pollutants and their respective analyzers. The new staff member will start 01/03/2023 and will be trained in the same manner. After training, each staff member will operate at and be responsible for a specific site. Temporary contract staff have not been hired to date. Once the bidding process (RFP) is complete, temporary staff will be trained to assist in daily field operations as directed by the Lead Technical Specialist. The timeline for the Request for Proposal:

- Request for proposals released Friday, December 30, 2022.
- Pre-Bid meeting (mandatory) Monday, January 9, 2023 @ 10:00am CST
- Deadline for questions Friday, January 20, 2023 @12:00 pm CST
- Proposal Due Date Tuesday, January 31, 2023 @ 4:00 pm CST
- Notification of Award TBD
- Goods/Services to Commence immediately upon execution of the contract.

3. Title V Program

A chart of the Title V permitting activities, which includes progress details, is attached. The ordinance to increase Title V fees was approved and signed by Shelby County Mayor Lee Harris on 10/24/2022. Approved copies of the signed ordinance will be distributed to the surrounding municipalities starting 01/03/2023. Billing for the upcoming year will be mailed the week of 01/03/2023, fees should be remitted no later than 02/28/2023.

An Engineer B candidate has been interviewed and selected. The hiring process continues.

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SECOND QUARTER ATTACHMENTS

- 1. 2019 TSA Audit Report Findings/Concerns &SCHD Response
- 2. Schedule of Standard Operating Procedure Revisions and Submissions
- 3. Email communication with Region 4 Quality and Support
- 4. Quarterly Update for TN Air Board December 2022
- 5. Organizational Chart-Pollution Control Branch

Finding / Concern	How was the item resolved / Status	EPA Concurrence
Finding 4.1.1 Unapproved fittings were observed in the sampling train of a gaseous pollutant.	Kynar fittings were replaced with Teflon fittings Submitted 12/30/19	Completed and closed
Concern 4.1.2 Moisture was observed in the CO and NO_2 sample lines at the STCC site (47-157-0100).	Additional heat tape was added to the sample lines Submitted 12/30/19	Completed and closed
Finding 4.2.1 Logbook records indicate temperature and relative humidity (RH) filter conditioning requirements were not met during some PM ₁₀ filter weighing sessions.	The PM ₁₀ data impacted in 2016 thru 2018 by the temperature and relative humidity was reviewed. Data was invalidated if conditioning requirements were not met. The affected data was resubmitted to the EPA. Submitted 04/23/20	I finally had a chance to review the materials you sent. I appreciate you guys doing all this. The explanation and highlighted logbooks made things much easier. Based on the materials provided, I have closed out 4.2.3 and agree with the 4.2.1 assessment. Once corrections and flags are applied in AQS, please send an AMP 350 and I will close out 4.2.2 and 4.2.3. Closed 06/03/20
Finding 4.2.2 Traceability of laboratory standards/equipment was not maintained in accordance with SOP requirements.	All Certificates of Calibrations for the balance and weights used for PM ₁₀ weighing were provided. AMP 350 Report was submitted. This finding is related to Finding 4.2.1. Certifications submitted 12/30/19	I finally had a chance to review the materials you sent. I appreciate you guys doing all this. The explanation and highlighted logbooks made things much easier. Based on the materials provided, I have closed out 4.2.3 and agree with the 4.2.1 assessment. Once corrections and flags are applied in AQS, please send an AMP 350 and I will close out 4.2.2 and 4.2.3. Closed 06/03/20
Concern 4.2.3 PM ₁₀ filter conditioning data summary calculations were not calculated properly and no independent validation	Conditioning temperature and RH were recalculated. The conditioning data was labeled as "as found" if the data logger was not available. Any data not meeting requirements were invalidated. The updated	I finally had a chance to review the materials you sent. I appreciate you guys doing all this. The explanation and highlighted logbooks made things much easier. Based on the materials provided, I have closed out 4.2.3 and agree with the 4.2.1 assessment. Once

was conducted to identify the mistakes.	information was provided and resubmitted into AQS. This concern is related to Finding 4.2.1. (attachment AMP 350 Shelby County TN 2016 PM 10 dataset) Submitted 04/23/20	corrections and flags are applied in AQS, please send an AMP 350 and I will close out 4.2.2 and 4.2.3. Closed 06/03/20
Concern 4.3.1 Forms used to document verifications and calibrations do not have sufficient information to fully verify and validate data.	Forms are being revised to depict current monitoring practices and to meet EPA standards.	
Concern 4.3.2 Information recorded on forms and in logbooks was incomplete and/or missing.	Forms are being updated and included in the revised Standard Operating Procedures	
Concern 4.3.3 Improvements are needed in electronic records management and storage.	The Shelby County Air Monitoring Branch will continue to work with the IT Department to improve our electronic shared drive.	Closed 07/21/20
Concern 4.3.4 Vulnerabilities were observed in SCHD's PM _{2.5} chain of custody.	New COC ("Shelby County Pollution Control PM 2.5 and PM 10 Chain of Custody Form") was developed and implemented. Submitted 04/15/20	Closed 07/21/20
Finding 4.4.1 Not all quality assurance and quality control checks (QA/QC) were reported to AQS.	All nightly checks from 2019 data set were submitted into AQS. The AMP 251 QA Raw Assessment Report (attachment 2019 QA Raw Assessment Report AMP251 1830068 and 2019 QA Raw Assessment Report for criteria	Closed 07/21/20

	pollutants and NO AMP 251 1830068) was provided. Submitted 04/15/20	
Finding 4.4.2 Filter-based PM _{2.5} data has not been fully validated.	The 2016 thru 2018 filter-based PM 2.5 data sets have been reviewed and 7 updates were made to the data set due to filters being used that had exceeded the 30 day tare time frame. These dates of the filters affected from Guthrie 1 are June 26, 2016; November 17, 2016; November 20, 2016; November 23, 2016; November 26, 2016 and November 29, 2016. The date of the filter affected from the Shelby Farms POC 2 sampler was June 7, 2018. These previous records were removed and a Null Value Code of AS was inserted into AQS for each respective date. The AMP 350 Report is attached along with the filter reports from Inter-Mountain Laboratories for 2016 through 2018. (attachment updated 2016 thru 2018 Raw Data Report for PM 2.5 AMP 350 1830084) Submitted 04/15/20	Closed 07/21/20
Concern 4.4.3 Data are not being fully validated to ensure all measurement quality objectives are satisfied.	9/1/22 our Staff Meteorologist began assisting with data validation. He has he knowledge and skillset for this task. Once training is complete the two newly hired Data Analyst will also perform this task, adding additional capacity.	

Finding 4.5.1 Criteria pollutant data were collected at SLAMS monitoring stations and reported to AQS without a current approved QAPP.	The "6" QA flag has been inserted for all criteria pollutant collected at the SLAMS monitoring stations for the 2016 thru 2018 data set. (see attachment 2016 thru 2018 Raw Data Report with 6 flag except for PM 10 hi vol AMP350 1830086) Submitted 04/15/20	Closed 07/21/20
Finding 4.5.2 Standard operating procedures are out of date and do not reflect current practices. A data handling SOP has not been developed.	SCHD hired Joel Craig Environmental Consultant to complete the creation and revision of the SOP's 10/26/2022. Please see attached schedule for details.	
Concern 4.5.3 Additional resources are needed for the quality assurance component of the Department's monitoring program.	Two Data Analyst have been hired. Start dates are 11/01/22 and 01/03/2023. Salaries were increased and vacant positions remain posted. All qualified applicants will be interviewed.	

Schedule of Standard Operating Procedure Revision and Submission

Number	Document	Draft	SCHD	Final	Final
		Submitted	Review	Completed	Submitted
		to SCHD	Completed		to EPA
1	Standard Operating Procedure for Ozone Transfer Standard Verification	10/31/2022	12/8/2022	12/8/2022	12/13/2022
2	Standard Operating Procedure for Mass Flow Controller Calibration/Verification	10/31/2022	12/8/2022	12/8/2022	12/13/2022
3	Standard Operating Procedure for Monitoring Carbon Monoxide (CO) using Teledyne API Models 300E, 300EU and T300U	11/3/2022	12/29/2022	1/2/2023	1/6/2023
12	Standard Operating Procedure for Monitoring PM 10 using Teledyne T640/640X	11/9/2022	12/29/2022	1/2/2023	1/6/2023
7	Standard Operating Procedure for Monitoring Particulate Matter using R&P TEOM 1405	11/12/2022	12/29/2022	1/2/2023	1/6/2023
5	Standard Operating Procedure for Monitoring Sulfur Dioxide (SO ₂) using Teledyne 100EU	11/22/2022	12/29/2022	1/2/2023	1/6/2023
9	Standard Operating Procedure for Monitoring Ozone (O₃) using Teledyne API Model 400E and T400	12/1/2022	12/29/2022	1/2/2023	1/6/2023
6	Standard Operating Procedure for Monitoring Nitrogen Dioxide (NO ₂)/ (NO _y) using Teledyne API T200U/200EU	12/13/2022	12/29/2022	1/2/2023	1/6/2023
11	Standard Operating Procedure for Monitoring Nitrogen Dioxide (NO ₂) using Teledyne T500	12/19/2022	1/2/2023	1/6/2023	1/10/2023
4	Standard Operating Procedure for Monitoring PM _{2.5} Speciation using Met One SASS Sampler	12/29/2022	1/12/2023	1/16/2023	1/20/2023
8	Standard Operating Procedure for Sequential Particulate Speciation System URG 300N	1/9/2023	1/23/2023	1/27/2023	1/31/2023
10	Standard Operating Procedure for Monitoring PM _{2.5} Using R&P Sequential Model 2025/2025i	1/13/2023	1/27/2023	1/31/2023	2/4/2023
13	Standard Operating Procedure for Processing and Validating Air Quality Monitoring Data	1/20/2023	2/3/2023	2/7/2023	2/11/2023
	OAPP Revisions	3/1/2023	3/15/2023	3/19/2023	3/23/2023
	QAPP Revisions	3/1/2023	3/15/2023	3/19/2023	3/23/

NOTE: Dates in black have already		
occurred/step accomplished, Dates in Red		
are best estimates.		

 From:
 Harris, Keith

 To:
 Cook-Pryor, Karen

 Subject:
 RE: SCHD SOP submission

Date: Monday, December 19, 2022 3:44:36 PM

Attachments: <u>image001.png</u>

Submission of the signed final version will be sufficient for the SOPs that need to be updated or the data handling SOP, which needs to be developed. A close-out letter will be issued once the recommendations of 4.3.1, 4.3.2, 4.4.3, and 4.5.2 are completed. I checked the TSA report and the SCHD response. Aside from the SOPs we discussed (including developing a data handling SOP), forms also need to be updated and once documents and forms are finalized, staff need to be trained to ensure changes are implemented.

From: Cook-Pryor, Karen < Karen.Cook-Pryor@shelbycountytn.gov>

Sent: Monday, December 19, 2022 4:22 PM **To:** Harris, Keith < Harris. Keith@epa.gov>

Subject: RE: SCHD SOP submission

Thanks to you and your staff for your input. With the minor corrections is it ok to say that these have been verified? Does your staff need to review the corrections? Continue to follow the schedule previously sent to you for SOP submissions? Any update on the close out letter?

From: Harris, Keith < Harris.Keith@epa.gov > Sent: Monday, December 19, 2022 2:55 PM

To: Cook-Pryor, Karen <Karen.Cook-Pryor@shelbycountytn.gov>

Subject: RE: SCHD SOP submission

Hey Karen,

I asked Tony and Gillian to take a quick look and try to identify any red flags note anything they think would be helpful. Attached are the documents with general comments/suggestions. Overall, they stated that these are an improvement over the previous submissions and only had minor comments. I appreciate all the hard work. Hope this information will be useful as you continue to develop and revise SOPs.

Thanks,

Keith

From: Cook-Pryor, Karen <Karen.Cook-Pryor@shelbycountytn.gov>

Sent: Friday, December 16, 2022 12:02 PM

To: Harris, Keith < Harris.Keith@epa.gov >; R4airqa < R4airqa@epa.gov >

Cc: Alexander, Kasia < Kasia. Alexander@shelbycountytn.gov >; Box, Stacey < Box. Stacey@epa.gov >

Subject: RE: SCHD SOP submission

Good morning,

Attached is a copy of the Shelby County Health Department's Air Monitoring programs' Standard Operating Procedure (SOP) creation/revision schedule which includes a completion date. Please let me know if this schedule is what's needed in order for Shelby County's Air Monitoring program to receive their closeout letter from the 2019 TSA Audit.

From: Harris, Keith < Harris. Keith@epa.gov>

Sent: Wednesday, December 14, 2022 11:10 AM

To: Cook-Pryor, Karen < <u>Karen.Cook-Pryor@shelbycountytn.gov</u>>

Cc: Alexander, Kasia < Kasia < Kasia < Kasia.Alexander@shelbycountytn.gov>; Box, Stacey < Box.Stacey@epa.gov>

Subject: RE: SCHD SOP submission

Correct. To quote the recommendation in Finding 4.5.2 "Please submit a revision/development schedule with expected completion dates. Finally, **submit revised SOPs** in accordance with the schedule as evidence once they are **finalized and approved by the Department**." Delivery of updated or developed SOPs cited in the TSA report are all that is needed to close related findings and concerns.

Those documents will be reviewed in conjunction with the QAPP to determine quality system efficacy and implementation during the TSA scheduled 2023.

From: Cook-Pryor, Karen < <u>Karen.Cook-Pryor@shelbycountytn.gov</u>>

Sent: Tuesday, December 13, 2022 5:20 PM

To: Harris, Keith < Harris. Keith@epa.gov>

Cc: Alexander, Kasia <Kasia.Alexander@shelbycountytn.gov>; Box, Stacey <Box.Stacey@epa.gov>

Subject: RE: SCHD SOP submission

So to be clear, approval from EPA Region 4 Quality and Support is not required in order for SCHD to receive it's close out letter from the 2019 TSA? Your staff will review and advise if the revised submitted SOP's comply with current EPA standards? The updated SOP's will not align with the current QAPP because of the needed revisions. Please can you direct me to the LSASD policy so that I can review as I review the SOP's prior to EPA submission. I do understand that all findings and concerns need to be resolved before the close letter can be issued, just not clear on EPA not approving the submissions.

From: Harris, Keith < Harris.Keith@epa.gov > Sent: Tuesday, December 13, 2022 3:37 PM

To: Cook-Pryor, Karen < Karen.Cook-Pryor@shelbycountytn.gov>

Cc: Alexander, Kasia <Kasia.Alexander@shelbycountytn.gov>; Box, Stacey <Box.Stacey@epa.gov>

Subject: RE: SCHD SOP submission

[This EMAIL was not sent from a Shelby County Government email address. Please use caution.] Thanks for the submission, Karen. It's great to see that you all are making progress.

Please note that our current LSASD policy is that we don't approve SOPs. During a QAPP review, we request the supporting SOPs make sure that the policies and procedures defined in the QAPP are supported by the SOPs, ensuring the quality system is complete.

We also look at the QAPP and SOPs during TSAs, where we compare what is stated in the approved QAPP and supporting SOPs to the observed procedures and requested records. If we observe that something is out of date or that the contents or details within an SOP result in data collection and/or reporting errors, we will address that in the TSA report and ask that the agency correct the issue. That describes the situation here.

All that said, I can ask staff to give a cursory review and provide feedback that may guide your overall approach to revision and development, if that would be helpful.

Please let me know if you would like feedback.

Thanks

Keith

From: Cook-Pryor, Karen < Karen.Cook-Pryor@shelbycountytn.gov>

Sent: Tuesday, December 13, 2022 1:57 PM

To: R4airqa < <u>R4airqa@epa.gov</u>>

Cc: Harris, Keith < Harris. Keith@epa.gov>; Alexander, Kasia < Kasia. Alexander@shelbycountytn.gov>

Subject: SCHD SOP submission

Hello,

Attached are two of the revised and updated SOP's for the Shelby County Health Department's Air Monitoring Program. These updated SOP's reflect current practices and schedules and may not match the existing Quality Assurance Project Plans (QAPP). Once the SOP's have been approved, we will revise the QAPP to reflect these approvals and add any information on new analyzers or equipment currently not included in the QAPP. Please feel free to contact me if any additional information is required. Thanks

Karen Cook-Pryor, MHA
Deputy Administrator Pollution
Environmental Health Services
Shelby County Health Department
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Facebook: www.facebook.com/ShelbyTNHealth
Instagram: www.instagram.com/ShelbyTNHealth



Quarterly Update for TN Air Board Major Sources Branch December 2022

1- Plan for Title V fee increase:

The ordinance was presented to the County Commission for three (3) readings per Shelby County's charter on 9/12/2022, 9/26/22 and 10/17/2022. The ordinance was approved and signed by County Mayor Lee Harris on 10/24/22.

2- Plan for hiring an engineer:

An engineering job was posted on 9/8/22. A candidate has been both interviewed and selected. The hiring process continues.

3- Progress on inspections:

All inspections are current and on schedule.

4- Progress on the current permitting backlog:

	Total Pr	ojects	18-Month O	nth Old Projects Only	
Activity Type	Total Total		18-M	18-M	
	Completed	Current	Completed	Open Projects	
	YTD	Open	YTD		
		Projects			
Renewals (R)	34	13	2	8	
Modifications (M)	51	25	6	3	
1 st Permit (1P)	3	10	2	5	
Exemptions (E)	9	3	1	1	
Name Change (NC)	11	3	5	3	
Roll into TV (RTV)	2	2	2	1	
Construction (C)	8	4	0	0	
TV Renewal (TVR)	7	4	5	2	
Initial Filing (IF)	1	1	0	1	

Activity Type

Total Projects include all projects including the 18-month category.

Total Completed YTD refers to all projects (Total Projects) completed in 2022.

Total Current Open Projects is referring to all projects (Total Projects) still open in 2022. Expressed in a different way...Total Projects Received YTD 2022 = Total Completed YTD + Total Current Open Projects.

- **18-Month** term is used in this report to identify projects that are beyond 18-months old timeline measured from the time an application is logged in the system. It is a subpart of the Total Project category.
- **18-Month Completed YTD** refers to number of projects in the 18-Month category that were completed in 2022.
- **18-Month Open Projects** refers to number of projects in the 18-Month category that are still open.

Note: We receive projects every week and, therefore, these numbers are dynamic and migration could take place to the 18-month category depending on the circumstance as permit analysis progresses. The permitting process involves parts that are within our control and also parts that are not. Often times we have to keep the source priority in mind to prioritize these projects. High priority is given to finishing the backlogged projects. We are making steady progress and constantly working on permitting projects based on workload, operational changes and changing source needs.

Permit writers are working as hard and fast as possible without sacrificing accuracy and thoroughness. As stated earlier, the backlog is fluid, as new projects and permit actions are coming into the office almost every week. The current 18-backlog can only be done by the existing workers based on facility knowledge, history, and process momentum. These are big and complicated projects.

Below is the list of sources associated with the 18-month-only backlog, engineers who are working to resolve that backlog, and the estimated time for the project completion.

Source	Item	Engineer	Projected Completion Quarter
Valero Refinery	1P, M, R, C, E, RTV	Mark Landry	Q3, 2023
Nucor Steel	C, M, E, RTV	Mark Landry	Q3, 2023
Covoro	NC, TVR	Gregg Fortunato	Complete
Penn-A-Kem	М	Gregg Fortunato	Complete
Ergon Armor	R, M	Deborah Liu	Complete
Ergon Asphalt & Emulsions, Inc.	R	Deborah Liu	Complete
American Yeast	M, TVR	Jeff Grill	Q1, 2023
St. Jude	TVR, E, M, C	Wasim Khokhar	Q2, 2023
CCL Labels, Inc.	IF, 1P	Gregg Fortunato	Q2, 2023
Mitsubishi	TVR, M	Gregg Fortunato	Q2, 2023

Permitting Descriptions

Renewals (R): Request to renew an operating permit for a conditional major facility.

Modifications (M): Changes requested for the operating permits.

First Permit (1P): Operating permit requests for a completed construction project of a process within an existing conditional major facility.

Exemptions (E): Exemptions requested under Tennessee Rule 1200-3-9-.04.

Name Change (NC): Facility name/ownership change request.

Roll into TV (RTV): Request to add completed construction projects into an existing TV operating permit.

Construction (C): Requests to construct a new pollution related process.

TV Renewal (TVR): Request to renew a TV operating permit.

Initial Filing (IF): An operating permit request for a previously unpermitted facility.

Current update for each project:

Valero Refinery:

A draft permit is going through public notice period. Notice published 12/15/2022.

Nucor Steel Memphis, Inc.:

A consolidated construction permit was issued on 11/18/22, The source submitted an updated TV application on 11/22/22. The draft permit is going through public notice period. Notice published 12/21/2022.

Covoro:

The final permit was issued 11/22/22.

Penn-A-Kem:

The draft permit is under EPA review. The draft permit was sent to the EPA on 11/18/22. The final permit was issued 12/23/2022.

Ergon Armor:

The final permit was issued on 11/15/22.

Ergon Asphalt and Emulsions:

The final permit was issued 12/15/22.

American Yeast:

A draft permit is complete for source review. The draft permit is going through the public notice period. Public notice issued 12/21/2022.

St. Jude:

A draft permit is being developed. We are anticipating finishing a draft permit and a source review by 12/30/22.

CCL:

A draft permit is being developed. We are anticipating finishing a draft permit and a source review by 12/30/22.

Mitsubishi:

The draft permit is going through the public notice period which ends 12/29/22.

SHELBY COUNTY HEALTH DEPARTMENT BUREAU OF ENVIRONMENTAL HEALTH SERVICES POLLUTION CONTROL SECTION

