

Title V Operating Permit Program Evaluation
Louisville Metro Air Pollution Control District
2024 Evaluation Report



United States Environmental Protection Agency, Region 4
Air and Radiation Division
Atlanta, Georgia

Acknowledgements

The U.S. Environmental Protection Agency Region 4 would like to acknowledge the dedication and commitment of the staff and management of the Louisville Metro Air Pollution Control District (LMAPCD). LMAPCD staff addressed numerous challenges to keep their program operating smoothly during the pandemic, including remote work, public notice and comment, and public meetings and hearings.

The EPA Region 4 permitting staff have had considerable engagement with LMAPCD this year through this program evaluation, as well as engagement on several minor New Source Review construction permits, and the EPA's relatively new Electronic Permitting System (EPS) database. In every instance, the EPA found the management and staff to be very knowledgeable, professional, and dedicated to their mission. The EPA appreciates LMAPCD's cooperation and willingness to respond to our information requests.

Executive Summary

Positive Finding(s)

- LMAPCD typically produces high-quality permits that are clear and easy to follow, and the associated statements of basis (SOB) also prove to be very helpful documents.
- LMAPCD implements a regulatory program known as Strategic Toxic Air Reductions (STAR). As a result of the STAR program, toxic air pollutants in metro Louisville have been reduced by approximately 80 percent since 2005, particularly in the area known as Rubbertown.
- LMAPCD puts forth a rather extensive effort with respect to the concept of Environmental Justice (EJ) as well as general public outreach.

Action Item(s)

- LMAPCD, with the assistance of the EPA, needs to promptly develop and implement a strategy to reduce its significant backlog of title V permit renewals. The EPA will utilize scheduled quarterly calls with LMAPCD as an additional tool to address this backlog.

Recommendation(s)

- LMAPCD should continue to regularly assess its fiscal standing and work with its Air Pollution Control Board (the Board) to make any necessary revisions to the current title V fee structure to reverse the current trend of operating at a fiscal deficit due to decreasing billable emissions.
- Language should be added to permits' general condition no. 2 to indicate that any reports/certifications that need to be submitted to the EPA can be submitted through the EPA's Compliance and Emissions Data Reporting Interface ([CEDRI](#)) rather than the Regional Office.
- General condition no. 35 should be revised to note that operational flexibility changes should be submitted to CEDRI or EPA Region 4's Air Permits Section rather than the EPA's "APTMD - 12th Floor."

I. Background

In response to the recommendations of a 2002 Office of Inspector General (OIG) audit, the EPA developed an action plan for performing reviews of title V programs for each air pollution control agency beginning in fiscal year (FY) 2003.

Following the initial title V program reviews, the EPA committed to conduct ongoing periodic title V program reviews for state and local programs that have at least 20 title V major sources within their jurisdiction. These follow-up evaluations may target specific areas of the program, follow-up items from previous evaluations, or overall implementation. In addition, at the request of the OIG, the EPA formally added a title V fee audit component in 2018.

The EPA Region 4 oversees eight (8) state and ten (10) local air permitting authorities with title V operating permit programs. Eleven (11) of these programs have at least 20 title V major sources (the remaining seven (7) programs have ten (10) or fewer sources). Resources allowing, EPA Region 4 typically commences two title V program evaluations annually, with the goal of reviewing each of these eleven programs on a five to six-year cycle. The purpose of these evaluations is to ensure the ability of the permitting authority to carry out its duties and responsibilities, as required, to effectively run the title V program, to document good practices and to identify if there are any ways the EPA can assist the permitting authority in meeting their title V commitments.

The last evaluation of LMAPCD's permitting program was conducted May 17-18, 2016. The 2016 program evaluation included a review of title V budgeting, permit file review, and public participation, and the report praised LMAPCD's electronic file system and staff retention while noting for a marked improvement regarding timely permit issuance and reduction of the backlog for both title V and Federally Enforceable District Origin Operating Permits (FEDOOPs) from the previous 2011 program evaluation. The current LMAPCD program evaluation consisted of a review of staffing resources, title V revenue and expenses, public participation, EJ in permitting, permit issuance rates, and a detailed review of ten (10) issued permits. This information was gathered through LMAPCD's response to the EPA's program evaluation survey questions, review of selected permit files, an in-person visit with interviews and discussions on April 3, 2024, a fee review based on additional information provided to the EPA for LMAPCD's FY21-FY23 budget cycles and permits issuance rates reported to the federal Title V Operating Permit System (TOPS) data through December of 2023. Preliminary results of our review of selected permit reviews were discussed with LMAPCD on April 3, 2024.

II. Program Overview and Staffing Resources

LMAPCD's [mission](#) is to "protect air quality in Louisville Metro to ensure healthy air for breathing, economic security, and prosperity for all Louisvillians." LMAPCD has jurisdiction over the permitting of air emission sources throughout Louisville Metro, the combined city-county of Louisville, Kentucky, and Jefferson County. Its air permitting office is located near downtown Louisville. Jefferson County, the county that coincides with Louisville Metro, is currently in nonattainment status for the 2015 Ozone National Ambient Air Quality Standard. LMAPCD's air permitting regulations are authorized by [KRS Chapter 77](#) and can be found [online](#).

As of October 2023, LMAPCD is responsible for regulating 30 title V sources. The total number of full-time equivalent (FTE) staff that LMAPCD employs to support its current title V workload are included in Table 1 below. A considerable portion of these positions' time is applied to the title V workload (*e.g.*, permit engineers spend approximately 20 percent of their time writing title V permits). LMAPCD's time-keeping system tracks title V versus non-title V activities. LMAPCD is currently in the process of filling three (3) vacancies for permit engineers; one (1) was promoted recently to fill a permit supervisor position vacated due to retirement.

Table I: LMAPCD Staff

Position	FTEs
Permit Engineer	10
Permit Supervisor	2
Permit Manager	1
Compliance Engineer	5
Small Business Compliance Assistance	1
Compliance Supervisor	1
Compliance Manager	1
Executive Administrator	1
Total FTEs	22

LMAPCD experiences minimal turnover; one permit engineer position has turned over every few years but was recently filled in January 2022. With minimal staff changes, LMAPCD has been able to maintain the title V program with consistency. To encourage retention and longevity, LMAPCD emphasizes work/life balance and job security along with flexible scheduling, including two (2) telework days per week. Training includes in-person learning with experienced employees as well as online opportunities, especially those offered by the EPA.

Finding(s): LMAPCD has relatively stable employment for its title V program.

Recommendation(s): None currently.

III. Title V Fees

Title V permitting authorities are required by section 502(b)(3) of the Clean Air Act (CAA), and the corresponding title V regulations at 40 CFR § 70.9, to collect permit fees from sources subject to title V sufficient to cover all costs necessary to develop and administer their title V permit programs. Permitting agencies must collect part 70 fees that are sufficient to cover both direct and indirect part 70 permit program costs. These fees must be used solely to cover the costs of the title V program and states must provide periodic demonstrations that they meet these fee requirements. 40 CFR § 70.9(d). Accordingly, air agencies (or state legislatures, as applicable) may need to revise fee schedules periodically to remain in compliance with the requirement that permit fees cover all part 70 permit program costs. Changes in costs over time may be due to many factors, including but not limited to: inflation, implementation costs, salary and healthcare cost increases, changes in the number of sources required to obtain part 70 permits, declining emission rates (especially reductions in coal-fired emission sources); complexity of permitting actions being performed; and promulgation of new emission standards, such as new MACT standards, New Source Performance Standards (NSPS), and waste incineration rules under CAA sections 111, 112, or 129, respectively.

The EPA established a presumptive minimum fee of \$61.73 per ton of regulated pollutant for the 12-month period of September 1, 2023, through August 31, 2024. States may charge less than the presumptive minimum, and use alternative fee structures, if they provide a demonstration that they have adequate fees to fully cover the direct and indirect costs of adequately implementing and enforcing the title V program. 40 CFR § 70.9(b)(2) & (3). The title V regulations at 40 CFR § 70.9(b)(2)(i) indicate that the Administrator will presume that the fee schedule meets the fee schedule requirements of part 70 if the program would result in the collection and retention of an amount not less than the presumptive minimum. 40 CFR § 70.9(b)(1) & (2).

Currently, LMAPCD collects at a rate approximately 11 percent higher than the presumptive minimum allowed by 40 CFR § 70.9(b)(2); LMAPCD charges \$68.46 per actual ton of regulated pollutant emitted for all title V sources. LMAPCD has also established a relatively expansive fee structure pursuant to [District Regulation 2.08](#), which is updated each fiscal year. All applications are subject to a non-refundable fee that must be paid in-full prior to any review. Fees are also charged (and due in-full upon issuance) based on the type of permitting action being processed (*e.g.*, initial or renewal permit and administrative, minor, or significant permit revision). Additional fees apply for such complexities as NSPS/National Emission Standards for Hazardous Air Pollutants (NESHAP) and STAR program reviews. Plantwide Applicability Limit (PAL) sources are not only subject to an initial issuance fee but also an annual fee during the permit effective period. All non-title V sources are also subject to an annual fee of varying amounts. A complete list of LMAPCD's current air permit fees is made available on its [website](#).

As with other permitting authorities within Region 4, LMAPCD reports a steady decline in billable emissions as new rules, cleaner fuels, and use of control technologies have reduced emissions. In

addition, regulatory complexity of numerous sources, inspection requirements, and public engagement have increased. To counter this, LMAPCD reassesses annually the title V fees that are collected as well as the expenditures of the title V program. Any concerns may be raised to the Board, which meets monthly; however, any changes to the fee structure requires public notice, which likely results in a several month delay to make changes. At the very least, like the presumptive minimum established by the EPA, all elements of the fee structure are adjusted annually using the Consumer Price Index (CPI), and this feature of the fee adjustment is pre-approved by the Board.

From the completed survey, Table II was created to summarize LMAPCD’s annual title V revenues, expenses, and rollover amounts.

Table II: Summary of FY21-FY25 Title V Fee Revenue and Expenditures

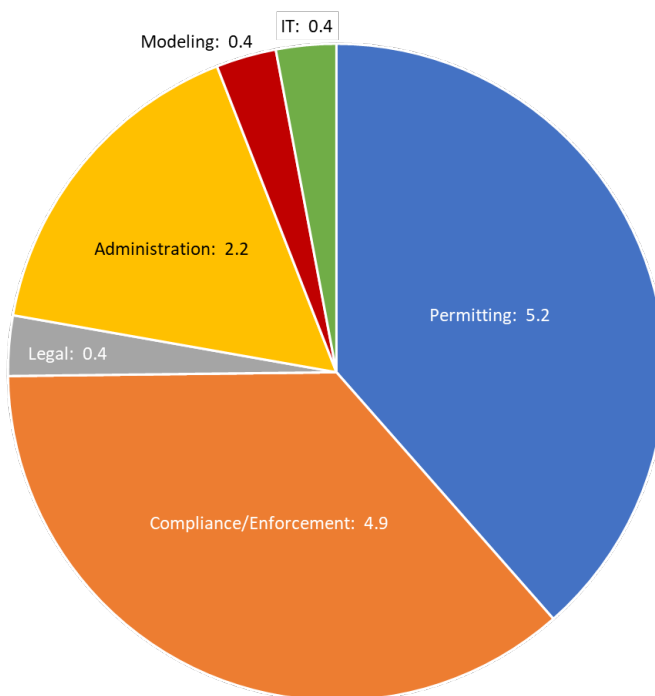
	FY21	FY22	FY23	PROJECTED FY24	PROJECTED FY25
TOTAL REVENUES (\$)	867,642.64	854,505.58	994,979.77	992,395	992,395
TOTAL EXPENSES (\$)	1,291,524.06	1,707,918.81	1,273,017.73	1,222,174	1,222,174
BEGINNING FY BALANCE (\$)	2,776,301.84	2,352,420.42	1,499,007.19	1,220,969*	993,190*

*Values calculated using the data submitted by LMAPCD.

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A breakdown of LMAPCD's FTEs by title V funding is shown below:

LMAPCD's FTEs Per Title V Program Area



From: Supplemental information provided by LMAPCD in an email to EPA Region 4 dated July 22, 2024.

Finding(s): The EPA commends LMAPCD for its rather creative and robust fee structure. The current fee structure takes advantage of the flexibility provided by 40 CFR § 70.9(b)(3) so as not to not rely solely on a fee rate tied to billable emissions.

Recommendation(s): Despite the flexibility incorporated into the current fee structure and the adjustment made to account for changes in the CPI, LMAPCD has seen revenue outpaced by program spending in recent years. LMAPCD is aware that it has been operating at a deficit over each of the last three years and that a once-considerable surplus has diminished at a concerning rate (*see* Table II above). The EPA encourages LMAPCD to meet with the Board as soon as practicable to discuss potential remedies to reverse the current fiscal trend.

IV. Public Participation & Community Engagement

Title V public participation procedures apply to initial permit issuance, significant permit modifications, and permit renewals. Adequate public participation procedures (*see* 40 CFR

§ 70.7(h)) must provide for public notice, including an opportunity for public comment and public hearing on the draft permit. Draft permit actions may be noticed through email and on a website (e-notice) or through a newspaper of general circulation. The permitting authority must keep a record of the public comments and respond to the significant issues raised during the public participation process.

LMAPCD employs numerous public notice methods. LMAPCD publishes their title V public notices in *The Courier Journal* as required by KRS Chapter 424, the LMAPCD [website](#), and LMAPCD's social media profiles. Subscribers to their GovDelivery service also receive public notices through email. The public can subscribe online and in-person at monthly board meetings and other events. Additionally, LMAPCD posts information and documents for [proposed permitting actions and public hearings and meetings](#) online. An online version of its [air quality regulations](#), including the permitting requirements, also exists. Records of permitting actions taken since April 2020 are also available through the public [dashboard](#) of EPS.

LMAPCD puts additional effort into public notice and participation. Notably, LMAPCD public notices FEDOOP, which are for sources taking limits to avoid title V applicability, and includes an FAQ section in all public notices to provide information about the purpose of the permit, whether there is an increase in emissions, and the source's compliance history. The public notice also indicates in which Metro Council District the source is located. LMAPCD [posts](#) the public notice, permit, and SOB throughout the public comment period and keeps the documents available online for an additional 60 days. Permit applications are available upon request. LMAPCD hosts public hearings upon request or when there is significant public interest, per Regulation 1.08. LMAPCD communicates with community environmental groups and is responsive to request for translation, additional public meetings, and alternate public meeting locations, for example.

The primary application of Environmental Justice at LMAPCD is the STAR program. According to the program's [webpage](#), STAR "is a regulatory program that provides a framework for assessing and addressing toxic air emissions in Louisville Metro," which was created to address the high toxic air pollution levels in Rubbertown, a community in Louisville with EJ concerns. STAR requires large emitters of toxic air contaminants (TAC) to model the health risk of their emissions and follow emission reduction plans if they exceed health risk goals. Since the program started in 2005, there has been an approximately 80 percent reduction in TAC.

While there is no specific EJ coordinator role at LMAPCD, EJ is integrated into all roles. Leadership roles network with community groups to discuss EJ, and permit roles are trained in EJ and EJScreen. LMAPCD staff also attend EJ conferences.

Additional EJ resources can be found on the EPA's [EJ website](#). The EPA's "[Activities To Promote Environmental Justice in the Permit Application](#)" summarizes additional useful tools for community engagement. Also, the EPA recently released "[EPA Legal Tools to Advance Environmental Justice](#)" in May 2022, with an addendum in January 2023, and "[Principles for Addressing Environmental Justice Concerns in Air Permitting](#)" in December 2022.

Finding(s): The EPA commends LMAPCD for the extensive effort around EJ, including detailed and widely accessible public noticing, a strong air toxics program, and cooperation with community groups. The EPA also commends LMAPCD for emphasizing the importance of public participation by making their announcements and documents available in numerous places and formats.

Recommendation(s): The EPA encourages LMAPCD to continue their EJ efforts and education.

V. Permit Issuance Rates

The title V regulations require air permitting agencies to “take final action on each permit application, including a request for permit modification or renewal, within 18 months, or such lesser time approved by the Administrator, after receiving a complete application.” 40 CFR § 70.7(a)(2). Ensuring that title V permits are renewed and subject to public review every five (5) years is an important aspect of every title V program. Delayed permit issuance reduces the ability of the public to review and provide comments on a permit and can result in a delay in the incorporation of new applicable requirements.

As part of the program evaluation, the EPA reviewed LMAPCD’s title V program permit issuance rates as reported per the questionnaire to ensure that permits are issued in a timely manner and renewed on a five-year cycle. At the time of this program review, LMAPCD had only issued three (3) title V permit renewals in the previous 12-month period. Based on a universe of 30 title V sources and a five-year permit cycle, LMAPCD needs to effectively issue six (6) permit renewals per year to remain timely. Additionally, LMAPCD had a backlog of 11 title V permit renewal applications (*i.e.*, applications that have been “in-house” for more than 18 months after having been deemed complete); this represents approximately 37 percent of LMAPCD’s title V universe. According to LMAPCD, competing priorities such as issuing construction permits and FEDOOPs as well as implementing its STAR program have hindered its ability to issue title V permit renewals in a timely manner. LMAPCD also believes its efforts to provide meaningful engagement with respect to both citizens and sources alike have resulted in longer/multiple public notice periods and, thus, delayed permit issuance (albeit resulting in better permits). Furthermore, LMAPCD’s transition to newer financial-tracking and time-keeping systems has required significant staff time to test, train, and implement.

Finding(s): The EPA understands the sheer workload associated with all the competing priorities faced by LMAPCD’s permitting staff and appreciates the effort to issue better permits via meaningful engagement during the public notice process. Nonetheless, the EPA has concerns regarding the current backlog of renewals since it is considerably greater than 20 percent, which is the benchmark that the EPA considers a backlog to be significant.

Recommendation(s): The EPA encourages, and is willing to assist, LMAPCD to develop and implement a strategy to reduce its renewal backlog. As part of implementation, LMAPCD should hold regularly scheduled calls with the EPA to track the progress of reducing the backlog.

VI. Selected Permit Reviews

As an element of the LMAPCD Title V Program Evaluation, EPA Region 4 selected ten (10) title V permits issued by LMAPCD to review for completeness and consistency with regulatory requirements. These reviews are in addition to the real-time reviews that EPA Region 4 conducts for targeted permit actions. The ten (10) permitting actions were selected as examples of different types of permitting actions (*e.g.*, initials, renewals, significant revisions), different source categories, varying applicable requirements (*e.g.*, NSPS, NESHAP, case-by-case MACT, Compliance Assurance Monitoring (CAM), Best Available Control Technology, Prevention of Significant Deterioration avoidance, PALs, etc.), and differing compliance history (*e.g.*, notices of violation, consent decrees). The EPA acknowledges that due to the small sample size, our comments may not be indicative of any systemic concerns. In general, the EPA found LMAPCD's title V permits to be well written and consistent with title V regulatory requirements. The EPA's findings and general recommendations are below:

1. Compliance Certification – Identify Deviations (General Condition #2)

The EPA recommends adding language to this permit condition to be consistent with the current language in 70.6(c)(5)(iii)(C) which requires that "The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under part 64 of this chapter occurred."

2. Compliance Certification – Identify Deviations (General Condition #2)

The EPA recommends adding language to this permit condition to indicate that any reports/certifications that need to be submitted to the EPA can be submitted through CEDRI rather than the Regional Office.

3. EPA Address/CEDRI Operational Flexibility Notifications (General Condition #35)

Operational flexibility changes should be submitted to CEDRI or EPA Region 4's Air Permits Section, not to the EPA's "APTMD - 12th Floor."

4. Asbestos NESHAP General Condition

The EPA recommends including a reference to the demolition and renovation provisions pursuant to the asbestos NESHAP (40 CFR 61, subpart M) under the general permit

conditions. The asbestos NESHAP is an “applicable requirement” for title V purposes. If a facility undertakes a demolition or renovation project, and this provision is already included in the general conditions, the permit will not have to be revised to add this applicable requirement.

5. Citation Errors

Several permits contained citation errors within permit conditions or within the citation of origin/authority for the permit condition. The EPA recommends correcting these errors during the next revision of these permits.

6. Summary Table Errors – Federal Rules Flagged as District-Only Enforceable

Most of the targeted permits contained at least one instance of identifying federal rules as "District Only Enforceable Regulations" (*e.g.*, 2.08, 2.16). The EPA recommends correcting these errors during the next revision of these permits.

7. Permit Condition Cites to Both Federal and District-Only Rules Citation Errors

A few of the targeted permits had permit conditions that cited to both federal and District-only regulations. EPA recommends adding language to General condition 8 to clarify that when a permit condition cites to both federal and district-only regulations, the permit term is federally enforceable.

8. Use of AP-42 Emission Factors

Most of the targeted permits reference AP-42 emission factors for compliance determinations. Please refer to EPA’s enforcement alert dated November 2020 regarding the appropriate use of AP-42 emission factors. While not prohibited, the use of AP-42 emission factors to calculate a unit's emissions may not result in accurate emission estimates. It is noted that AP-42 factors are averages, often based on limited data, and therefore are not a good representation of the emissions from a defined emissions unit used under different operating scenarios. These factors were designed for large scale, area-wide attainment demonstrations and inventories, and not source specific assessments. The EPA recommends that the applicant use AP-42 emission factors in the emission calculations as the last resort or ensure that the estimates are conservative and include associated rationale in the permit record.

9. Monitoring Rationale

In some instances, the rationale in the permit for the selected monitoring was vague, such as the phrase, "A one-time compliance demonstration was performed..." The EPA recommends adding an explanation of the established/designated compliance demonstration.

10. Practical Enforceability Avoidance Limits

For an emission limit to be enforceable as a practical matter, the permit must clearly specify

how emissions will be measured or determined for purposes of demonstrating compliance with the limit. A few of the permits reviewed did not clearly specify how emissions will be measured or determined for purposes of demonstrating compliance with the limit.

11. Missing Applicable Requirements

Some of the permits reviewed did not include applicable NSPS/NESHAP requirements in permit conditions. We recommend including the missing requirements or explaining in the permit record why they are not applicable during the next revision of these permits.

12. Differences from Applicable Requirements

One permit reviewed had several permit conditions that did not match the requirements of the cited regulations. We recommend correcting these differences from the applicable requirements or explaining the difference in the permit record during the next revision of the permit.

13. Inadequate PAL Monitoring Provisions

The PAL limits for nitrogen oxides, sulfur dioxide, carbon monoxide, and greenhouse gases in one reviewed permit were not enforceable as a practical matter because they did not meet the minimum monitoring requirements for a PAL (40 CFR 52.21(aa)(12)). Neither the permit nor the SOB specifies the emission factor used for the calculations or whether those factors were validated according to 40 CFR 52.21(aa)(12)(vi)(c).

14. CAM Applicability

One targeted permit and SOB indicated that specific emission units were made subject to CAM; however, CAM does not appear to be applicable.

15. Observed Positives

- a) Statements of basis prove to be very useful documents by:
 - Providing a level of detail that helps better understand the facility, its emission units, and applicable requirements (*e.g.*, tables detailing facility-wide PTE, tables listing emission units with associated control devices, etc.); and
 - Establishing the legal and factual basis for the permit.
- b) Permit format is well laid out, clear, and easy to follow.
- c) Permits make use of footnotes that provide additional information such as avoidance limits as well as justifications for established monitoring provisions.
- d) *Attachment A* provides clear explanation of how emissions are calculated, including the emission factors used.

The above items were presented and discussed in-person with LMAPCD during the interview portion of the program evaluation on April 3, 2024, to ensure our concerns were clear, particularly with respect to the affected permit(s).

VII. Conclusion

Based on the permits reviewed, completed title V questionnaire, TOPS data, fee documents, interviews and discussions, and follow-up information received, the EPA concludes that:

- LMAPCD typically produces high-quality permits. The layout is such that the permit is clear and easy to follow. The permits also make use of footnotes that provide very helpful additional information (*e.g.*, rationale for monitoring provisions) and include an attachment that provides clear explanation of how emissions are calculated (including emission factors used). The associated SOB also proves to be a very helpful document by using a level of detail that allows for better understanding of the facility, its emission units, and applicable requirements.
- The EPA acknowledges the ongoing nationwide challenge of maintaining a fully funded title V program with significantly declining emissions and revenues. Although LMAPCD has operated at a deficit for the past few years (and continues to rely on a once-considerable rollover balance), the EPA is confident that LMAPCD will continue to regularly assess its fiscal standing and work with its Board to reverse this trend via necessary revisions to the current fee structure (*e.g.*, increased fees or new fee categories).
- LMAPCD's current backlog of title V permit renewals is concerning to the EPA, particularly since it is considerably higher than the EPA's benchmark for a significant backlog (*i.e.*, greater than or equal to 20 percent of one's title V universe). The EPA is confident that LMAPCD will, in conjunction with EPA Region 4, promptly develop and implement a strategy to reduce this backlog.
- The EPA Region 4 is committed to providing any needed assistance with respect to permit reviews and public engagement, including permitting projects with EJ implications. Specifically, the EPA Region 4 is committed to providing prompt feedback to LMAPCD regarding any rule and guidance interpretation inquiries and any general or specific permitting questions raised, and to keep LMAPCD informed of any future agency actions, such as rulemaking, that may have an impact on permitting programs.