Proposed Updates to BACT Guidelines

Board Meeting

November 6, 2026

Background – Best Available Control Technology (BACT)

- BACT is a major permitting requirement under Regulation XIII - New Source Review (NSR)
- BACT is the most stringent emission limitation or control technique required for an equipment class and category that has been determined to be:

Achieved in Practice, or

Contained in a State Implementation Plan (SIP), or

Technologically Feasible and Cost-Effective

BACT is Required for New, Modified or Relocated Emission Sources Subject to Permitting

Background - BACT Guidelines

BACT Guidelines are published for commonly permitted equipment

- Identifies the BACT determinations for a specific category or class of source
- Source is defined as an individual permit unit, e.g. engine, boiler, spray booth, etc.
- Technical feasibility considered for the class and category of source

BACT Guidelines are periodically updated to

- Incorporate new BACT determinations
- Reflect advancements in technology
- Ensure affected equipment use the cleanest technologies

Background - BACT Requirements and Guideline Updates

Major Polluting Facility

- Federal major source facilities – LAER*
- Subject to federal regulations
- Does not allow for routine consideration of cost
- Determined at time of permit to construct issuance

Approval

Board approval not required for LAER/BACT determinations for Major Polluting Facilities**

Non-Major (Minor) Polluting Facility

- Smaller emitting facilities
- Subject to Health and Safety Code §40440.11
- Considers cost effectiveness through analysis
- Determined at the time an application is deemed complete

Approval

Board approval required for BACT listings for Non-Major Polluting Facilities

* Federal LAER (Lowest Achievable Emission Rate) is the most stringent emission rate or control technology for a class or category of source required for Federal major sources

** LAER/BACT listings are typically examples of previously permitted federal major sources.

BACT Guidelines - Proposed New Determination Listings

Part B - Major Polluting Facilities
(Section I – South Coast AQMD LAER/BACT Determinations)

The following have been determined to be Achieved in Practice:

- Linear Generator, Non-Emergency
  Electrical Generator, Natural Gas Fired

  Lower VOC limit



- Lithographic Printing, Non-Heatset, Sheet-fed
  - Operation with UV-curable or Oil-based Inks
  - Compliance with South Coast AQMD Rules 1130 and 1171

BACT Guidelines - Proposed New Listings

Part B - Major Polluting Facilities
(Section III – Other Technologies)

Listings for Other Technologies are not yet Achieved in Practice, do not yet qualify as LAER, but are emerging and may be considered in the future

- Boiler, Refinery Gas or Natural Gas or Process Gas Fired, 520.4 MMBtu/hr*

  Lower emission rate for NOx, CO and Ammonia

- Digester Gas (Biogas) Conditioning and Upgrading System

  Establish limit for total sulfur



* Million British thermal units per hour

BACT Guidelines - Proposed New Listings

Part D – Non-Major Polluting Facilities

The following listings are proposed to be updated to reflect increased stringency from recent rule amendments

- Food Oven
  - Consistent with Rule 1153.1
- Linear Generator, Non-Emergency Electrical Generator, Natural Gas Fired
  - Consistent with Rule 1110.3



Summary of Proposed Updates

Policy & Procedures

- Administrative updates for consistency with updated rules and regulations
- Routine update of maximum incremental cost-effectiveness values
- Enhancing process to update BACT Guidelines to:
  - Improve transparency and provide more frequent updates reflecting new LAER listings
  - Maintain the role of the Scientific Review Committee and opportunities for public participation

LAER/BACT Listings and Updates

- **Major Polluting Facilities**
  One new and one updated LAER/ BACT determination listings
- **Other/Emerging Technologies listings**
  Two new listings
- **Non-Major Polluting Facilities**
  One new and four updated BACT listings

Stakeholder Comments and Ongoing Evaluations

RadTech International – June 30, 2026

Key Issue	Staff Response
Request to expand proposed listing for UV sheet-fed lithographic printing to include electron-beam and wide-web fed applications	Staff will continue to review additional permitted operations that utilize electron-beam and web-fed lithographic printing for achieved in practice considerations and candidates for future listing opportunities



RADTECH
THE ASSOCIATION FOR UV&EB TECHNOLOGY

June 30, 2026

Bahareh Farahani
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, California 91765
bfarahani@aqmd.gov

Re: Comments on Proposed New Listings for Best Available Control Technology and Request for Inlcusion of Electron Beam Lithographic Printing.

Dear Bahareh:

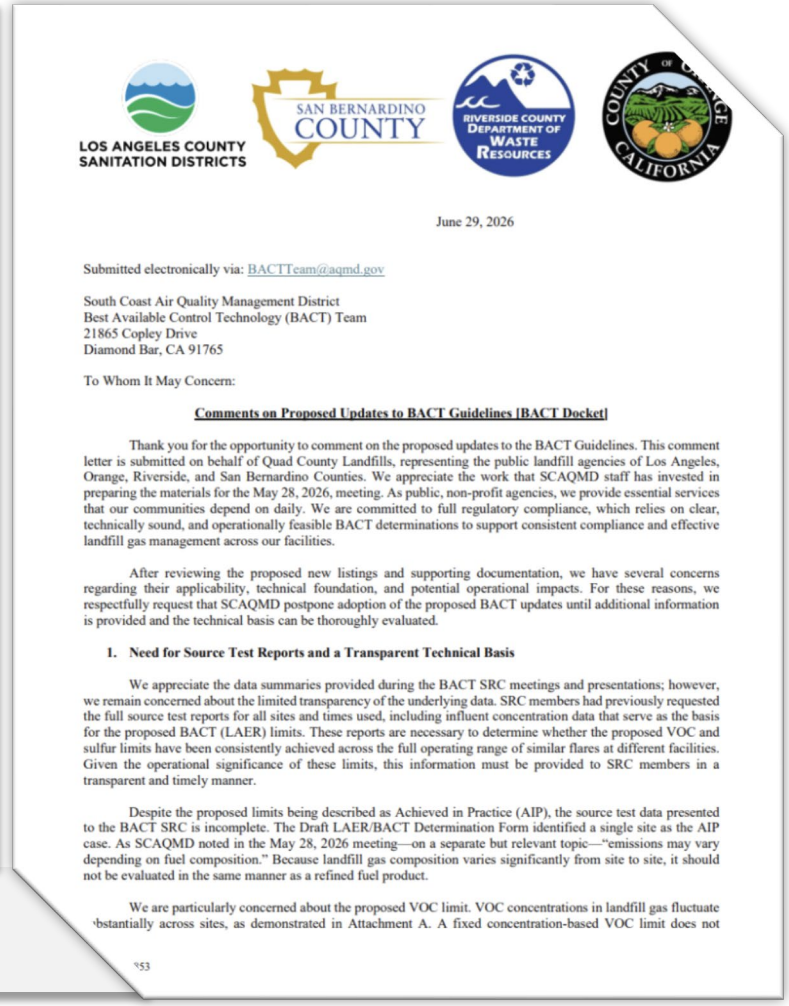
RadTech represents over 800 members involved in the Ultraviolet/Electron Beam/Light Emitting Diode (UV/EB/LED) industry. Our technology is considered pollution prevention and we appreciate the District's efforts to recognize it as an alternative to add-on control devices in the guidelines. We value the work of the district's Scientific Review Committee on the Best Available Control Technology Guidelines (BACT). We appreciate the opportunity to provide feedback regarding the proposed listing for Lithographic Printing, Non-Heatset, Sheet-fed. We support the proposal to include UV technology as a BACT compliant process.

During the October 2025 meeting, I asked for clarification regarding the types of curing mechanisms. The listing specifies a sheet-fed lithographic printing press, 170 kW rated ultraviolet (UV) dryer and 175 kW rated infrared dryer. As mentioned, energy curable materials can be cured with Electron Beam (EB) technology and Light Emitting Diode (LED) technology. For purposes of Volatile Organic Compound (VOC) content, the materials used in UV operations are the same as those cured with EB or LED equipment- essentially zero VOC. In the foreseeable future, a sheet-fed lithographic printing press using either EB or LED could ...entially come into the South Coast Basin and therefore it is important for our industry to be that EB or LED processes would be equivalent for purposes of the BACT listing being

Stakeholder Comments and Ongoing Evaluations (cont'd)

The following have been discussed with the BACT Scientific Review Committee but are not included in the proposed updates to the BACT Guidelines to allow staff additional time to evaluate:

- **Major Polluting Facilities (Part B, Section I – South Cost AQMD LAER/BACT Determination):**
  - ❑ Sulfur Control System (Prior to Landfill Gas Combustion)
  - ❑ Flare, Landfill Gas Fired (VOC and PM10 Control)
- **Non-Major Polluting Facilities (Part D – BACT Guidelines):**
  - ❑ Liquid Storage Tanks – Fixed Roof (Compliance with Rule 463 – Organic Liquid Storage)



LOS ANGELES COUNTY SANITATION DISTRICTS

SAN BERNARDINO COUNTY

RIVERSIDE COUNTY DEPARTMENT OF WASTE RESOURCES

June 29, 2026

Submitted electronically via: BACTTeam@aqmd.gov

South Coast Air Quality Management District
Best Available Control Technology (BACT) Team
21865 Copley Drive
Diamond Bar, CA 91765

To Whom It May Concern:

Comments on Proposed Updates to BACT Guidelines [BACT Docket]

Thank you for the opportunity to comment on the proposed updates to the BACT Guidelines. This comment letter is submitted on behalf of Quad County Landfills, representing the public landfill agencies of Los Angeles, Orange, Riverside, and San Bernardino Counties. We appreciate the work that SCAQMD staff has invested in preparing the materials for the May 28, 2026, meeting. As public, non-profit agencies, we provide essential services that our communities depend on daily. We are committed to full regulatory compliance, which relies on clear, technically sound, and operationally feasible BACT determinations to support consistent compliance and effective landfill gas management across our facilities.

After reviewing the proposed new listings and supporting documentation, we have several concerns regarding their applicability, technical foundation, and potential operational impacts. For these reasons, we respectfully request that SCAQMD postpone adoption of the proposed BACT updates until additional information is provided and the technical basis can be thoroughly evaluated.

1. **Need for Source Test Reports and a Transparent Technical Basis**

We appreciate the data summaries provided during the BACT SRC meetings and presentations; however, we remain concerned about the limited transparency of the underlying data. SRC members had previously requested the full source test reports for all sites and times used, including influent concentration data that serve as the basis for the proposed BACT (LAER) limits. These reports are necessary to determine whether the proposed VOC and sulfur limits have been consistently achieved across the full operating range of similar flares at different facilities. Given the operational significance of these limits, this information must be provided to SRC members in a transparent and timely manner.

Despite the proposed limits being described as Achieved in Practice (AIP), the source test data presented to the BACT SRC is incomplete. The Draft LAER/BACT Determination Form identified a single site as the AIP case. As SCAQMD noted in the May 28, 2026 meeting—on a separate but relevant topic—"emissions may vary depending on fuel composition." Because landfill gas composition varies significantly from site to site, it should not be evaluated in the same manner as a refined fuel product.

We are particularly concerned about the proposed VOC limit. VOC concentrations in landfill gas fluctuate ·bstantially across sites, as demonstrated in Attachment A. A fixed concentration-based VOC limit does not

·53

Recommended Actions

Determine that the proposed amendments to the BACT Guidelines are exempt from the requirements of CEQA

Approve proposed amendments to the BACT Guidelines