



Air quality regulations for hemp processing activities

Hemp processing can include several activities that would need to be evaluated for potential air emissions under the Kansas Air Quality Act and [regulations](#)¹. Hemp processing activities can occur at a stationary location, or some may occur in the field with portable equipment such as dryers or grinders. Industrial operations producing primary and/or secondary products from hemp include equipment used to handle, dry, grind and extract hemp byproducts. These include cannabidiol, or CBD, and fiber materials to be used in the manufacture of products such as clothing, building materials, paper and bioplastics. This guidance document is intended to assist processors of hemp in the identification of operations and equipment that would be subject to Kansas and EPA air quality regulations. This guidance, and the associated [Hemp Processing Air Quality Evaluation Tool](#), are designed to cover several basic processes in the hemp processing industry; however, there may be activities not included in the tool that could also be subject to air permitting and compliance requirements. By utilizing the *Hemp Processing Air Quality Evaluation Tool*, a facility will be able to evaluate the potential to emit air pollution from their process activities, and make determinations if an air construction approval or permit was or is needed prior to installing and operating the equipment.

Hemp processing equipment

Kansas air quality regulations would apply to industrial operations at a facility once the hemp arrives onsite and will be processed, but some can occur as off-site, portable activities. Typical industrial activities subject to air quality regulations include the following:

- Conveyors to move hemp or hemp materials
- Boilers or water heaters used in processes
- Engines for emergency power backup or to operate equipment
- CBD oil-extraction equipment
- Solvents used to extract or clean extraction equipment
- Dryers or ovens used to dry hemp or hemp products

Identification of activities subject to Kansas air quality regulations is the first step to understanding the permits needed by the Kansas Department of Health and Environment, or KDHE, Bureau of Air, or BOA.

New or existing facilities that have installed air emission sources or modified existing emission sources of air pollutants (e.g., a CBD oil-extraction unit, or a natural gas dryer or oven) must evaluate these new or modified emission sources to determine whether they need a **construction permit** or **approval**. During a preconstruction review, the KDHE BOA ensures proposed construction projects at new and existing facilities are able to meet applicable Kansas and federal air quality requirements. A construction permit or approval is required **BEFORE** a facility can install and operate a new source, or modify an existing source of air pollutants.

Please refer to the guidance documents [Five Steps To Determine Whether Your Facility Needs An Air Permit](#)² and [KDHE Air Construction Approval and Permit Guidance](#)³ for a full overview of air quality permitting and compliance in Kansas.

Applications for an air construction approval or permit must be submitted through the Kansas Environmental Information System, or [KEIMS](#).⁴

Other resources

[Kansas Fire Marshall Commercial Hemp Processing Information](#)⁵ – Office of the State Fire Marshall (OFSM)

[Providing Proactive Environmental Assistance to the Cannabis Industry](#)⁶ – National SBEAP, Colorado SBEAP YouTube video

[Environmental Impact of Cannabis](#)⁷ – National SBEAP, Colorado SBEAP YouTube video

Please contact Kansas SBEAP at 800-578-8898 or sbeap@ksu.edu for free technical assistance with the emission calculation tool, or questions regarding your process and how Kansas air quality regulations may apply.

Webpage references

1. https://www.kdheks.gov/bar/regs/KS_AQ_REGS.pdf
2. <https://www.sbeap.org/files/sbeap/publications/Five%20Steps%20to%20Determine%20Whether%20Your%20Facility%20Needs%20an%20Air%20Permit.pdf>
3. <https://www.kdheks.gov/air-permit/forms/constr-approval-permit-guidance.pdf>
4. <https://www.kdheks.gov/bar/keims-BOA.html>
5. <https://firemarshal.ks.gov/334/Commercial-Industrial-Hemp-Processing>
6. <https://youtu.be/lsiQUugkSfY>
7. <https://youtu.be/Vh0qP9pBdDQ>

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