

Fact Sheet

**AvCarb Material Solutions
2 Industrial Drive, Lowell, Massachusetts 01843
AQ02 Non-Major Comprehensive Plan Application**

June 2022

Facility Information:

AvCarb Material Solutions (AvCarb) is a leading manufacturer of engineered application-specific carbon components for fuel cells, electrolyzers, flow batteries, automotive, thermal, friction, and industrial applications. Carbon-based products include gas diffusion layers (GDLs), molded graphite layers, woven carbon fabrics, and carbon felts and papers used in electrochemical and friction applications such as clutches, transmissions, brakes and fishing reels. The two main production operations are Carbon Fiber and GDL. Carbon fiber production is currently limited to 262,800 lbs per 12-month rolling period. GDL production is currently limited to 250,000 m² per year. The facility is located at 2 Industrial Drive in Lowell, between the Lowell Connector and Route 110, and has been in operation since 1958.

Environmental Compliance History:

AvCarb currently operates under Plan Approval MBR-04-IND-001 issued in 2006 under the previous company name of Ballard Material Products by the Massachusetts Department of Environmental Protection (MassDEP) Northeast Regional Office (NERO). Emissions from the facility include particulate matter (PM), nitrogen oxides (NO_x), carbon monoxide (CO), sulfur dioxide (SO₂), volatile organic compounds (VOC), hydrogen cyanide (HCN), ammonia (NH₃), and hydrofluoric acid (HF). The facility has maintained compliance with all emissions, monitoring, recordkeeping, reporting and testing requirements of the Plan Approval.

Proposed Project:

AvCarb is proposing to add new production equipment to the GDL process. With the proposed changes the facility emissions will decrease for most pollutants, and the facility will continue to operate as a minor source of air emissions. The facility is proposing to add one Inokin coater and oven, two Cire Ovens, two Carsten ovens, and two Continuous Graphitizers. All equipment will be electrically heated. With this additional equipment, the facility proposes to increase the entire GDL process production limit to 1,000,000 m² per year.

Proposed emissions associated with the proposed production equipment will reduce current process emissions found in the Facility's current plan approval/permit. AvCarb is requesting that fuel burning emissions be included in the proposed plan approval/permit. These fuel burning emissions were not included in the current Facility approval. No changes are proposed for the existing fuel burning equipment.

AvCarb has filed an Air Quality Permit Application with the Massachusetts Department of Environmental Protection (MassDEP) for its existing facility at 2 Industrial Drive, Lowell, Massachusetts. The proposed modification is subject to the Massachusetts Air Pollution Control Regulations (310 CMR 7.00) and must apply for and receive a permit (known as an "Approval") before it can begin construction of the project. MassDEP is currently reviewing the permit application according to the applicable regulations.

After completing its review, MassDEP will issue a proposed decision to approve or deny the permit application, and at that time will provide a 30-day public comment period on its proposed decision. Information on how to review the permit application and be notified of MassDEP's proposed decision, and how to submit comments, can be found at the bottom of this Fact Sheet.

Environmental Justice (EJ) Populations:

The MassDEP EJ policy for air permitting projects similar to this project went into effect on September 3, 2020. The facility property is identified by MassDEP as part of an Environmental Justice (EJ) community based on minority population and income. Within the local EJ communities the following languages are spoken in addition to English: MonKhmer/Cambodian and Spanish or Spanish Creole within 1 mile of the facility, and MonKhmer/Cambodian, Spanish or Spanish Creole, Portuguese or Portuguese Creole, and Laotian within 1 miles of the facility. The attached map shows the location of the facility and the nearby EJ communities.

Public Participation and Comment:

MassDEP is currently reviewing this permit application from AvCarb. If you have questions or would like more information about the permit application or agency review process, or would like to be added to the distribution list to be notified when the public comment period on the draft decision begins, please contact the MassDEP personnel listed below.

The permit application is currently available for public review via the EEA ePLACE Public Access Portal: <https://eeaonline.eea.state.ma.us/EEA/PublicApp/>

On the main EEA ePLACE Portal page, click on the **orange** "Search and/or Comment" button, then on the name of the applicant/facility on the resulting page.

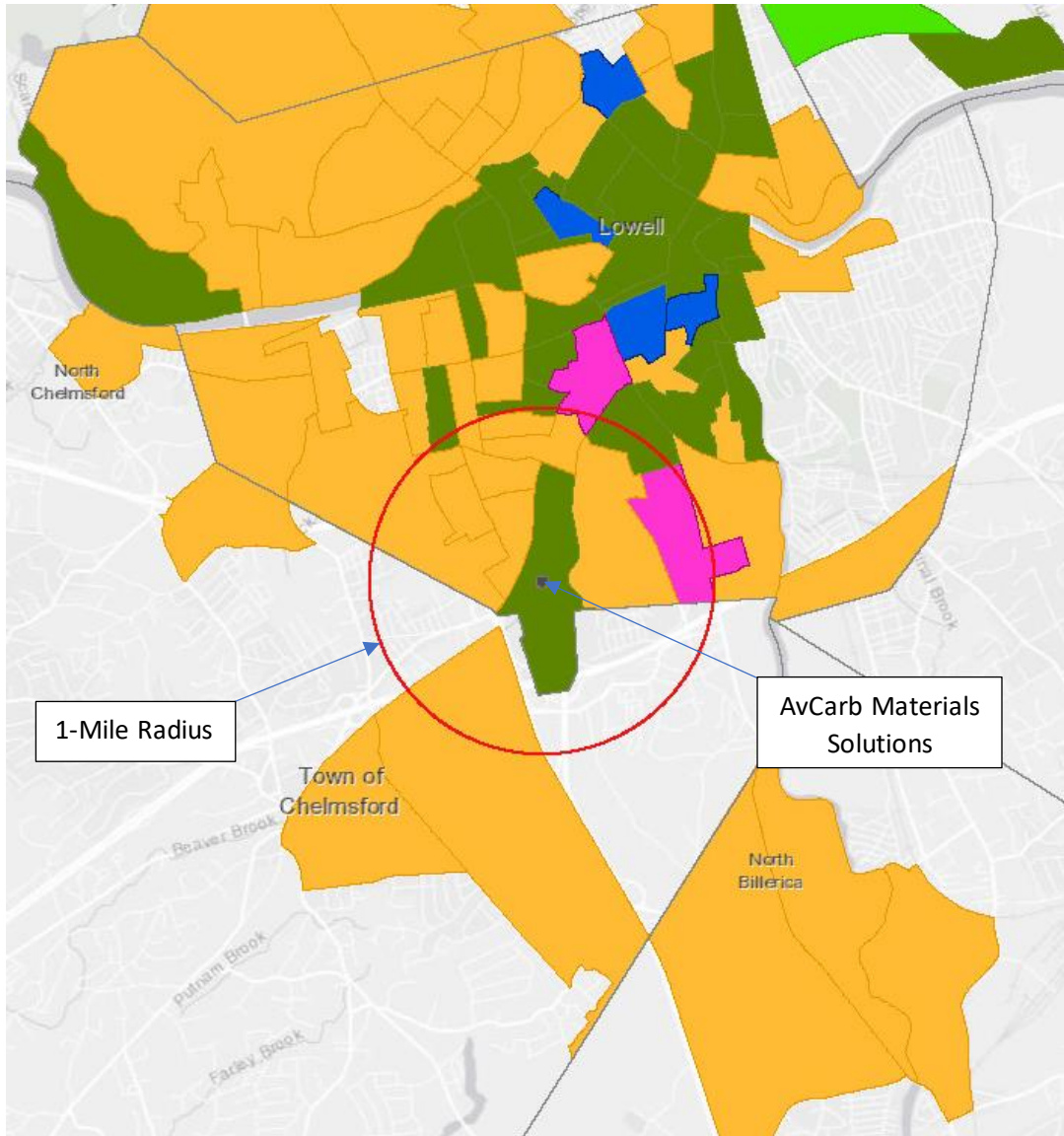
After MassDEP completes its review of the permit application, the agency will issue a proposed decision, subject to a 30-day public comment period. This information will also be posted in the ePLACE Public Access Portal. If you would like to be notified of the proposed decision and the public comment period, please contact Susan McConnell susan.mcconnell@mass.gov.

MassDEP contact:

Susan McConnell susan.mcconnell@mass.gov
Edward Braczyk edward.braczyk@mass.gov

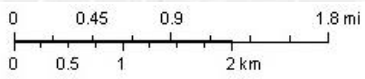
Facility Contact:

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AvCarb Materials Solutions



- Minority: the block group minority population is $\geq 40\%$ or the block group minority population is $\geq 25\%$ and the median household income of the municipality the block group is in is $< 150\%$ of the Massachusetts median household income
- Income: at least 25% of households have a median household income 65% or less than the state median household income
- Language isolation: 25% or more of households do not include anyone older than 14 who speaks English very well
- Minority and income
- Minority and English isolation
- Income and English isolation
- Minority, income and English isolation