



LCFS Guidance



Low Carbon Fuel Standard (LCFS) Guidance 20-01

Fuel Production Facility and Intermediate Facility Registration in the Alternative Fuels Portal

February 2020

INTRODUCTION

The California Air Resources Board's (CARB) Low Carbon Fuel Standard (LCFS) regulation, which appears at sections 95480 to 95503 of title 17, California Code of Regulations, is designed to reduce greenhouse gas emissions associated with the life cycle of transportation fuels used in California. CARB staff has prepared this guidance document to describe the regulatory requirements in a user-friendly format. Unlike the regulation itself, this document does not have the force of law. It is not intended to and cannot establish new mandatory requirements beyond those that are already in the LCFS Regulation, nor can it supplant, replace or amend any of the legal requirements of the regulation. Conversely, any omission or truncation of regulatory requirements does not relieve entities of their legal obligation to fully comply with all requirements of the regulation.

BACKGROUND

This guidance document is designed to summarize and describe the LCFS Regulation¹ requirements relating to fuel production and intermediate facility registration in the Alternative Fuels Portal (AFP).

OVERVIEW OF FACILITY REGISTRATION REQUIREMENT

Facility registration is not a new concept in the LCFS. Participants in the program have historically been required to register their fuel production facility in the AFP before submitting a fuel pathway application. Starting in 2019, all facilities from which site-specific operational data is relied upon in determining the CI score for a pathway must be registered in the AFP, pursuant to section 95488.2(a). These facility types are defined as such:

- Fuel Production Facility: the facility at which the fuel is produced. "Fuel Production facility" means, with respect to biomethane to vehicle fuel pathways, a

¹ All citations to the LCFS Regulation are title 17 to the California Code of Regulation (CCR), sections 95480-95503.

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facility at which fuel is upgraded, purified, or processed to meet standards for injection to a natural gas common carrier pipeline or for use in natural gas vehicles. (Section 95481(a)(65).)

- Intermediate Facility: a facility in a fuel supply chain, which is not the fuel production facility, that contributes site-specific data for determination of a fuel pathway carbon intensity. Intermediate facilities produce components of a fuel or intermediate chemical that may be further processed into a fuel. This term includes feedstock-processing facilities. (Section 95481(a)(79).)

The intermediate facility registration requirement means that any facility from which site-specific data is submitted to determine the CI of the pathway must be registered in the AFP. An intermediate facility may be registered by an entity who is not the owner of the facility; this registration simply associates the facility with a fuel pathway application.

IDENTIFYING FACILITY TYPES IN A FUEL PATHWAY

Tables A-1 and A-2 in Appendix A of this guidance document provide examples of common pathways and clarify the fuel production and intermediate facilities for a given fuel pathway application. Note that the list is not exhaustive, but is intended to serve as a reference to guide applicants through the registration process.

FACILITY REGISTRATION PROCESS IN THE AFP

An intermediate facility may be registered by following the same steps as registration of a fuel production facility, which are outlined in the AFP User Guide.² The fuel pathway application should always be created under the fuel production facility. All facilities with site-specific data must be registered prior to submission of the fuel pathway application. Intermediate facility information (Facility Name, Address, and LCFS Facility ID Number) can be entered in the Tier 1 Simplified CI Calculator in the blank cells to the right of Section 1 in the fuel inputs tab. Note that an applicant can register an intermediate facility under the applicant's AFP company profile, even if they are not the owner of the intermediate facility. For more information on registration of intermediate facilities with a joint applicant, refer to LCFS Guidance 20-02: [Joint Applicants for Fuel Pathway Applications](#).

CONTACT

If you have questions regarding the above information, please visit the LCFS Contacts webpage: <https://www.arb.ca.gov/fuels/lcfs/contact.htm>.

² AFP User Guide: https://ww3.arb.ca.gov/fuels/lcfs/reportingtool/afp_userguide.pdf

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Appendix A: Alternative Fuels Portal Facility Registration

Table A-1. Common Pathways and Associated Fuel Production and Intermediate Facilities Required to Register in AFP

Legend:

** Required only if site-specific data from this facility is used to determine CI*

*** Required only if this facility is not co-located with upgrading facility*

Pathway (Fuel: Feedstock)	Fuel Production Facility	Intermediate Facility
Ethanol: Starch/Fiber/Sugarcane	Ethanol facility	
Ethanol: Other Feedstock (Tier 2)	Ethanol facility	<i>Feedstock production facility *</i>
Biofuel with Carbon Capture and Sequestration	Biorefinery (capture facility)	Sequestration facility
Biomass-Based Diesel: Fat/Oil/Grease Residues	BD/RD facility	<i>Feedstock processing or rendering facility *</i>
Biomass-Based Diesel: Plant-derived Oils	BD/RD facility	<i>Feedstock extraction facility *</i>
LNG and L-CNG: North American Natural Gas	Liquefaction facility	
CNG: Biomethane from Landfill	Biogas upgrading facility	<i>Landfill **</i>
LNG and L-CNG: Biomethane from Landfill	Biogas upgrading facility	<ul style="list-style-type: none"> • <i>Landfill **</i> • Liquefaction facility
CNG: Biomethane from Wastewater Sludge	Biogas upgrading facility	<i>Wastewater treatment plant **</i>
LNG and L-CNG: Biomethane from Wastewater Sludge	Biogas upgrading facility	<ul style="list-style-type: none"> • <i>Wastewater treatment plant **</i> • Liquefaction facility
CNG: Biomethane from Organic Waste	Biogas upgrading facility	<i>Digester site **</i>
LNG and L-CNG: Biomethane from Organic Waste	Biogas upgrading facility	<ul style="list-style-type: none"> • <i>Digester site **</i> • Liquefaction facility
CNG: Biomethane from Dairy/Swine Manure	Biogas upgrading facility	<i>Digester site **</i>
LNG and L-CNG: Biomethane from Dairy/Swine Manure	Biogas upgrading facility	<ul style="list-style-type: none"> • <i>Digester site **</i> • Liquefaction facility
Hydrogen (Steam Methane Reformation): Fossil Natural Gas	Central SMR facility (register the refueling station in AFP only if on-site production)	<i>Liquefaction facility (for pathways with liquid hydrogen transport/storage) *</i>

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Pathway (Fuel: Feedstock)	Fuel Production Facility	Intermediate Facility
Hydrogen (Steam Methane Reformation): Biomethane	Central SMR facility (register the refueling station in AFP only if on-site production)	<ul style="list-style-type: none"> • <i>Liquefaction facility (for pathways with liquid hydrogen transport/storage)*</i> • <i>Biogas upgrading facility *</i>
Hydrogen (Electrolysis): Grid Electricity	Electrolyzer facility (register the refueling station in AFP only if on-site production)	<i>Liquefaction facility (for pathways with liquid hydrogen transport/storage) *</i>
Hydrogen (Electrolysis): Low-CI Electricity	Electrolyzer facility (register the refueling station in AFP only if on-site production)	<ul style="list-style-type: none"> • <i>Liquefaction facility (for pathways with liquid hydrogen transport/storage)*</i> • <i>Source of low-CI electricity</i>
Zero-CI Electricity (Lookup Table): From single source	Zero-CI electricity generating unit	
Zero-CI Electricity (Lookup Table): From mix of sources	Company headquarters	<i>Note: multiple generating units do not need to be registered in the AFP, but must be registered in WREGIS</i>
Low-CI Electricity (Tier 2)	Low-CI electricity generating unit	

Table A-2. Pathways using Low-CI Process Energy (see LCFS Regulation section 95488.8(h))

Pathway Description	Fuel Production Facility	Intermediate Facility
Fuel Production Facility using directly-supplied biomethane or other user-defined process energy	Facility producing the transportation fuel as shown in Table A-1	Source of biomethane/other user-defined process energy
Fuel Production Facility using directly-supplied low-CI electricity as process energy, including a third-party-operated combined heat and power (CHP) unit	Facility producing the transportation fuel as shown in Table A-1	Source of low-CI electricity