

Diesel Regulation Amendments

(title 13, California Code of Regulations, sections 2281-2285)





Purpose of Amendments

- Accommodate ADF provisions under development
- Other amendments are being proposed to update and clarify the existing regulations



Current Regulations

- Have been developed for emissions control
- Applicable to all diesel fuel sold, offered, or supplied in California
- Standards are enforced by the ARB staff



Current Regulations

§ 2281. Sulfur Content of Diesel Fuel

- 15-ppmw standard
- Enforced at refinery, import facility and throughout distribution system



Current Regulations

§ 2282. Aromatic Hydrocarbon Content of Diesel Fuel

- 10-vol% standard (20-vol% for small refiners) or
 - Designated alternative aromatic hydrocarbon limit, or
 - Certified diesel fuel formulation, or
 - Designated equivalent limits
- Enforced at refinery or import facility on the “final blend”



Current Regulations

§ 2282(g) Certified Diesel Fuel Formulations Resulting in Equivalent Emissions Reductions

- Outlines requirements and procedures for testing candidate fuel against 10-percent aromatic reference fuel
- Test protocol must be approved by ARB staff before testing can begin
- Executive order is issued if candidate fuel emissions meet criteria for equivalence

Current Regulations

- § 2283. Exemptions for Diesel Fuel Used in Test Programs (refers to §2259 of the CaRFG regs.)
- § 2284. Lubricity of Diesel Fuel
 - Same standard was later adopted by ASTM
 - CDFA's Division of Measurement Standards enforces
ASTM D975, Standard Specification for Diesel Fuel Oils

Current Regulations

§ 2285. Exemption from Diesel Fuel Requirements for Military-Specification Fuels Used in Qualifying Military Vehicles

- Exemptions from sections 2281, 2282, and 2284
- e.g., JP-8 used in exempt vehicles and tactical military vehicles

Summary of Amendments

- New aromatic HC caps
- Clarify and update § 2282(g) requirements
- Add new sections 2286, 2287, and 2288, similar to CaRFG sections 2268, 2271, and 2266.5(f)
- Delete obsolete and outdated provisions
- Update test methods
- Update significant figures
- Placeholder language for biodiesel to be aligned with ADF proposal
- Other corrections and clarifications



New Aromatic HC Caps

- Aromatic HC cap of 28 percent by volume
- Aromatic HC cap of 22.4 percent by volume for B20
- Would be enforced at all points of distribution system

Clarify and Update §2282(g) Requirements

- Consistent with requirements of test protocol submitted by applicant and reviewed by ARB staff
- Clarify candidate fuel requirements
- Clarify test requirements for additive-based candidate fuels, e.g., executive officer's determination that the additive does not increase emissions of noxious or toxic substances and proposal to add cellular testing criteria
- Update test engine to pre-2007 (w/ EGR, but no DPF or SCR)

New sections 2286, 2287, and 2288

- § 2286. Liability of Persons Who Commit Violations Involving Diesel Fuel That Has Not Yet Been Sold or Dispensed into a Fuel Tank.
- § 2287. Variances.
- § 2288. Restrictions on Blending Diesel Fuel with Other Materials.
 - Diesel w/ diesel (≤ 5 biodiesel), etc.
 - Operational restrictions
 - Additives (specific, general, DTBP, red dye)
 - Protocols

Delete Obsolete and Outdated Provisions

- Obsolete 500-ppm sulfur standard
- Phase-in of 15-ppm sulfur standard
- Phase-in of applicability of regulations to stationary, locomotive, and marine engines
- Phase-in of lubricity standard
- Other

Update Test Methods

- Nitrogen content to ASTM D4629-08
- API gravity to ASTM D287-12b
- Viscosity to ASTM D445-12
- Flashpoint to ASTM D93-12
- Distillation to ASTM D86-12
- Cetane number to ASTM D613-10a

Update Significant Figures

- Aromatic hydrocarbon content, vol. %...10.0
- Gravity, API,...33.0-39.0
- Distillation, °F...340.0-...660.0

Other Corrections and Clarifications

- Use consistent wording, e.g., “sell, offer, or supply”
- Clarify and add definitions related to enforcement
 - Clarify “import facility”
 - Add “production facility”
- Notification requirements, “before the start of physical transfer of the final blend from the production or import facility, and in no case less than 12 hours before the producer or importer either completes physical transfer or commingles the final blend.”
- Correct incorrect section or paragraph references

Next Steps

- Please provide written comments by July 5, 2013
- Will amend reg language to accommodate ADF reg
- Next rulemaking workshop in August
- Board Hearing September 2013



Rulemaking Contacts

Alternative Diesel Fuel Contacts:

- Alexander “Lex” Mitchell
Air Pollution Specialist
(916) 327-1513
amitchel@arb.ca.gov
- Jim Aguila, Manager
Substance Evaluation Section
(916) 322-8283
jaguila@arb.ca.gov
- <http://www.arb.ca.gov/fuels/diesel/altdiesel/bio/diesel.htm>

Diesel Fuel Regulation Contacts:

- Jim Guthrie
Air Resources Engineer
(916) 327-1508
jguthrie@arb.ca.gov
- Ms. Manisha Singh, Manager
Fuels Section
(916) 327-1501
mansingh@arb.ca.gov