(a) Purpose
The purpose of this rule is to gather air quality-related information on oil and gas well drilling, well completion, and well reworks.

(b) Applicability
This rule applies to any owner or operator of an onshore oil or gas well located in the District that is conducting oil or gas well drilling, well completion, and/or well reworks. In addition, this rule applies to suppliers as defined in paragraph (c)(1442).

(c) Definitions
For the purposes of this rule, the following definitions shall apply:

1. **ACIDIZING** means a treatment of the wellbore or reservoir formation with an acid to either clean out scale, damage, or other debris in the well, or react with the soluble substances in the formation to improve permeability and enhance production of oil and gas.

2. **AIR TOXIC** means any substance identified on a list that is compiled and maintained by the California Air Resources Board pursuant to Health and Safety Code 44321.

3. **CHEMICAL FAMILY** means a group of chemicals with related physical and chemical properties.

4. **DRILLING** means digging or boring into the earth for the purpose of developing, extracting, or producing oil, gas, or other hydrocarbons, but does not include remediation efforts to clean-up or remove contamination.

5. **DRILLING FLUID** means fluid used to lubricate the drill string, line the walls of a well, flush cuttings to the surface, and create enough hydrostatic weight to prevent blowouts.

6. **FLOWBACK FLUID** means the fluid that flows from an oil or gas well following a well production stimulation or treatment activity, either in preparation for a subsequent phase of well production stimulation or treatment activity, or in preparation for a cleanup and returning the well to production. The flowback period begins when material introduced into the well during the well production stimulation or treatment activity...
returns to the surface immediately following the activity well completion hydraulic fracturing or refracturing. The flowback period ends with either well shut in or when the well is producing continuously to the flow line or to a storage vessel for collection, whichever occurs first.

(75) **GRAVEL PACKING** means a method of well completion that uses water, gravel, and additives to place sand and gravel near the well itself with the objective of limiting entry of formation sands and fine-grained material into the wellbore.

(6) **HAZARDOUS AIR POLLUTANT** means an air pollutant that causes or may cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental and ecological effects, as identified by the U.S. Environmental Protection Agency (EPA).

(87) **HYDRAULIC FRACTURING** means a technique used in stimulating a formation or zone that involves the pressurized injection of hydraulic fracturing fluid, which is a carrier fluid mixed with chemical additives, and typically a proppant, into an underground geologic formation in order to fracture the formation, thereby causing or enhancing the production of oil or gas from a well.

(98) **ONSHORE OIL OR GAS WELL** means a well located on lands that are not submerged under ocean waters or inland bays during mean high tide.

(10) **OWNER OR OPERATOR** means any person who owns, leases, or operates an oil or gas well subject to this rule, including any person who has a contractual arrangement with the owner or operator to conduct activities affecting an oil or gas well subject to this rule.

(119) **PROPPANT** means material inserted or injected into the underground geologic formation that is intended to prevent fractures from closing.

(124) **REWORK** means any operation subsequent to drilling that involves deepening—of redrilling, plugging, or well production stimulation or treatment activity of an existing well—permanently altering in any manner the casing of a well or its function.

(134) **SENSITIVE RECEPTOR** means any residence including private homes, condominiums, apartments, and living quarters; education resources such as preschools and kindergarten through grade twelve (k-12) schools; daycare centers; and health care facilities such as hospitals or retirement and nursing homes. A sensitive receptor includes long term care hospitals, hospices, prisons, and dormitories or similar live-in housing.
(14) SUPPLIER means, for the purpose of this rule, an entity selling or distributing a chemical to the owner or operator of an onshore oil or gas well for use as a drilling fluid, well completion fluid, or rework.

(13) TOXIC AIR CONTAMINANT is an air pollutant which may cause or contribute to an increase in mortality or serious illness, or which may pose a present or potential hazard to human health, as identified by the California Air Resources Board.

(15) TRADE SECRET may include, but is not limited to, any formula, plan, pattern, process, tool, mechanism, compound, procedure, production data, or compilation of information which is not patented, which is known only to certain individuals within a commercial concern who are using it to fabricate, produce, or compound an article of trade or a service having commercial value and which gives its user an opportunity to obtain a business advantage over competitors who do not know or use it, as defined in California Government Code Section 6254.7(d).

(16) WELL means an oil or gas well, a hole drilled for the purpose of producing or extracting oil or gas, or a well into which fluids are injected.

(17) WELL COMPLETION means the activities and methods, including gravel packing and well production stimulation or treatment activities, of preparing a well for the production or extraction of oil or gas, by which one or more flow paths for hydrocarbons are established between the reservoir and the surface.

(18) WELL COMPLETION FLUID means a carrier fluid mixed with physical and chemical additives used for the purpose of preparing a well for the production or extraction of oil and gas, or used in a well production stimulation or treatment activity.

(19) WELL PRODUCTION STIMULATION OR TREATMENT ACTIVITY means an activity performed on a well to improve its productivity, acidizing, gravel packing, hydraulic fracturing, or any combination thereof.

(d) Notification Requirements

(1) Beginning [60 days after date of adoption] the owner or operator of an onshore oil or gas well shall electronically notify the Executive Officer, using a format approved by the Executive Officer, of the following information, no more than ten (10) days and no less than 24 hours prior to
the start of drilling, well completion, or rework of an onshore oil or gas well:

(A) name and contact information of the owner or operator of the subject well(s);

(B) well name(s) and API well number(s) (if available);

(C) geographical coordinates of the subject well(s);

(D) nearest sensitive receptor within 1,500 feet of the subject well(s), specifying the:
   (i) sensitive receptor type (e.g., residence, school, hospital);
   (ii) name of facility, if applicable;
   (iii) location address; and
   (iv) distance from the closest property line of the sensitive receptor to the subject well(s); and

(E) expected start date(s) and identification of general activities to be conducted (e.g., drilling, well completion, and reworking).

(2) If the start date of the drilling, well completion, or rework as notified pursuant to paragraph (d)(1) is modified, the owner or operator of an onshore oil or gas well shall electronically notify the Executive Officer at least 24 hours prior to the new start date if modified to occur earlier than the original start date, or within 24 hours prior to the original start date if modified to occur after the original start date or if the original start date is canceled that the start date for the well specified in the notice has been modified.

(3) The notification time period in paragraph (d)(1) shall not apply to drilling, well completion, or rework operations that are necessary to avert a threat to life, health, property, or natural resources. The notification shall be submitted no later than 48 hours of the start of the operations specified in this paragraph.

(4) Within 24 hours of receipt, the Executive Officer shall make all information as received under paragraphs (d)(1) through (d)(3) available to the public on a website.

(e) Reporting Requirements

(1) Beginning [6090 days after date of adoption] and until [2 years after date of adoption], for each well, the owner or operator of an onshore oil and gas well shall electronically submit a report to the Executive Officer no
later than thirty (30)–days after the completion of the last activity, or if more than one operation is being conducted, the last activity in the series of operations associated with drilling, well completion or rework, specifying the following information:

(A) **name and contact information of the** owner or operator of the subject well;

(B) **well name(s) and API well number(s)** (if available);

(C) identification of combustion equipment rated at greater than 50 brake horsepower that is used during the drilling, well completion, or reworks including the equipment type, engine size, fuel type, engine tier, and hours of operation;

(D) for dry materials used for drilling, well completion, and rework provide:

(i) type and amount of dry materials used;

(ii) method(s) in which dry materials are added and mixed onsite into the drilling and well completion fluid(s); and

(iii) any air pollution control techniques, devices, and/or practices used to control fugitive emissions or odors;

(E) for drilling fluids and flowback fluid, provide:

(i) volume of well completion fluids used and volume of flowback fluid recovered;

(ii) method(s) used for collecting, **storing**, conditioning, separating, and/or treating drilling fluids and/or flowback fluids as they return to the surface;

(iii) any air pollution techniques, devices, and/or practices used to control volatile organic compounds or odors; and

(iv) final disposition of recovered drilling fluids and flowback fluids.

(2) Beginning [60 days after date of adoption], a supplier that provides chemicals to the owner or operator of an oil or gas well for drilling, well completion, or rework shall provide the owner or operator with the following information within ten (10) days after the chemicals are sold to the owner or operator:

(A) **name and chemical abstract service (CAS) number** of each chemical compound and chemical abstract service (CAS) number;

(B) for each chemical trade name product:
(i) the total volume and density; or
(ii) total mass;

(C) for each chemical ingredient used in the chemical trade name product, the maximum concentration in percent by mass;

(D) identification of whether the chemical(s) are an air toxic;

(E) identification of whether any of the chemical information provided is claimed protected as trade secret, including the basis for the claim of trade secret, and the chemical family or similar descriptor; and

(F) identification of the chemical family or similar descriptor of any chemical information claimed protected as trade secret.

(3) The supplier shall, at a minimum, provide the owner or operator with the information specified in subparagraphs (e)(2)(D) through (e)(2)(F) for any chemical information that is claimed protected as trade secret. If a supplier claims trade secret and does not provide the owner or operator with the specified information, then the supplier shall provide the owner or operator of the oil or gas well with substitute information as provided in paragraph (f)(2).

(4) The supplier shall provide information not made available to the owner or operator, as described in subparagraphs (e)(2)(A) through (e)(2)(E), to the Executive Officer within sixty (60) days.

(5) Beginning [60/90 days after date of adoption], the owner or operator of an onshore oil and gas well shall electronically report, using a format approved by the Executive Officer, chemical compounds contained in the drilling and well completion fluids to the Executive Officer no later than sixty (60) thirty (30) days after the last activity, or if more than one operation is being conducted, the last activity in the series of operations associated with drilling, well completion, or rework specifying the following information:

(A) name and API number of the affected well(s);
(BA) name and chemical abstract service (CAS) number of each chemical compound and chemical abstract service (CAS) number;
(C) purpose of the chemical compound;
(DB) for each chemical trade name product:
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(i) the total volume and density; or
(ii) total mass;

(F) identification of whether the chemical(s) are an air toxic; and

(G) identification of whether any of the chemical information provided is claimed protected as trade secret, including the basis for the claim and the chemical family or similar descriptor;

(H) identification of the chemical family or similar descriptor of any chemical information claimed protected as trade secret; and

(I) identification of whether the chemical(s) are a hazardous air pollutant and/or toxic air contaminant; and

(f) company name, address, contact, and phone number of the suppliers of any chemical.

(f) AQMD Website Posting of Chemicals

Beginning [60-90 days after date of adoption], the Executive Officer shall make the following information as received under subdivision (e) available to the public for each event by owner or operator name, well name, API well number, location, and date of activity on a website:

(1) For all non-trade secret chemical compounds:
   (A) Name of the chemical compound;
   (B) Chemical abstract service (CAS) number;
   (C) Purpose of the chemical compound;
   (D) Volume or mass of chemical used; and
   (E) Identification of chemical(s) that are an air toxic, hazardous air pollutant and/or toxic air contaminant.

(2) For all trade secret chemical compounds:
   (A) Chemical family or similar descriptor; and
   (B) Purpose of the chemical compound; and
   (B) Identification of chemical(s) that are an air toxic, hazardous air pollutant and/or toxic air contaminant.