

**Colorado Oil and Gas Conservation
Commission**

**Draft Rules for Oil and Gas
Development in Colorado
(HB 1298 & HB 1341)**

March 31, 2008

DEPARTMENT OF NATURAL RESOURCES

Oil and Gas Conservation Commission *Eff 09/30/2007*

PRACTICE AND PROCEDURE *Eff 09/30/2007*

2 CCR 404-1 *Eff 09/30/2007*

[Editor's Notes follow the text of the rules at the end of this CCR Document.] *Eff 09/30/2007*

100-SERIES DEFINITIONS

ACT shall mean the Oil and Gas Conservation Act of the State of Colorado. *Eff 09/30/2007*

ANCILLARY FACILITIES shall mean all of the equipment, buildings, structures, and improvements associated with or required for the operation of a well site, pipeline, or compressor facility. Ancillary facilities include, but are not limited to, roads, well pads, tank batteries, combustion equipment and pits and exclude gathering lines.

APPLICANT shall mean the person who institutes a proceeding before the Commission which it has standing to institute under these rules. *Eff 09/30/2007*

AQUIFER shall mean a geologic formation, group of formations or part of a formation that can both store and transmit ground water. It includes both the saturated and unsaturated zone but does not include the confining layer which separates two (2) adjacent aquifers. *Eff 09/30/2007*

ASSEMBLY BUILDING shall mean any building or portion of building or structure used for the regular gathering of fifty (50) or more persons for such purposes as deliberation, education, instruction, worship, entertainment, amusement, drinking or dining, or awaiting transport.

AUTHORIZED DEPUTY shall mean a representative of the Director as authorized by the Commission.

BARREL shall mean 42 (U.S.) gallons at 60° F. at atmospheric pressure.

BATTERY shall mean the point of collection (tanks) and disbursement (tank, meter, ~~lease-automated custody transfer~~ [LACT] unit) of oil or gas from producing well(s).

BEST MANAGEMENT PRACTICES (BMPs) are maintenance and operating practices that are designed to prevent or reduce impacts caused by oil and gas operations to air, water, soil or biological resources, and to minimize adverse impacts to public health, safety and welfare, including the environment and wildlife resources.

BRADENHEAD TEST AREA shall mean any area designated as a bradenhead test area by the Commission under Rule 207.b.

BUILDING UNIT shall mean a building or structure intended for human occupancy. A dwelling unit is equal to one (1) building unit, every guest room in a hotel/motel is equal to one (1) building unit, and every five thousand (5,000) square feet of building floor area in commercial facilities, and every fifteen thousand (15,000) square feet of building floor area in warehouses, or other similar storage facilities, is equal to one (1) building unit.

CEASE AND DESIST ORDER shall mean an order issued by the Commission or the Director pursuant to C.R.S. §34-60-121(5).

CENTRALIZED E&P WASTE MANAGEMENT FACILITY shall mean a facility, other than a commercial disposal facility ~~exclusively~~-regulated by the Colorado Department of Public Health and Environment that

is: ~~(1) used exclusively by one owner or operator; or (2) used by more than one operator under an operating agreement and which that~~ receives for collection, treatment, temporary storage, and/or disposal of produced water, drilling fluids, drill cuttings, completion fluids, and any other exempt E&P wastes that are generated from ~~two or more production units or areas or from~~ a set of commonly ~~owned or~~ operated leases. This definition includes the surface storage and disposal facilities that are present at Class II disposal well sites. ~~This definition also includes oil-field naturally occurring radioactive materials (NORM) related storage, decontamination, treatment, or disposal.~~

CHEMICAL INVENTORY shall mean a list of all chemicals, by chemical name, used, stored, or released at an oil and gas facility, operation, or location during or in support of site preparations or operations, well drilling and downhole operations, construction completion, stimulation, and production. The chemical inventory shall include how much of each chemical was used, how it was used, and when it was used. "Chemical name" as used in this definition means the scientific designation of a chemical in accordance with the nomenclature system developed by the International Union of Pure and Applied Chemistry or the Chemical Abstracts Service rules of nomenclature, or a name which clearly identifies the chemical for the purpose of conducting a hazard evaluation.

COMMERCIAL DISPOSAL WELL FACILITY shall mean a facility whose primary objective is disposal of Class II waste from a third party for financial profit.

COMMISSION shall mean the Oil and Gas Conservation Commission of the State of Colorado.

COMPLETION. An oil well shall be considered completed when the first new oil is produced through wellhead equipment into lease tanks from the ultimate producing interval after the production string has been run. A gas well shall be considered completed when the well is capable of producing gas through wellhead equipment from the ultimate producing zone after the production string has been run. A dry hole shall be considered completed when all provisions of plugging are complied with as set out in these rules. Any well not previously defined as an oil or gas well, shall be considered completed ninety (90) days after reaching total depth. If approved by the Director, a well that requires extensive testing shall be considered completed when the drilling rig is released or six months after reaching total depth, whichever is later.

COMPREHENSIVE DRILLING PLAN means a plan created by one or more operator(s) covering future oil and gas operations in a defined geographic area within a geologic basin. The Plan may (a) identify natural features of the geographic area, including vegetation, wildlife, and other attributes of the physical environment; (b) describe the operator's future oil and gas operations in the area; (c) identify potential impacts from such activities; (d) develop agreed-upon measures to avoid, minimize, and mitigate the identified potential impacts; and (e) include other relevant information.

CORNERING AND CONTIGUOUS UNITS when used in reference to an exception location shall mean those lands which make up the unit(s) immediately adjacent to and toward which a well is encroaching upon established setbacks.

CROP LAND shall mean lands which are cultivated, mechanically or manually harvested, or irrigated for vegetative agricultural production.

CUBIC FOOT of gas shall mean the volume of gas contained in one cubic foot of space at a standard pressure base and a standard temperature base. The standard pressure base shall be 14.73 psia, and the standard temperature base shall be 60° Fahrenheit.

D–J BASIN FOX HILLS PROTECTION AREA shall mean that area of the State consisting of Townships 5 South through Townships 5 North, Ranges 58 West through 70 West, and Township 6 South, Ranges 65 West through 70 West.

DAY shall mean a period of twenty-four (24) consecutive hours.

DEDICATED INJECTION WELL shall mean any well as defined under 40 C.F.R. §144.5 B, 1992 Edition, (adopted by the U.S. Environmental Protection Agency) used for the exclusive purpose of injecting fluids or gas from the surface. The definition of a dedicated injection well does not include gas storage wells.

DESIGNATED AGENT, when used herein shall mean the designated representative of any producer, operator, transporter, refiner, gasoline or other extraction plant operator, or initial purchaser.

DESIGNATED OUTSIDE ACTIVITY AREAS shall mean a well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by twenty (20) or more persons on at least forty (40) days in any twelve (12) month period or by at least five hundred (500) or more people on at least three (3) days in any twelve (12) month period.

DIRECTOR shall mean the Director of the Oil and Gas Conservation Commission of the State of Colorado or any member of the Director's staff authorized to represent the Director.

DOMESTIC GAS WELL shall mean a gas well that produces solely for the use of the surface owner. The gas produced cannot be sold, traded or bartered.

DRILLING PITS shall mean those pits used during drilling operations and initial completion of a well, and include:

ANCILLARY PITS used to contain fluids during drilling operations and initial completion procedures, such as circulation pits and water storage pits.

COMPLETION PITS used to contain fluid during initial completion procedures, and not originally constructed for use in drilling operations.

RESERVE PITS used to store drilling fluids for use in drilling operations or to contain E&P waste generated during drilling operations and initial completion procedures.

EDUCATIONAL FACILITY shall mean any building used for legally allowed educational purposes for more than twelve (12) hours per week for more than six (6) persons. This includes any building or portion of building used for licensed day-care purposes for more than six (6) persons.

EMERGENCY ORDER shall mean an order issued by the Commission pursuant to C.R.S. §34-60-108(3).

EMERGENCY SITUATION for purposes of C.R.S. §34-60-121(5) and the rules promulgated thereunder shall mean a fact situation which presents an immediate danger to public health, safety or welfare.

EXPLORATION AND PRODUCTION WASTE (E&P WASTE) shall mean those wastes associated with operations to locate or remove oil or gas from the ground or to remove impurities from such substances and which are uniquely associated with and intrinsic to oil and gas exploration, development or production operations ~~of which that~~ are exempt from regulation under Subtitle C of the Resource Conservation and Recovery Act (RCRA), 42 USC Sections 6921, et seq. ~~For a waste to be considered an E&P waste, it shall be associated with operations to locate or remove oil or gas from the ground or to remove impurities from such substances and it shall be intrinsic to and uniquely associated with oil and gas exploration, development or production.~~ For natural gas, primary field operations include those production-related activities at or near the wellhead and at the gas plant (regardless of whether or not the gas plant is at or near the wellhead), but prior to transport of the natural gas from the gas plant to market. In addition, uniquely associated wastes derived from the production stream along the gas plant feeder pipelines are considered E&P wastes, even if a change of custody in the natural gas has occurred between the wellhead and the gas plant. In addition, wastes uniquely associated with the operations to recover natural gas from underground storage fields are considered to be E&P waste.

FIELD shall mean the general area which is underlaid or appears to be underlaid by at least one pool; and “field” shall include the underground reservoir or reservoirs containing oil or gas or both. The words “field” and “pool” mean the same thing when only one underground reservoir is involved; however, “field”, unlike “pool”, may relate to two or more pools.

FINANCIAL ASSURANCE shall mean a surety bond, cash collateral, certificate of deposit, letter of credit, sinking fund, escrow account, lien on property, security interest, guarantee, or other instrument or method in favor of and acceptable to the Commission. With regard to third party liability concerns related to public health, safety and welfare, the term encompasses general liability insurance.

FLOWLINES shall mean those segments of pipe from the wellhead downstream through the production facilities ending at: ~~in~~ in the case of gas lines, the gas metering equipment; or in the case of oil lines the oil loading point or LACT unit; or in the case of water lines, the water loading point, the point of discharge to a pit, ~~or~~ the injection wellhead, or the permitted surface water discharge point.

GAS FACILITY shall mean those facilities that process or compress natural gas after production-related activities which are conducted at or near the wellhead and prior to a point where the gas is transferred to a carrier for transport.

GAS GATHERING SYSTEM shall include all pipelines, gas facilities, and ancillary facilities used to transport, treat, compress, or process natural gas that are located between a well's production facility, a transmission line or main, or the inlet of a gas processing plant (not located on a transmission line).

GAS STORAGE WELL means any well drilled for the injection, withdrawal, production, observation, ~~and~~ or monitoring of natural gas stored in underground formations. The fact that any such well is used incidentally for the production of native gas or the enhanced recovery of native hydrocarbons shall not affect its status as a gas storage well.

GAS WELL shall mean a well, the principal production of which at the mouth of the well is gas, as defined by the Act.

GATHERING LINE shall mean a pipeline that transports gas from a production facility to a natural gas processing plant or transmission line or main.

GREEN COMPLETION PRACTICES shall mean those practices intended to reduce emissions of salable gas and condensate vapors during cleanout and flowback operations prior to the well being placed on production.

GROUNDWATER means subsurface waters in a zone of saturation.

HIGH DENSITY AREA shall mean any tract of land determined to be a high density area in accordance with Rule 603.b.

HOSPITAL, NURSING HOME, BOARD AND CARE FACILITIES shall mean buildings used for the licensed care of more than five (5) in-patients or residents.

INACTIVE WELL shall mean any shut-in well from which no production has been sold for a period of twelve (12) consecutive months; any well which has been temporarily abandoned for a period of six (6) consecutive months; or, any injection well which has not been utilized for a period of twelve (12) consecutive months.

INDIAN LANDS shall mean those lands located within the exterior boundaries of a defined Indian reservation, including allotted Indian lands, in which the legal, beneficial, or restricted ownership of the underlying oil, gas, or coal bed methane or of the right to explore for and develop the oil, gas, or coal bed methane belongs to or is leased from an Indian tribe.

INTERVENOR shall mean a local government or the Colorado Department of Public Health and Environment intervening solely to raise environmental or public health, safety and welfare concerns, or the Colorado Division of Wildlife intervening solely to raise wildlife resource concerns, in which case the intervention shall be granted of right, or a person who has timely filed an intervention in a relevant proceeding and has demonstrated to the satisfaction of the Commission that the intervention will serve the public interest, in which case the person may be recognized as a permissive intervenor at the Commission's discretion.

JAIL shall mean those structures where the personal liberties of occupants are restrained, including but not limited to, mental hospitals, mental sanitariums, prisons, reformatories.

LACT ("Lease Automated Custody Transfer") means the transfer of produced crude oil or condensate, after processing or treating in the producing operations, from storage vessels or automated transfer facilities to pipelines or any other form of transportation.

LAND APPLICATION shall mean the disposal method by which E&P waste is spread upon or sometimes mixed into soils.

LAND TREATMENT shall mean the treatment method by which E&P waste is applied to soils and treated to result in a reduction of hydrocarbon concentration by biodegradation and other natural attenuation processes. Land treatment may be enhanced by tilling, disking, aerating, composting and the addition of nutrients or microbes.

LOCAL GOVERNMENT means a county, home rule or statutory city, town, territorial charter city or city and county, or any special district established pursuant to the Special District Act, C.R.S. §32-1-101 to 32-1-1505.

LOCAL GOVERNMENTAL DESIGNEE means the office designated to receive, on behalf of the local government, copies of all documents required to be filed with the local governmental designee pursuant to these rules.

LOG or **WELL LOG** shall mean a systematic detailed record of formations encountered in the drilling of a well.

MINIMIZE ADVERSE IMPACTS shall mean, wherever reasonably practicable, to avoid adverse impacts from oil and gas operations, minimize the extent and severity of those impacts that cannot be avoided, mitigate the effects of unavoidable remaining impacts, and take into consideration cost-effectiveness and technical feasibility with regard to actions and decisions taken to minimize adverse impacts.

MULTI-WELL PITS shall mean pits used for treatment or disposal of E&P wastes generated from more than one (1) well from one (1) commonly owned or operated lease.

MULTI-WELL SITE shall mean a common well pad from which multiple wells may be drilled to various bottomhole locations.

NON-CROP LAND shall mean all lands which are not defined as crop land, including range land.

OIL AND GAS FACILITY shall mean all equipment or improvements used or installed at an oil and gas location for the exploration, production, withdrawal, gathering, treatment or processing of oil or natural gas.

OIL AND GAS LOCATION shall mean a definable area where an operator has disturbed or intends to disturb the land surface in order to locate an oil and gas facility.

OIL AND GAS OPERATIONS means exploration for oil and gas, including the conduct of seismic operations and the drilling of test bores; the siting, drilling, deepening, recompletion, reworking, or abandonment of an oil and gas well, underground injection well, or gas storage well; production operations related to any such well including the installation of flowlines and gathering systems; the generation, transportation, storage, treatment, or disposal of exploration and production wastes; and any construction, site preparation, or reclamation activities associated with such operations.

OIL WELL shall mean a well, the principal production of which at the mouth of the well is oil, as defined by the Act.

ORPHAN WELL shall mean a well for which no owner or operator can be found, or where such owner or operator is unwilling or unable to plug and abandon such well.

ORPHANED SITE shall mean a site, where a significant adverse environmental impact may be or has been caused by oil and gas operations for which no responsible party can be found, or where such responsible party is unwilling or unable to mitigate such impact.

OWNER shall mean the person who has the right to drill into and produce from a pool and to appropriate the oil or gas produced therefrom either for such owner or others or for such owner and others, including owners of a well capable of producing oil or gas, or both.

PIT shall mean any natural or man-made depression in the ground used for oil or gas exploration or production purposes. Pit does not include steel, fiberglass, concrete or other similar vessels which do not release their contents to surrounding soils.

PLUGGING AND ABANDONMENT shall mean the cementing of a well, the removal of its associated production facilities, the removal or abandonment in-place of its flowline, and the remediation and reclamation of the wellsite.

POINT OF COMPLIANCE means one or more points or locations at which compliance with applicable groundwater standards established under Water Quality Control Commission Basic Standards for Groundwater, Section 3.11.4, must be achieved.

POLLUTION means man-made or man-induced contamination or other degradation of the physical, chemical, biological, or radiological integrity of air, water, soil, or biological resource.

POLLUTION PREVENTION CHECKLIST shall mean a checklist of actions taken or on-site conditions that indicate compliance with specific regulatory requirements applicable to specific types of oil and gas facilities (e.g. drilling pads, pits, flowlines, etc.), or applicable to specific types of oil and gas activities (e.g. closure, reclamation, spill response, etc.) developed by the Director.

The words **POOL, PERSON, OWNER, PRODUCER, OIL, GAS, WASTE, CORRELATIVE RIGHTS** and **COMMON SOURCE OF SUPPLY** are defined by the Act, and said definitions are hereby adopted in these Rules and Regulations. The word “operator” is used in these rules and regulations and accompanying forms interchangeably with the same meaning as the term “owner” except in Rules 301, 323, 401 and 530 where the word “operator” is used to identify the persons designated by the owner or owners to perform the functions covered by those rules.

PRODUCED AND MARKETED. These words, as used in the Act, shall mean, when oil shall have left the lease tank battery or when natural gas shall have passed the metering point and entered into the stream of commerce as its first step toward the ultimate consumer.

PRODUCTION FACILITIES shall mean all storage, separation, treating, dehydration, artificial lift, power supply, compression, pumping, metering, monitoring, flowline, and other equipment directly associated with oil wells, gas wells, or injection wells.

PRODUCTION PITS shall mean those pits used after drilling operations and initial completion of a well, including natural gas gathering, processing and storage facility pits, multi-well pits and:

SKIMMING/SETTLING PITS used to provide retention time for settling of solids and separation of residual oil.

PRODUCED WATER PITS used to temporarily store produced water prior to injection for enhanced recovery or disposal, off-site transport, or surface-water discharge.

PERCOLATION PITS used to dispose of produced water by percolation and evaporation through the bottom ~~and~~ or sides of the pits into surrounding soils.

EVAPORATION PITS used to contain produced waters which evaporate into the atmosphere by natural thermal forces.

PROTESTANT shall mean a person who has timely filed a protest in a relevant proceeding and has demonstrated to the Commission's satisfaction that the person filing the protest would be directly and adversely affected or aggrieved by the Commission's ruling in the proceeding, and that any injury or threat of injury sustained would be entitled to legal protection under the act.

RECLAMATION shall mean the process of returning or restoring the surface of disturbed land as nearly as practicable to its condition prior to the commencement of oil and gas operations or to landowner specifications with an approved variance under Rule 502.b.

REFERENCE AREA shall mean an area of land undisturbed by oil and gas activity or any other ground-disturbing activity, owned by a person who agrees to maintain the area in its undisturbed state and to allow periodic access to it by the Director for the purpose of providing baseline information for reclamation standards.

RELEASE shall mean any unauthorized discharge of E&P waste to the environment over time.

REMEDIATION shall mean the process of reducing the concentration of a contaminant or contaminants in water or soil to the extent necessary to ensure compliance with the allowable concentrations and levels in Table 910-1 and other applicable ground water standards and classifications.

RESERVE PITS shall mean those pits used to store drilling fluids for use in drilling operations or to contain E&P waste generated during drilling operations and initial completion procedures.

RESPONDENT shall mean a party against whom a proceeding is instituted, or a **PROTESTANT** protestant who protests the granting of the relief sought in the application as provided in Rule 544509.

RESPONSIBLE PARTY shall mean an owner or operator-person who conducts an oil and gas operation in a manner which is in contravention of any then-applicable provision of the act, or of any rule, regulation, or order of the Commission, or of any permit, that threatens to cause, or actually causes, a significant adverse environmental impact to any air, water, soil, or biological resource. RESPONSIBLE PARTY includes any person who disposes of any other waste by mixing it with exploration and production waste so as to threaten to cause, or actually cause, a significant adverse environmental impact to any air, water, soil, or biological resource.

RESTRICTED DEVELOPMENT ACTIVITY means the seasonal deferral of ground disturbance, construction, drilling and completion, non-emergency workovers, and pipeline installation activity, except in the event of situations posing a risk to public health, safety, welfare, or the environment, to minimize adverse impacts to wildlife resources. It does not include production, maintenance, emergency operations, reclamation activities, or habitat improvements.

RESTRICTED SURFACE OCCUPANCY AREA shall mean an area in which ground-disturbing activities are restricted as provided for in these rules to minimize adverse impacts to wildlife resources.

SEISMIC OPERATIONS shall mean all activities associated with acquisition of seismic data including but not limited to surveying, shothole drilling, recording, shothole plugging and reclamation.

SENSITIVE AREA is an area vulnerable to potential significant adverse groundwater impacts, due to factors such as the presence of shallow ~~economically usable~~ groundwater or pathways for communication with deeper ~~economically usable~~ groundwater; proximity to surface water, including lakes, rivers, perennial or intermittent streams, creeks, irrigation canals, and wetlands. Additionally, areas classified for domestic use by the Water Quality Control Commission, local (water supply) wellhead protection areas, areas within 1/8 mile of a domestic water well, areas within 1/4 mile of a public water supply well, designated ground water basins, and surface water drinking water supply areas are sensitive areas. The procedure for identifying Sensitive Areas is set forth in the Sensitive Area identification Decision Tree and Guidance Document.

SHUT-IN WELL shall mean a well which is capable of production or injection by opening valves, activating existing equipment or supplying a power source.

SIMULTANEOUS INJECTION WELL shall mean any well in which water produced from oil and gas producing zones is injected into a lower injection zone and such water production is not brought to the surface.

SOLID WASTE shall mean any garbage, refuse, sludge from a waste treatment plant, water supply plant, air pollution control facility, or other discarded material; including solid, liquid, semisolid, or contained gaseous material resulting from industrial operations, commercial operations, or community activities. Solid waste does not include any solid or dissolved materials in domestic sewage, or agricultural wastes, or solid or dissolved materials in irrigation return flows, or industrial discharges which are point sources subject to permits under the provisions of the Colorado Water Quality Control Act, Title 25, Article 8, C.R.S. or materials handled at facilities licensed pursuant to the provisions on radiation control in Title 25, Article 11, C.R.S. Solid waste does not include: (a) materials handled at facilities licensed pursuant to the provisions on radiation control in Title 25, Article 11, C.R.S.; (b) excluded scrap metal that is being recycled; or (c) shredded circuit boards that are being recycled.

SOLID WASTE DISPOSAL shall mean the storage, treatment, utilization, processing, or final disposal of solid wastes.

SPECIAL FIELD RULES shall mean those rules promulgated for and which are limited in their application to individual pools or fields within the State of Colorado.

SURFACE WATER DRINKING WATER SUPPLY AREA means the region or zone within a watershed drainage area that provides water to a surface water intake, spring, or ground water well under the influence of surface water, used as a public water supply.

SPECIAL PURPOSE PITS shall mean those pits used in oil and gas operations, including natural gas gathering, processing and storage facility pits, multi-well pits, and:

BLOWDOWN PITS used to collect material resulting from, including but not limited to, the emptying or depressurizing of wells, vessels, or gas gathering systems.

FLARE PITS used exclusively for flaring gas.

EMERGENCY PITS used to contain liquids on a temporary basis due to during an initial phase of emergency response operations related to a spill/release or process upset conditions.

BASIC SEDIMENT/TANK BOTTOM PITS used to temporarily store or treat the extraneous materials in crude oil which may settle to the bottoms of tanks or production vessels and which may contain residual oil.

WORKOVER PITS used to contain liquids during the performance of remedial operations on a producing well in an effort to increase production.

PLUGGING PITS used for containment of fluids encountered during the plugging process.

SPILL shall mean any unauthorized sudden discharge of E&P waste to the environment.

STORMWATER RUNOFF shall mean rain or snowmelt that flows over land and does not percolate into soil and includes stormwater that flows onto and off of an oil and gas location or facility.

STRATIGRAPHIC WELL means a well drilled for stratigraphic information only. Wells drilled in a delineated field to known productive horizons shall not be classified as “stratigraphic.” Neither the term “well” nor “stratigraphic well” shall include seismic holes drilled for the purpose of obtaining geophysical information only.

SUBSURFACE DISPOSAL FACILITY means a facility or system for disposing of water or other oil field wastes into a subsurface reservoir or reservoirs.

TANK shall mean a stationary vessel that is used to contain fluids, constructed of non-earthen materials (e.g. concrete, steel, plastic) that provide structural support.

TEMPORARILY ABANDONED WELL shall mean a well which is incapable of production or injection without the addition of one or more pieces of wellhead or other equipment, including valves, tubing, rods, pumps, heater-treaters, separators, dehydrators, compressors, piping or tanks.

TIMING LIMITATION AREA shall mean an area in which ground-disturbing activities are restricted as provided for in these rules to minimize adverse impacts to wildlife resources.

VEGETATIVE TRANSECT shall mean a fixed path along which one records and counts occurrences of plant species and other types of ground cover, such as plant litter, rock, and bare ground.

VOLUNTARY SELF-EVALUATION shall mean a self-initiated assessment, audit, or review, not otherwise expressly required by environmental law, that is performed by any person or entity, for itself, either by an employee or employees employed by such person or entity who are assigned the responsibility of performing such assessment, audit, or review or by a consultant engaged by such person or entity expressly and specifically for the purpose of performing such assessment, audit, or review to determine whether such person or entity is in compliance with environmental laws.

WATERS OF THE STATE mean any and all surface and subsurface waters which are contained in or flow in or through this state, but does not include waters in sewage systems, waters in treatment works of disposal systems, water in potable water distribution systems, and all water withdrawn for use until use and treatment have been completed. Waters of the state include, but are not limited to, all streams, lakes, ponds, impounding reservoirs, wetlands, watercourses, waterways, wells, springs, irrigation ditches or canals, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, situated wholly or partly within or bordering upon the State.

WELL when used alone in these Rules and Regulations, shall mean an oil or gas well, a hole drilled for the purpose of producing oil or gas, a well into which fluids are injected, a stratigraphic well, a gas storage well, or a well used for the purpose of monitoring or observing a reservoir.

WELL SITE shall mean the areas that are directly disturbed during the drilling and subsequent operation of, or affected by production facilities directly associated with, any oil well, gas well, or injection well and its associated well pad.

WILDCAT (EXPLORATORY) WELL means any well drilled beyond the known producing limits of a pool.

WILDLIFE RESOURCES shall mean fish, wildlife, and their aquatic and terrestrial habitats.

ZONE OF INCORPORATION shall mean the soil layer from the soil surface to a depth of twelve (12) inches below the surface.

ALL OTHER WORDS used herein shall be given their usual customary and accepted meaning, and all words of a technical nature, or peculiar to the oil and gas industry, shall be given that meaning which is generally accepted in said oil and gas industry.

200-SERIES GENERAL RULES

201. EFFECTIVE SCOPE OF RULES AND REGULATIONS

All rules and regulations of a general nature herein promulgated to prevent waste and to conserve oil and gas in the State of Colorado shall be effective throughout the State of Colorado and be in force in all pools and fields except as may be amended, modified, altered or enlarged generally or in specific individual pools or fields by orders heretofore or hereafter issued by the Commission, and except where special field rules apply, in which case the special field rules shall govern to the extent of any conflict.

201A, EFFECTIVE DATE OF AMENDMENTS

Amendments to these rules adopted by the Commission in July 2008 shall become effective on November 1, 2008.

202. OFFICE AND DUTIES OF DIRECTOR

The office of Director of the Commission is hereby created. It shall be the duty of the Director to aid the Commission in the administration of the Act, as may be required of the Director from time to time and to act as hearing officer when so directed by the Commission.

203. OFFICE AND DUTIES OF SECRETARY

The office of Secretary to the Commission is hereby created. The duties of the Secretary shall be as determined from time to time by the Commission.

204. GENERAL FUNCTIONS OF DIRECTOR

The Director and the authorized deputies shall also have the right at all reasonable times to go upon and inspect any oil ~~and~~ or gas properties, disposal facilities, or transporters facilities and wells for the purpose of making any investigation or tests to ascertain whether the provisions of the Act or these rules or any special field rules are being complied with, and shall report any violation thereof to the Commission.

205. ACCESS TO RECORDS

All producers, operators, transporters, refiners, gasoline or other extraction plant operators and initial purchasers of oil and gas within this State, shall make and keep appropriate books and records covering their operations in the State, including natural gas meter calibration reports, from which they may be able to make and substantiate the reports required by the Commission or the Director. These records shall include a chemical inventory, by well or oil and gas facility. In addition to the inventory, the records shall

include material safety data sheets, product information sheets, and other records necessary to describe the chemical constituents of each product listed in the inventory. Entities maintaining inventories under this section shall update these inventories bi-monthly throughout the life of the well or oil and gas facility. These records must be maintained in a readily retrievable and reviewable format. The Colorado Department of Public Health and Environment may obtain information provided to the Commission in a chemical inventory upon written request to the Commission.

Such books, records, inventories, and copies of said reports required by the Commission or the Director shall be kept on file and available for inspection by the Commission for a period of at least five years except for the chemical inventory, which shall be kept on file and available for inspection by the Commission for the life of the applicable oil and gas facility. Upon the Commission's written request for information required to be maintained under this section, the record-keeping entity shall supply the Commission with the requested information within three (3) business days in a format readily-reviewable by the Commission. Information provided to the Commission under this section that is entitled to protection under state or federal law, including C.R.S. § 24-72-204, as a trade secret, privileged information, or confidential commercial, financial, geological, or geophysical data shall be kept confidential and protected against public disclosure unless required, permitted, or authorized by other state or federal law.

The Director and the authorized deputies shall have access to all well records wherever located. All owners, drilling contractors, drillers, service companies, or other persons engaged in drilling or servicing wells, shall permit the Director, or authorized deputy, at the Director's or their risk, in the absence of negligence on the part of the owner, to come upon any lease, property or well operated or controlled by them, and to inspect the record and operation of such wells and to have access at all times to any and all records of wells; provided, that information so obtained shall be kept confidential and shall be reported only to the Commission or its authorized agents.

206. REPORTS

a. All producers, operators, transporters, refiners, gasoline and other extraction plant operators and initial purchasers of oil and gas within the State shall from time to time file accurate and complete reports or checklists containing such information and covering such geographic areas or periods as the Commission or Director shall require.

b. **Pollution Prevention Checklist.** Operators with oil and gas facilities in the Piceance geologic basin shall complete and retain a Pollution Prevention Checklist, available on the COGCC website, for each oil and gas facility concerning actions taken or current on-site conditions that indicate compliance with specific requirements necessary to minimize adverse impacts.

(1) The Pollution Prevention Checklist shall demonstrate on-going compliance with requirements relating to stormwater management, protection of surface water drinking water supply areas, odor management, management of exploration and production waste, and maintenance of a chemical inventory.

(2) A new Pollution Prevention Checklist shall be completed and signed by a designated agent annually for each oil and gas facility on or before February 15, and operators shall retain an accessible and current Pollution Prevention Checklist at the oil and gas facility at all times.

(3) An operator required to complete and retain a Pollution Prevention Checklist shall provide a copy of an oil and gas facility's current Pollution Prevention Checklist to the Director within five (5) days of receiving a written request. The Director may grant an operator a reasonable extension of time to provide a Pollution Prevention Checklist where the operator provides sufficient information to the Director that there was no access to the oil and gas facility because of weather or other event not caused by the operator.

(4) The Pollution Prevention Checklist is not considered a report, record, account, or memorandum for purposes of C.R.S. §34-60-121(2).

207. TESTS AND SURVEYS

a. **Tests and surveys.** When deemed necessary or advisable, the Commission is authorized to require that tests or surveys be made to determine the presence of waste or occurrence of pollution. The Commission, in calling for reports under Rule 206 and tests or surveys to be made as provided in this rule, shall designate the time allowed the operator for compliance, which provisions as to time shall prevail over any other time provisions in these rules.

b. Bradenhead monitoring.

(1) The Director shall have authority to designate specific fields or portions of fields as bradenhead test areas within which, on any well, the bradenhead access to the annulus between the production and surface casing, as well as any intermediate casing, shall be equipped with fittings to allow safe and convenient determinations of pressure and fluid flow. Any such proposed designation shall occur by notice describing the proposed bradenhead test area. Such notice shall be given to all operators of record within such area and by publication. The proposed designation, if no protests are timely filed, shall be placed upon the Commission consent agenda for the regular monthly meeting of the Commission following the month in which such notice is given, and shall be approved or heard by the Commission in accordance with Rule 520. Such designation shall be effective immediately, upon approval by the Commission.

(2) All operators within any bradenhead test area shall have thirty (30) days after the effective date of the designation to commence the taking of bradenhead pressure readings in all wells located therein which are equipped for such readings. The operator shall equip any well which is not so equipped within ninety (90) days of the effective date, and within thirty (30) days thereafter the operator shall take the required reading. Such readings shall include the date, time and pressure of each reading, and the type of fluid reported. Such readings shall be taken in bradenhead test areas annually, maintained at the operator's office for a period of five (5) years, and shall be reported to the Director upon written request.

208. CORRECTIVE ACTION

The Commission shall require correction, in a manner to be prescribed or approved by it, of any condition which is causing or is likely to cause waste or pollution; and require the proper plugging and abandonment of any well or wells no longer used or useful in accordance with such reasonable plan as may be prescribed by it.

209. PROTECTION OF COAL SEAMS AND WATER-BEARING FORMATIONS

In the conduct of oil and gas operations each owner shall exercise due care in the protection of coal seams and water-bearing formations as required by the applicable statutes of the State of Colorado.

Special precautions shall be taken in drilling and abandoning wells to guard against any loss of artesian water from the stratum in which it occurs and the contamination of fresh water by objectionable water, oil, or gas. Before any oil or gas well is completed as a producer, all oil, gas and water strata above and below the producing horizon shall be sealed or separated in order to prevent the intermingling of their contents.

210. SIGNS AND MARKERS

The operator shall mark each and every well in a conspicuous place, from the time of initial drilling until final abandonment, as follows:

a. **Drilling and Recompletion Operations** Directional signs, no less than three (3) and no more than six (6) square feet in size, shall be provided during any drilling or recompletion operation, by the operator or drilling contractor. Such signs shall be at locations sufficient to advise emergency crews where drilling is taking place; at a minimum, such locations shall include (i) the first point of intersection of a public road and the rig access road and (ii) thereafter at each intersection of the rig access route, except where the route to the rig is clearly obvious to uninformed third parties. Signs not necessary to meet other obligations under these rules shall be removed as soon as practicable after the operation is complete.

b. **Permanent Designations.**

(1) **Wells.** Within sixty (60) days after the completion of a well, a permanent sign shall be located at the wellhead which shall identify the well and provide its legal location, including the quarter quarter section. When no associated battery is present, the additional information required under Rule 210.b. (2) shall be required on the sign.

(2) **Batteries.** Within sixty (60) days after the installation of a battery, a permanent sign shall be located at the battery. At the option of the operator, or at the request of local emergency response authorities, the sign may be placed at the intersection of the lease access road with a public, farm or ranch road if the referenced battery is readily apparent from such location. Such sign, which shall be no less than three (3) square feet and no more than six (6) square feet, shall provide: the name of the operator; a phone number at which the operator can be reached at all times; a phone number for local emergency services (911 where available); the lease name or well name(s) associated with the battery; the public road used to access the site; and, the legal location, including the quarter quarter section. In lieu of providing the legal location on the permanent sign, it may be stenciled on a tank in characters visible from one-hundred (100) feet.

c. **Centralized E&P Waste Management Facilities.** The main point of access to a centralized E&P waste management facility shall be marked by a sign captioned "(operator name) E&P Waste Management Facility." Such sign, which shall be no less than three (3) square feet and no more than six (6) square feet shall provide: a phone number at which the operator can be reached at all times; a phone number for local emergency services (911 where available); the public road used to access the facility; and, the legal location, including quarter quarter section, of the facility.

d. **TANKS.** All tanks shall be labeled or posted with the following information:

(1) Name of operator;

(2) Operator's emergency contact telephone number;

(3) Containment capacity;

(4) Tank contents;

(5) National Fire Protection Association (NFPA) label; and

(6) Identification number from United States Department of Transportation placard or shipping document.

ed. General sign requirements. No sign required under this Rule 210. shall be installed at a height exceeding six (6) feet. Operators shall maintain signs in a legible condition, and shall replace

damaged or vandalized signs within sixty (60) days. New operators shall update signs within sixty (60) days after change of operator approval is received from the Commission.

211. NAMING OF FIELDS

All oil and gas fields discovered in the State subsequent to the adoption of these rules and regulations shall be named by the Director or at the Director's direction.

212. SAFETY

For safety regulations regarding industry personnel, contact the U.S. Department of Labor, Occupational Safety and Health Administration, Regional Administrator, Colorado Region VIII, 1961 Stout Street, Suite 1576, Denver, Colorado 80201, telephone (303) 844-3061. For State Safety regulations regarding public safety see Rules 601-6086-9.

213. FORMS UPON REQUEST

Forms required by the Commission will be furnished upon request. (Please see Procedures and Forms Guidelines)

214. LOCAL GOVERNMENTAL DESIGNEE

Each local government which designates an office for the purposes set forth in the 100 Series shall provide the Commission written notice of such designation, including the name, address and telephone number, facsimile number, electronic mail address, local emergency dispatch and other emergency numbers of the local governmental designee. It shall be the responsibility of such local governmental designee to ensure that all documents provided to the local governmental designee by oil and gas operators and the Commission or the Director are distributed to the appropriate persons and offices.

215. GLOBAL POSITIONING SYSTEMS

Global Positioning Systems (GPS) may be used to locate facilities used in oil and gas operations provided they meet the following minimum standards of the Commission:

- a. Instruments rated as Differential Global Positioning System (DGPS) shall be used.
- b. ~~Instrument precision shall be no less than~~ Instruments shall be capable of one (1) meter accuracy after differential correction.
- c. All GPS data shall be differentially corrected by post processing prior to data submission.
- d. Position dilution of precision (PDOP) values shall not be higher than six (6) and shall be included with location data.
- e. Elevation mask (lowest acceptable height above the horizon) shall be no less than fifteen degrees (15°)
- f. Latitude and longitude coordinates shall be provided in decimal degrees with an accuracy and precision of five (5) decimals of a degree using the North American Datum (NAD) of 1983 (e.g.; latitude 37.12345 N, longitude 104.45632 W).
- g. Raw and corrected data files shall be held for a period of three (3) years.
- h. Measurements shall be made by a trained GPS operator familiar with the theory of GPS, the use of GPS instrumentation, and typical constraints encountered during field activities.

216. COMPREHENSIVE DRILLING PLANS

a. Purpose. Comprehensive Drilling Plans are intended to identify foreseeable oil and gas activities in a defined geographic area, facilitate discussions about potential impacts, and identify measures to minimize adverse impacts from such activities.

b. Scope. A Comprehensive Drilling Plan shall cover more than one proposed oil and gas location within a geologic basin, but its scope may otherwise be customized to address specific issues in particular areas. Although operators are encouraged to develop joint Plans covering the proposed activities of multiple operators where appropriate, Comprehensive Drilling Plans will typically cover the activities of one operator.

c. Information requirements. Operators are encouraged to submit the most detailed information practicable about the future activities in the geographic area covered by the Comprehensive Drilling Plan. Detailed information is more likely to lead to identification of specific impacts and agreement regarding measures to minimize adverse impacts. The information included in the Comprehensive Drilling Plan shall be decided upon by the operator, in consultation with other participants. The following information may be included as part of a Comprehensive Drilling Plan, depending on the circumstances:

- (1) A U.S. Geological Survey 1:24,000 topographic map showing the proposed oil and gas locations, including proposed access roads and gathering systems;
- (2) A current aerial photo showing the proposed oil and gas locations at the same scale as the topographic map;
- (3) Overlay maps showing the proposed oil and gas locations, including all access roads and gathering systems, drainages and stream crossings, and existing and proposed buildings, roads, utility lines, pipelines, mines, oil or gas wells, water wells, and Colorado Division of Wildlife's Natural Diversity Information Source (NDIS) riparian data set;
- (4) A list of all production and proposed gas gathering facilities to be installed within the area covered by the Comprehensive Drilling Plan over the time of the Plan and the anticipated timing of the installation;
- (5) A plan for the management of all exploration and production waste;
- (6) A description of the wildlife resources at each oil and gas location;
- (7) Wildlife surveys that are determined necessary after consultation with the Colorado Division of Wildlife;
- (8) Locations of all proposed reclamation reference areas to be used as guides for interim and final reclamation;
- (9) Any rule variances that are likely to be requested;
- (10) Proposed actions to minimize adverse impacts, by medium; and
- (11) A list of all parties that participated in creating the Comprehensive Drilling Plan.

d. Procedure.

- (1) Initiation. One or more operator may submit a proposed Comprehensive Drilling Plan to the Commission, describing the operator's foreseeable oil and gas development activities in

a specified geographic area within a geologic basin. The Director may request an operator to initiate a Comprehensive Drilling Plan, but the decision to do so rests solely with the operator.

- (2) **Participants.** Operators shall invite the Colorado Department of Public Health and Environment and the Colorado Division of Wildlife to participate in development of the Comprehensive Drilling Plan. Operators are encouraged to invite the local governmental designee and surface owners to participate. In many cases, participation by these agencies and individuals will facilitate identification of potential impacts and development of presumptive conditions of approval to minimize adverse impacts.
- (3) The operator, the Director, and any participants shall review the proposed Comprehensive Drilling Plan, identify information needs, discuss operations and potential impacts, and establish presumptive measures to minimize adverse impacts resulting from oil and gas development activities covered by the Plan.
- (4) The Director shall accept a Comprehensive Drilling Plan that has been agreed to in writing by the operator and that the Director considers suitable after consultation with the Colorado Division of Wildlife and the Colorado Department of Public Health and Environment, as applicable.
- (5) The Director shall identify and document the agreed-upon conditions of approval for activities within the geographic area covered by the accepted Comprehensive Drilling Plan. The Director shall provide the list of conditions of approval to the local governmental designee and encourage the local government to utilize the results in its approvals of activities.
- (6) Comprehensive Drilling Plans that have been accepted by the Director shall be posted on the COGCC website.

e. Site-specific approvals.

- (1) Practices and conditions agreed to in an accepted Comprehensive Drilling Plan shall be presumptively included as conditions of approval of any Commission or Director approval of a Form 2, Form 2A, or other permit for individual ground-disturbing oil and gas locations covered by the Plan.
- (2) Where a proposed oil and gas location is contemplated in and within the geographic area covered by an accepted Comprehensive Drilling Plan and where the operator does not request a variance from a provision in these rules intended to minimize adverse impacts, the Director shall approve or deny an Application for Permit-to-Drill, Form 2, or Oil and Gas Location Approvals, Form 2A, within thirty (30) days of a determination that such application is complete pursuant to Rule 303.h, unless significant new information is brought to the attention of the Director.
- (3) Where the Director does not issue a decision on an application for an oil and gas location covered by an accepted Comprehensive Drilling Plan within thirty (30) days, the operator may request a hearing before the Commission. Such a hearing shall be expedited and the matter shall be heard at the next scheduled Commission hearing, and all parties shall be deemed to have waived any notice requirements to the contrary.
- (4) A party requesting a hearing pursuant to Rule 503.b.8 on the Director's approval of an Oil and Gas Location Assessment, Form 2A, for an oil and gas location that includes conditions of approval arrived at as part of an accepted Comprehensive Drilling Plan shall bear the burden of establishing that the conditions of approval are insufficient to protect public health, safety, welfare, the environment and wildlife resources due to new information or

changed circumstances occurring since the Comprehensive Drilling Plan was accepted by the Director.

f. **Duration.** Once accepted by the Director, a Comprehensive Drilling Plan shall be valid for a period of five (5) years.

g. **Modification.** Upon the initiative of the operator or any participants, an accepted Comprehensive Drilling Plan may be modified using the same process as that leading to acceptance of the original Plan. The review and approval of the modification shall focus only on the proposed modification.

300-SERIES DRILLING, DEVELOPMENT, PRODUCING AND ABANDONMENT

301. RECORDS, REPORTS, NOTICES-GENERAL

Any written notice of intention to do work or to change plans previously approved must be filed with the Director, and must reach the Director and receive approval before the work is begun, or such approval may be given orally and, if so given, shall thereafter be confirmed to the Director in writing.

In case of emergency, or any situation where operations might be unduly delayed, any notice or information required by these rules and regulations to be given to the Director may be given orally or by wire, and if approval is obtained the transaction shall be promptly confirmed in writing to the Director, as a matter of record.

Immediate notice shall be given to the Director when public health or safety is in jeopardy. Notice shall also be given to the Director of any other significant downhole problem or mechanical failure in any well within ten (10) days.

The owner shall keep on the leased premises, or at the owner's headquarters in the field, or otherwise conveniently available to the Director, accurate and complete records of the drilling, redrilling, deepening, repairing, plugging or abandoning of all wells, and of all other well operations, and of all alterations to casing. These records shall show all the formations penetrated, the content and quality of oil, gas or water in each formation tested, and the grade, weight and size, and landed depth of casing used in drilling each well on the leased premises, and any other information obtained in the course of well operation. Such records on each well shall be maintained by any subsequent owner.

Whenever a person has been designated as an operator by an owner or owners of the lease or well, such an operator may submit the reports as herein required by the Commission.

302. COGCC Form 1. REGISTRATION FOR OIL AND GAS OPERATIONS

a Prior to the commencement of its operations, all producers, operators, transporters, refiners, gasoline or other extraction plant operators, and initial purchasers who are conducting operations subject to this Act in the State of Colorado, shall, for purposes of the Act, file a Registration For Oil and Gas Operations, Form 1, with the Director in the manner and form approved by the Commission. Any producer, operator, transporter, refiner, gasoline or other extraction plant operator, and initial purchaser conducting operations subject to the Act who has not previously filed a Registration For Oil and Gas Operations, Form 1, shall do so. Any person providing financial assurance for oil and gas operators in Colorado shall file a Form 1 with the Director. All changes of address of the parties required to file a Form 1 shall be immediately reported by submitting a new Form 1.

b. **Designation of Agent, Form 1A.** Any party may act on or for the behalf of the owner/operator provided the owner/operator has filed a Designation of Agent, Form 1A. Operator employees approved to submit documents shall be listed on a completed designation of agent, Form 1A. A company/individual other than the operator may be designated as an agent, and its

representatives shall be listed on a completed designation of agent, Form 1A. This agency shall remain in effect until it is terminated in writing by the owner/operators submitting a new Designation of Agent, Form 1A. All changes of address of the agent to reported agent information shall be immediately reported by submitting a new Designation of Agent, Form 1A.

303. REQUIREMENTS FOR FORM 2, APPLICATION FOR PERMIT-TO-DRILL, DEEPEN, RE-ENTER, OR RECOMPLETE, AND OPERATE; FORM 2A, OIL AND GAS LOCATION ASSESSMENT.

~~[THE FOLLOWING LANGUAGE WILL BE PLACED ON THE APD BY THE DIRECTOR'S SIGNATURE:
"BASED ON THE INFORMATION PROVIDED HEREIN, THIS APPLICATION FOR PERMIT-TO-DRILL
COMPLIES WITH COGCC RULES AND APPLICABLE ORDERS AND IS HERBY APPROVED.]~~

a. FORM 2. APPLICATION FOR PERMIT-TO-DRILL, DEEPEN, RE-ENTER, OR RECOMPLETE, AND OPERATE.

(1) **Approval by Director.** Before any person shall commence operations for the drilling or re-entry of any well, such person shall file with the Director an application on Form 2 for a Permit-to-Drill, pay a filing and service fee established by the Commission (see Appendix III), and obtain the Director's approval, subject to Rule 303.m.1, before commencement of operations with heavy equipment.

~~(2) **Final agency action.** The Director's approval of a Permit-to-Drill shall be considered final agency action for purpose of judicial review.~~

(3) **Operational conflicts.** The Permit-to-Drill shall be binding with respect to any operationally conflicting local governmental permit or land use approval process.

(4) **Exemptions.** Wells drilled for stratigraphic information only shall be exempt from paying the filing and service fee. The re-entry of a well in a unitized, storage, or secondary recovery operation shall be exempt from the filing of Form 2 and from paying the filing and service fee. The notice of such intent to re-enter a well shall be filed on a Sundry Notice, Form 4.

b. A request to recomplete or deepen a well to a different reservoir or to side-track a well shall be filed on an Application for Permit-to-Drill, Form 2, with a filing and service fee established by the Commission (see Appendix III), along with a Sundry Notice, Form 4, detailing the work, and a wellbore diagram.

c. Attached to and part of the Permit-to-Drill, Form 2, as filed shall be a current 8½" by 11" scaled drawing of the entire section(s) containing the proposed well location with the following minimum information:

(1) Dimensions on adjacent exterior section lines sufficient to completely describe the quarter section containing the proposed well shall be indicated. If dimensions are not field measured, state how the dimensions were determined.

(2) The latitude and longitude of the proposed well location shall be provided on the drawing with a minimum of five (5) decimal places of accuracy and precision using the North American Datum (NAD) of 1983 (e.g.; latitude 37.12345 N, longitude 104.45632 W). If GPS technology is utilized to determine the latitude and longitude, all GPS data shall meet the requirements set forth in Rule 215. a. through h.

(3) For directional drilling into an adjacent section, that section shall also be shown on the location plat and dimensions on exterior section lines sufficient to completely describe the quarter section containing the proposed productive interval and bottom hole location shall

be indicated. (Additional requirements related to directional drilling are found in Rule 321.)

- (4) For irregular, partial or truncated sections, dimensions will be furnished to completely describe the entire section containing the proposed well.
- (5) The field-measured distances from the nearer north/south and nearer east/west section lines shall be measured at ninety (90) degrees from said section lines to the well location and referenced on the plat. For unsurveyed land grants and other areas where an official public land survey system does not exist, the well locations shall be spotted as footages on a protracted section plat using Global Positioning System (GPS) technology and reported as latitude and longitude in accordance with Rule 215.
- (6) A map legend.
- (7) A north arrow.
- (8) A scale expressed as an equivalent (e.g. - 1" = 1000').
- (9) A bar scale.
- (10) The ground elevation.
- (11) The basis of the elevation (how it was calculated or its source).
- (12) The basis of bearing or interior angles used.
- (13) Complete description of monuments and/or collateral evidence found; all aliquot corners used shall be described.
- (14) The legal land description by section, township, range, principal meridian, baseline and county.
- (15) Operator name.
- (16) Well name and well number.
- (17) Date of completion of scaled drawing.

(18) A completed or, where it has been approved in advance, an approved Oil and Gas Location Assessment, Form 2A.

~~(18) All visible improvements within two hundred (200) feet of a wellhead (or, in a high density area within four hundred (400) feet of a wellhead) shall be physically tied in and plotted on the well location plat or on an addendum, with a horizontal distance and approximate bearing from the well location. Visible improvements shall include, but not be limited to, all buildings, publicly maintained roads and trails, major above-ground utility lines, railroads, pipelines, mines, oil wells, gas wells, injection wells, water wells, visible plugged wells, sewers with manholes, standing bodies of water, and natural channels including permanent canals and ditches through which water may flow. If there are no visible improvements within two hundred (200) feet of a wellhead (or in a high density area within four hundred (400) feet of a wellhead), it shall be so noted on the Permit to Drill, Form 2.~~

~~(19) Surface use shall be described within the two hundred (200) foot radius of a wellhead (or in a high density area within the four hundred (400) foot radius of a wellhead).~~

~~(20) In addition to the scaled drawing, the applicant shall attach to the Permit-to-Drill, Form 2, an 8½" by 11" vicinity or U.S.G.S. topographic map of at least a three (3) mile radius around the proposed well which clearly shows access from one (1) or more public roads.~~

d. ~~FORM~~ **Form 2/2A. OIL AND GAS LOCATION ASSESSMENT** application and copies to local governmental designees.

(1) ~~Drill Site/Access Road Reclamation Form.~~ A completed Oil and Gas Location Assessment, Form 2A. ~~In addition to the above, an applicant filing a Permit-to-Drill, Form 2, shall also attach a completed Form 2A, shall be submitted for any new oil and gas location, except gathering lines, as set forth below. These provision shall not apply to projects that are subject to regulation by the U.S. Department of Transportation or have received approval of the Federal Energy Regulatory Commission, except that the Form 2A shall not be required on federal or Indian owned surface lands when a Federal 13 Point Surface Use Plan is included.~~

(2) Information requirements. In all instances, tThe Form 2A requires the attachment of:

A. a minimum of ~~two~~ five (25) color photographs; one (1) of the staked location from each cardinal direction, and one (1) of the existing or proposed access road. Each photograph shall be identified by: date taken, well or location name, GPS coordinate~~location~~ and direction of view; ~~Permit-to-Drill, Form 2, shall be filed with the Director in duplicate for wells on all private, state and federal surface lands.~~

B. A list of equipment to be used in conjunction with drilling, completing, and operating the well(s), including production tanks, pits, combustion equipment, and other ancillary equipment;

C. A scaled drawing showing all visible improvements within four hundred (400) feet of the proposed location, with a horizontal distance and approximate bearing from the location. Visible improvements shall include, but not be limited to, all buildings or residences, publicly maintained roads and trails, major above-ground utility lines, railroads, pipelines, mines, oil wells, gas wells, injection wells, water wells, springs, plugged wells, sewers with manholes, standing bodies of water, and natural channels including permanent canals and ditches through which water may flow. A description of surface uses within the four hundred (400) foot radius of a proposed location, if any, shall be attached to the scaled drawing. If there are no visible improvements within four hundred (400) feet of a location, it shall be so noted on the Form 2A;

D. A topographic map showing all surface waters and riparian areas within one thousand (1,000) feet of the proposed location, with a horizontal distance and approximate bearing from the location, as delineated in the Natural Diversity Information Source (NDIS) database;

E. An 8½" by 11" vicinity or U.S. Geological Survey topographic map of at least a three (3) mile radius around the proposed location which clearly shows access from one (1) or more public roads;

F. Designation of the current land use and basis for setting reclamation standards.

- i. If the current land use includes residential, industrial/commercial, or cropland and does not include any other uses, the land use should be indicated and no further information is needed.
- ii. If the current land use includes rangeland, forestry, recreation, and/or wildlife resources, then a reference area shall be selected and the following information shall be submitted:
 - aa. A topographic map showing the location of the site, and the location of the reference area; and
 - bb. Four (4) color photographs of the reference area, taken during the growing season of vegetation and facing each cardinal direction. Each photograph shall be identified by date taken, well or location name, GPS coordinates, and direction of view.

G. Natural Resources Conservation Service (NRCS) soil map unit description:

H. If the location disturbance is to occur on lands with a slope ten percent (10%) or greater, or one foot of elevation gain or more in ten foot distance, then the following shall be required:

- i. Construction layout drawing (construction, in operation, after final reclamation); and
- ii. Location cross-section plot (construction, in operation, after final reclamation).

I. Where the proposed oil and gas location is for multiple wells on a single pad, a drawing showing proposed wellbore trajectory with bottom-hole locations;

J. A description of any proposed actions to minimize adverse impacts, along with their installation and monitoring procedures;

K. Where the proposed oil and gas location is contemplated within the geographic area covered by a Comprehensive Drilling Plan accepted pursuant to Rule 216, a list of any presumptive conditions of approval; and

L. Any additional data as reasonably required by the Commission as a result of consultation with the Colorado Department of Public Health and Environment or the Colorado Division of Wildlife.

(3) Form 2A requiring approval.

A. The Oil and Gas Location Assessment, Form 2A, requires Commission or Director approval prior to approval of Permits-to-Drill, Form 2, or other permit applications, in the following circumstances:

- i. The proposed oil and gas location will disturb more than one (1) acre and is located in one of the following counties in Colorado:
 - a. Garfield;
 - b. Mesa; or
 - c. Rio Blanco.

- ii. The proposed location requires consultation with the Colorado Department of Public Health and Environment or the Colorado Division of Wildlife, pursuant to Rule 306.c or 306.d;
 - iii. The local governmental designee requests consultation on the proposed location pursuant to Rule 306.b; or
 - iv. Where the proposed oil and gas location requires submittal of a Form 2A and:
 - a. Is an ancillary facility to a well;
 - b. Is servicing multiple wells; and
 - c. Would not require any other Commission permit or facility registration.
- B. Where the Oil and Gas Location Assessment, Form 2A, requires approval, the operator shall file the Form 2A prior to or concurrent with Permit-to-Drill, Form 2, applications for individual wells to be constructed at the oil and gas location.

(4) Form 2A informational report.

Where a proposed location is outside those situations described in Rule 303.d.3, the Oil and Gas Location Assessment, Form 2A, is a report that does not require approval prior to approval of Permits-to-Drill, Form 2.

In these circumstances, the Form 2A shall be submitted concurrently with the Application for Permit-to-Drill, Form 2, or other permit applications, and it will be subject to completeness review pursuant to Rule 303.h.

~~(2) **Form 2/2A to local governmental designee.**—A single, informational copy of the Permit- to-Drill, Form 2 and Form 2A and all attachments shall be delivered by the applicant to the local governmental designee(s) of the county or municipal corporation within whose jurisdiction the activity is occurring or is proposed to occur at or before the time of filing with the Director. It shall be the responsibility of the Director to promptly provide the local governmental designee(s) with formal notification of the filing of the Permit- to-Drill, Form 2, by posting the Permit- to-Drill, Form 2, and the posting date on the COGCC website.~~

~~(3) **Comment period for local governmental designee.**—Any comments from the local governmental designee concerning the Permit- to-Drill, Form 2, and Form 2A as filed shall be provided to the Director and to the applicant in writing within ten (10) days after the date on which the Permit- to-Drill, Form 2 was posted on the COGCC website by the Director. The Director shall take no action with respect to the Permit- to-Drill, Form 2, prior to the expiration of the ten (10) day comment period, except under the circumstances provided for in Rule 303.j.(1) and (2), or when the Director has received notice from the local governmental designee(s) waiving the ten (10) day comment period. Upon written request by the local governmental designee to the Director received prior to the expiration of the ten (10) day comment period, the local governmental designee shall be granted an extension of up to twenty (20) additional days to consider the application.~~

~~(4) **Application for hearing by Local Governmental Designee.**—If, prior to the expiration of the comment period provided herein, including any extension, and after participation in an onsite consultation under Rule 306.a.(3), the local governmental designee files an application for hearing on the Permit- to-Drill, Form 2, under Rule 503.b.(6), alleging significant impacts on public health, safety and welfare, including the environment, the~~

~~Director shall withhold approval of such permit except that the provisions of Rule 303.k. shall apply.~~

e. Processing time for approvals under this section.

(1) In accordance with Rule 216.e.2, where a proposed oil and gas location is contemplated in and within the geographic area covered by an accepted Comprehensive Drilling Plan and where the operator does not request a variance from a provision in these rules intended to minimize adverse impacts, the Director shall approve or deny an Application for Permit-to-Drill, Form 2, or Oil and Gas Location Approvals, Form 2A, within thirty (30) days of a determination that such application is complete, unless significant new information is brought to the attention of the Director or the Commission.

(2) If the Director has not issued a decision on an Application for Permit-to-Drill, Form 2, or, where approval is required, an Oil and Gas Location Assessment, Form 2A, within seventy-five (75) days of a determination that such application is complete, the operator may request a hearing before the Commission on the permit application. Such a hearing shall be expedited and the matter shall be heard at the next regularly scheduled Commission hearing at which time the matter can be legally heard, and all parties shall be deemed to have waived any individual notice requirements to the contrary.

ef. Oil and Gas Locations Well-sites and access roads in wetlands. In the event that an operator acquires an Army Corps of Engineers permit pursuant to 33 U.S.C.A. §1342 and 1344 of the Water Pollution and Control Act (Section 404 of the federal "Clean Water Act") for construction of ~~an well-site, access road, or production oil and gas facility~~location, the operator shall so indicate on the Oil and Gas Location Assessment, Form 2A.

fg. Revisions to Form 2 or Form 2A. Prior to approval of the Form 2 ~~or Form 2A~~ permit application, minor revisions or requested information may be provided by contacting the COGCC staff. After approval, any substantive changes shall be submitted for approval on a Form 2 ~~or Form 2A~~. A Sundry Notice, Form 4, shall be submitted, along with supplemental information requested by the Director, when non-substantive revisions are made after approval, and no additional fee shall be imposed.

gh. Incomplete applications. Applications for ~~Permit-to-Drill, Form 2, or Oil and Gas Location Assessments, Form 2A,~~ which are submitted without the required information and necessary attachments, the proper signature, or the required information, shall be considered incomplete and shall not be reviewed or approved. The COGCC staff shall notify the applicant in not more than ~~thirty ten (310)~~ thirty ten (310) days of permit application-its receipt of the application of such inadequacies, except that the Director shall notify the applicant of inadequacies within three (3) days of its receipt where the proposed location is covered by an accepted Comprehensive Drilling Plan. The applicant shall then have thirty (30) days from the date ~~which that they were it was~~ contacted to correct ~~and/or~~ provide requested information ~~for that well~~, otherwise the ~~permit~~ application shall be considered withdrawn and the fee shall not be refunded.

i. Information requests after completeness determination. Subsequent to deeming an Application for Permit-to-Drill, Form 2, or Oil and Gas Location Assessment, Form 2A, complete, the Director may request from the operator additional information needed to complete review of and make a decision on such an application. Such an information request shall not affect an operator's ability to request a hearing pursuant to Rule 303.e seventy-five (75) days from the date the Form 2 or Form 2A was originally determined to be complete pursuant to Rule 303.h.

hj. Permit expiration.

(1) For Applications for Permit-to-Drill, Form 2. If drilling operations are not commenced on the permitted well within one (1) year after the date of approval, then the permit approval shall become null and void. The Director shall not approve extensions to applications for Permit-to-Drill, Form 2.

(2) For Oil and Gas Location Assessments, Form 2A. If construction operations are not commenced on an approved location within three (3) years after the date of approval, then the approval shall become null and void. The Director shall not approve extensions to Oil and Gas Location Assessments, Form 2A.

ik. Permits in areas pending Commission hearing. The Director may withhold the issuance of a permit and the granting of approval of any Permit-to-Drill, Form 2, for any well or proposed well that is located in an area for which an application has been filed, or which the Commission has sought, by its own motion, to establish drilling units or to designate any tract of land as a high density area, in which case the hearing thereon shall be held at the next meeting of the Commission at which time the matter can be legally heard.

jl. Special circumstances for permit issuance without notice or consultation. The Director may issue a permit at any time in the event that an operator files a sworn statement and demonstrates therein to the Director's satisfaction that:

(1) The operator had the right or obligation under the terms of an existing contract to drill a well; and the owner or operator has a leasehold estate or a right to acquire a leasehold estate under said contract which will be terminated unless the operator is permitted to immediately commence the drilling of said well; or

(2) Due to exigent circumstances (including a recent change in geological interpretation), significant economic hardship to a drilling contractor will result or significant economic hardship to an operator in the form of drilling standby charges will result.

In the event the Director issues a permit under this rule, the operator shall not be required to meet obligations to surface owners and local governmental designees under Rules ~~303.d.~~, 305.b.(~~24~~) & (~~34~~), and 306.a. The Director shall report permits granted in such manner to the Commission at regularly scheduled monthly hearings.

km. Withholding a Approval of a Application for Permit-to-Drill, Form 2, or Oil and Gas Location Assessment, Form 2A.

(1) The Director's decision to approve any Application for Permit-to-Drill, Form 2, or Oil and Gas Location Assessment, Form 2A, for any proposed well or location will become the decision of the Commission subject to judicial review in ten (10) days after it is issued unless a hearing on such an approval is requested pursuant to Rule 503.b is granted.

(~~2~~) The Director may withhold approval of any Application for Permit-to-Drill, Form 2, or Oil and Gas Location Assessment, Form 2A, for any proposed well or location when, based on information supplied in a written complaint submitted by any party with standing under Rule 522.a.(1), other than a local governmental designee, or by staff analysis, the Director has reasonable cause to believe the proposed well or location is in material violation of the Commission's rules, regulations, orders or statutes, or otherwise presents an imminent threat to public health, safety and welfare, including the environment, or would fail to minimize adverse impacts. Any such withholding of approval shall be limited to the minimum period of time necessary to investigate and dismiss the complaint, or to resolve the alleged violation or issue. If the complaint is dismissed or the matter resolved to the dissatisfaction of the complainant, such person may consult with the local governmental designee pursuant to Rule 306.b3.d.(4).

~~(23)~~ The Director shall withhold approval of any Application for Permit-to-Drill, Form 2, or Oil and Gas Location Assessment, Form 2A, for any proposed well or location, when a request for a hearing is made by a local governmental designee in accordance with Rules ~~303.d.(4) and~~ 503.b.(6), unless the local government has been disqualified from making such request under Rule 501.b.

(4) The Director shall withhold approval of any Application for Permit-to-Drill, Form 2, or Oil and Gas Location Assessment, Form 2A, for any proposed well or location, when a request for a hearing is made by the operator, owner of the affected land, the local government, the Colorado Department of Public Health and Environment, or the Colorado Division of Wildlife in accordance with Rule 503.b.8.

~~(35)~~ In the event the Director withholds approval of any Application for Permit-To-Drill, Form 2, or Oil and Gas Location Assessment, Form 2A, under this Rule 303.~~ik.~~, an operator may ask the Commission to issue an emergency order rescinding the Director's decision.

~~(64)~~ Any hearing granted pursuant to ~~this~~ Rule 303.~~ik.~~ shall be expedited and the matter shall be heard at the next regularly scheduled Commission hearing at which time the matter can be legally heard, and all parties shall be deemed to have waived any notice requirements to the contrary. ~~The Director shall use best efforts to notify the parties of any such hearing.~~

(7) In withholding approval, the Director shall foster the responsible, balanced development, production, and utilization of the natural resources of oil and gas in the State of Colorado in a manner consistent with protection of public health, safety, and welfare, including protection of the environment and wildlife resources.

in. Suspending approved Permit-To-Drill, Form 2. Prior to the spudding of the well, the Director shall suspend an approved Permit-to-Drill, Form 2, if the Director has reasonable cause to believe that information submitted on the Permit-to-Drill, Form 2 was materially incorrect. Under the circumstances described in Rule 303.j.(1) or (2), an operator may ask the Commission to issue an emergency order rescinding the Director's decision.

mo. Reclassification of stratigraphic well. If a test for productivity is made in a stratigraphic well, the well must be reclassified as a well drilled for oil or gas and is subject to all of the rules and regulations for well drilled for oil or gas, including filing of reports and mechanical logs.

np. Provisions for avoiding mine sites. Any person holding, or who has applied for, a permit issued or to be issued under §34-33-101 to 137, C.R.S., may at their election, notify the Director of such permit or application. Such notice shall include the name, mailing address and facsimile number of such person and designate by legal description the life-of-mine area permitted, or applied for, with the Division of Reclamation, Mining and Safety~~Minerals and Geology~~. As soon as practicable after receiving such notice and designation, the Director shall inform the party designated therein each time that a Permit-to-Drill, Form 2, is filed with the Director which pertains to a well or wells located or to be located within said life-of-mine area as designated. The provisions of Rule 303.j. (1) and (2) will not be applicable to this rule.

304. FINANCIAL ASSURANCE REQUIREMENTS

Prior to drilling or assuming the operations for a well an operator shall provide financial assurance in accordance with the 700 Series rules. When an operator's existing wells are not in compliance with the 700 Series, the Director may withhold action on an Application for Permit-to-Drill, Form 2, or Oil and Gas Location Assessment, Form 2A, until such time as a hearing on the permit application is held by the Commission. Such hearing shall be held at the next regularly scheduled Commission hearing at which time the matter can be legally heard.

305. NOTICES OF OIL AND GAS OPERATIONS

a. The provisions of this Rule 305.b(1)B and subsections (2) through (5), shall not be applicable on federal or Indian owned surface lands.

b. Notices.

(1) Notice of Form 2A Submittals.

A. Public notice and opportunity to comment.

i. Whether submitted pursuant to Rule 303.d.3 or Rule 303.d.4, the Director shall, upon determination that the Form 2A is complete pursuant to Rule 303.h:

aa. Promptly post the Oil and Gas Location Assessment, Form 2A, and attachments on the Commission website;

bb. Simultaneously electronically alert the local governmental designee of the county or municipal corporation within whose jurisdiction the activity is occurring or proposed to occur; and

cc. Simultaneously electronically alert the Colorado Department of Public Health and Environment and the Colorado Division of Wildlife where the proposed location would trigger consultation pursuant to Rule 306.c or 306.d.

ii. The public shall be given thirty (30) calendar days from the date of posting to submit comments to the Commission on the Oil and Gas Location Assessment, Form 2A that is not covered by an accepted Comprehensive Drilling Plan. Where the proposed location is covered by an accepted Comprehensive Drilling Plan, the public shall be given twenty (20) days from the date of posting to submit comments.

iii. The website posting called for in this subsection shall clearly indicate:

aa. The date on which the Form 2A was posted;

bb. The date by which public comments must be received to be considered;

cc. The address(es) to which the public may direct comments; and

dd. Where the proposed location is covered by an accepted Comprehensive Drilling Plan, the posting shall include directions for review of the accepted plan.

iv. The Commission shall promptly post all comments received under this subsection on the Commission website.

B. Landowner notice.

i. Whether submitted pursuant to Rule 303.d.3 or Rule 303.d.4, the applicant shall, within five (5) days of a completeness determination pursuant to Rule 303.h, provide a copy of a complete Oil and Gas Location

Assessment, Form 2A, with attachments to the record owner of the surface to be affected by the proposed location and his lessee (if known) and the record owner(s) of property that is both adjacent to and within five hundred (500) feet of the proposed location, if such owner(s) exists, and his lessee (if known).

- ii. The notice required in this subsection shall include a copy of the Commission's Informational Brochure for Surface Owners containing the rules pertaining to notice of oil and gas operations and opportunities for consultation thereon, as well as the rules of procedure for filing complaints and making applications for hearing. The brochure shall provide contact information for the Commission's main office, field offices and website, and shall describe the services and information available to the public, including access to a listing of local governmental designees. The brochure shall contain a prominent disclaimer advising surface owners to obtain legal advice as may be appropriate to their particular circumstances.
- iii. The notice required in this subsection shall include a copy of Rule 306(a) and the Commission's "Onsite Inspection Request Form."
- iv. The notice required in this subsection shall be accomplished by hand delivery or by certified mail, return-receipt requested.

C. Content of notices required under this subsection. All individual notices and agency notifications required under this subsection shall:

- i. Inform the recipient of his or her right to submit comments to the Director on the Oil and Gas Location Assessment, Form 2A, with attachments, within thirty (30) days after the date it was posted on the Commission website where the proposed location is not covered by an accepted Comprehensive Drilling Plan. Where the proposed location is covered by an accepted Comprehensive Drilling Plan, the notice shall inform the recipient of his or her right to submit comments to the Director within twenty (20) days from the date of posting.
- ii. Inform the recipient of his or her right to receive the subsequent notices set out in Rule 305.b.2 to 305.b.5, and of the fact that this right will be waived if the recipient does not notify the applicant of his or her desire to receive these subsequent notices by a specified date that is ten (10) days from the date of actual service of the notice called for in this subsection.

D. Except under the circumstances provided for in Rule 303.j.(1) and (2) and where consultation requires a forty (40) day review period, the Director shall take no action with respect to the Oil and Gas Location Assessment, Form 2A, prior to the expiration of the thirty (30) day comment period, or, where the proposed location is covered by an accepted Comprehensive Drilling Plan pursuant to Rule 216, prior to the expiration of the twenty (20) day comment period.

(+2) Notice of drilling. Before an operator shall commence operations for the drilling of any well, such operator shall evidence its intention to conduct such operations by giving any party that has indicated a desire to receive it pursuant to Rule 305.b.1.C.ii ~~the surface owner and local governmental designee~~ written notice thereof as provided in subparagraph c. below. Where required, sSuch notice of drilling shall be mailed or hand delivered ~~to the surface owner~~ not less than thirty (30) days prior to the date of estimated commencement

of operations with heavy equipment as set forth in the notice ~~and shall be mailed to the local governmental designee not less than thirty (30) days prior to the date of estimated commencement of operations with heavy equipment as set forth in the notice.~~ Operators shall retain a record of such notice of drilling for a minimum of one (1) year. Such written notice also shall be posted on or near the proposed drillsite at least thirty (30) days prior to commencement of operations with heavy equipment. ~~If notice for the commencement of operations is waived by the surface owner under this rule, the local governmental designee notice under this Rule 305.b. shall be received no later than the business day preceding commencement of operations with heavy equipment.~~ The operator shall confirm that the ~~surface owner~~ notice requirements of this Rule 305.b have been completed or waived before the Director approves an Application for Permit-to-Drill, Form 2.

~~(32)~~ **Notice of subsequent well operations.** Before an operator shall commence subsequent well operations, such operator shall evidence its intention to conduct such operations by giving ~~any party that has indicated a desire to receive it pursuant to Rule 305.b.1.C.ii the surface owner~~ written notice thereof in accordance with paragraph c. below. Subsequent well operations shall mean those operations that will materially impact surface areas beyond the existing access road or well site for any well, including operations such as fracturing or recompletion of the well but shall not include routine service and maintenance operations including but not limited to the changing of pumps. Where required, such ~~The~~ notice of subsequent operations shall be mailed or hand delivered not less than seven (7) days prior to the date of estimated commencement of operations with heavy equipment as set forth in the notice.

~~(43)~~ **Notice during irrigation season.** If a well is to be drilled on irrigated crop lands between March 1 and October 31, the operator, in addition to meeting the consultation requirements of Rule 306., shall contact the surface owner, or at the request of the surface owner, the tenant, at least fourteen (14) days prior to the commencement of surface activities by the operator and arrange to coordinate drilling operations to avoid unreasonable interference with irrigation plans and activities.

~~(45)~~ **Final reclamation notice.** The following notice requirement shall apply only to final reclamation operations commenced more than thirty (30) days after the completion of a well.

A. Not less than thirty (30) days before any final reclamation operations are to take place pursuant to Rule 1004., the operator shall notify the surface owner in accordance with paragraph c. below. Final reclamation operations shall mean those reclamation operations to be undertaken when a well is to be plugged and abandoned or when production facilities are to be permanently removed.

c. **Notice requirements.** As to notices to be given pursuant to this Rule 305., included with each such notice shall be the following.

- (1) The estimated date that the operations for which notice is being given are to commence.
- (2) The name of the operator and the name, address and phone number of the individual representing the operator who can be contacted concerning the proposed operations.
- (3) The legal description (or plat) indicating the quarter quarter section upon which the operations will be conducted.
- (4) A statement that the surface owner has responsibility for ensuring notifying that any affected tenant is actually notified of the proposed operations.

(5) With respect to the notices of drilling, the notice mailed or hand delivered to the surface owner shall also include a return addressed, postage prepaid postcard upon which surface owners may request their preference with respect to the consultation requirement under Rule 306., including the preference to appoint a tenant for consultation. If the surface owner appoints a tenant for consultation, that person's name, address, and telephone number must be provided to the operator by the surface owner on the postcard.

~~(6) A copy of the Commission's informational brochure for surface owners, containing the rules pertaining to notice of oil and gas operations and opportunities for consultation thereon, as well as the rules of procedure for filing complaints and making applications for hearing. The brochure shall provide contact information for the Commission's main office, field offices and website, and shall describe the services and information available to the public, including access to a listing of local governmental designees. The brochure shall contain a prominent disclaimer advising surface owners to obtain legal advice as may be appropriate to their particular circumstances.~~

d. **Identifying surface owner.** In determining the identity and address of a surface owner for the purpose of giving all notices under this Rule 305., the records of the assessor for the county in which the lands are situated may be relied upon.

e. **Tenants.** With respect to notices given under this Rule 305., it shall be the responsibility of the notified surface owner to ensure that give notice of the proposed operation has been actually received by ~~to~~ the tenant farmer, lessee or other party that may own or have an interest in any crops or surface improvements that could be affected by such proposed operation.

f. **Waiver.** ~~Any and all of t~~The ~~surface owner~~ notice requirements set forth in this Rule 305., may be waived by the affected surface owner party entitled to such notification at any time. ~~Any and all local governmental designee notice requirements set forth in this Rule 305., may be waived by the affected local governmental designee(s) at any time.~~

306. CONSULTATION.

In locating roads, production facilities, ~~and~~ well sites, or other oil and gas operations, and in preparation for reclamation and final abandonment, the operator shall use its best efforts to consult in good faith, as provided below. ~~with the affected surface owner, or the surface owner's appointed tenant as provided for in Rule 305. Consultation with local governmental designees is addressed in Rule 306.a. (3) below. The following shall apply to each such consultation:~~

a. **Drilling eConsultation with surface owner.** Where a proposed oil and gas location is not subject to a surface use agreement, the operator shall undertake a ~~The~~ good faith effort to consult ~~shall occur~~ at a time mutually agreed to by the parties prior to the commencement of operations with heavy equipment upon the lands of the surface owner. ~~The operator shall confirm that the surface owner consultation requirements of this Rule 306, have been completed or waived before the Director approves an Application for Permit to Drill, Form 2.~~

(1) **Information provided by operator.** When consulting with the surface owner or appointed tenant, the operator shall furnish a description or diagram of the proposed drilling location; dimensions of the drill site; topsoil management practices to be employed; and, if known, the location of associated production or injection facilities, pipelines, roads and any other areas to be used for oil and gas operations (if not previously furnished to such surface owner or if different from what was previously furnished).

(2) **Good faith consultation.** Such good faith consultation shall allow the surface owner or appointed tenant the opportunity to provide comments to the operator regarding

preferences for the timing of oil and gas operations and preferred locations for wells and associated facilities.

(3) **Onsite inspection.** Within ten (10) days of the consultation called for above, a surface owner or appointed tenant may request that the Director conduct an onsite inspection.

A. **Initiation.** A surface owner or appointed tenant's request for onsite inspection shall include:

- i. Two (2) proposed dates for the inspection which are within thirty (30) days of requesting onsite inspection;
- ii. A description of the unresolved issues;
- iii. A brief description of the unresolved issues related to the proposed oil and gas location;
- iv. The surface owner or appointed tenant's preference for having the local governmental designee invited to participate; and
- v. Certification that the request for onsite inspection has been sent to the Colorado Department of Public Health and Environment and the Colorado Division of Wildlife.

B. **Purpose.** The purpose of the onsite inspection shall be to determine whether technical or operational conditions of approval should be attached to an approved Application for Permit-to-Drill, Form 2, or Oil and Gas Location Assessment, Form 2A, in order to:

- i. Avoid potential unreasonable crop loss or land damage;
- ii. Address potential impacts to public health, safety, and welfare, including the environment and wildlife resources, within Commission jurisdiction regarding the proposed oil and gas location that may not be adequately addressed by Commission rules or orders; and
- iii. Otherwise ensure compliance with the Commission's rules relating to advance notice and good faith consultation with respect to timing of operations and location of oil and gas facilities.
- iv. The onsite inspection provided herein shall not address matters of surface owner compensation, property value, future use of the property, or any private party contractual issues between the operator and the surface owner.

C. **Participants in the onsite inspection.** When the Director conducts an onsite inspection as described herein, he shall invite representatives of the surface owner or appointed tenant, the operator, the Colorado Department of Public Health and Environment, and the Colorado Division of Wildlife to attend. The Director shall also invite the local governmental designee to the onsite inspection, unless the surface owner or appointed tenant does not wish the local governmental designee to be present.

D. A request by a surface owner or appointed tenant for an onsite inspection that is made prior to an operator's submittal of an Oil and Gas Location Assessment,

Form 2A, shall be accepted by the Director but will not be acted upon until the Director has received the Oil and Gas Location Assessment, Form 2A.

E. The Director shall withhold approval of an Application for Permit-to-Drill, Form 2, and an Oil and Gas Location Assessment, Form 2A, until the expiration of the ten (10) business days period provided above in Rule 306.a.3, except under the following circumstances or as otherwise provided in these rules:

i. A surface use or other relevant agreement has been executed; or

ii. The Rule 306.a consultation has been waived by the surface owner pursuant to Rule 306.a.5.

(4) **Results of onsite inspection.** Following an onsite inspection, the Director shall determine whether to attach site-specific conditions of approval to an Oil and Gas Location Assessment, Form 2A or Application for Permit-to-Drill, Form 2, where applicable. This determination shall incorporate the results of consultation in order to foster the responsible, balanced development, production, and utilization of the natural resources of oil and gas in the State of Colorado in a manner consistent with protection of public health, safety, and welfare, including protection of the environment and wildlife resources. Any such conditions of approval shall be consistent with applicable Commission spacing orders and well location rules and shall take into account cost-effectiveness, technical feasibility, protection of correlative rights, and prevention of waste. The conditions that may be attached by the Director as a result of onsite inspection include, but are not limited to:

A. **Visual or aesthetic impacts.** Moving the proposed location or access road to take advantage of natural features for screening; installing low profile artificial lift methods; constructing artificial features for screening;

B. **Surface impacts.** Moving or reducing the size, shape, or orientation of the location or access road to avoid disturbance of natural features or to enhance the success of interim and final reclamation activities; controlling noxious weeds and undesirable species in disturbed areas; utilizing an existing location or access road to avoid the impacts of new construction; utilizing a closed drilling fluid system instead of reserve pits to avoid impacts to sensitive areas;

C. **Noise impacts.** Installing electric motors where practicable; muffling, locating, or orienting motors or compressors to reduce noise; installing insulated buildings or sound barriers;

D. **Dust impacts.** Watering roads as necessary to control dust during construction, drilling, or completion operations;

E. **Ground water impacts.** Collecting and analyzing water and gas samples from existing water wells or springs; installing monitoring wells; collecting ground water samples; reporting water, gas, and pressure data;

F. **Safety impacts.** Soil gas sampling and analysis; residential crawl space gas sampling and analysis; installing security fencing around wellheads, pits, and production equipment;

(5) **Waiver.** The requirement to consult with the surface owner may be waived by the affected surface owner or the surface owner's appointed tenant at any time by submittal to the operator in writing.

(6) The operator shall confirm that the requirements of this Rule 306.a have been completed or waived before the Director approves an Application for Permit-to-Drill, Form 2, or an Oil and Gas Location Assessment, Form 2A.

(3)b. ~~Local government consultation.~~

(1) Local governments ~~which that~~ have appointed a local governmental designee and have indicated to the Director a desire for ~~onsite~~ consultation shall be given an opportunity to engage in such consultation concerning an Application for Permit-to-Drill, Form 2, or an Oil and Gas Location Assessment, Form 2A, for the location of roads, production facilities and well sites prior to the commencing of operations with heavy equipment-

(2) Within seven (7) days of its notification pursuant to Rule 305, the local governmental designee may notify the Commission and the Colorado Department of Public Health and Environment by electronic mail of its desire to have the Colorado Department of Public Health and Environment consult on a proposed location, based on concerns regarding public health, safety, welfare, or impacts to the environment.

c. Consultation with the Colorado Division of Wildlife.

(1) Consultation to occur. An operator shall consult with the Commission, the surface owner, and the Colorado Division of Wildlife on an Oil and Gas Location Assessment, Form 2A, where:

A. The operator seeks from the Director a variance from a provision in the 1200-Series of these rules intended to minimize adverse impacts to wildlife resources;

B. The operator elects to consult rather than comply with the provisions of Rule 1208, Timing Limitation Areas;

C. The surface owner requests consultation with the Commission on provision of the 1200-Series; or

D. An operator requests a well density increase pursuant to Rule 508 or the Commission develops a basin-wide order involving public health, welfare, safety, wildlife, or environmental concerns or protections.

E. Notwithstanding the foregoing, the requirement to consult with the Colorado Division of Wildlife may be waived by the Colorado Division of Wildlife at any time.

(2) Procedure for consultation.

A. The operator, the Commission, the surface owner, and the Colorado Division of Wildlife shall have forty (40) days to conduct the consultation called for in this section.

B. The consultation called for in this section shall focus on:

i. Identifying potential adverse impacts to wildlife resources from the proposed oil and gas activities;

ii. Developing potential conditions of approval or other measures to minimize adverse impacts to wildlife resources; and

iii. Evaluating reclamation goals for the location.

C. The operator is encouraged to review the list of Actions to Minimize Adverse Impacts to Wildlife Resources developed by the Colorado Division of Wildlife and maintained on the Commission and Colorado Division of Wildlife websites to develop a set of proposed site-specific measures to address the impacts of oil and gas operations on wildlife resources.

(3) Results of consultation under Rule 306.c.

A. As a result of consultation called for in this subsection, the Colorado Division of Wildlife may make written recommendations to the Commission on conditions of approval necessary to minimize adverse impacts to wildlife resources. Where applicable, the Colorado Division of Wildlife may also make written recommendations on whether a variance request should be granted, under what conditions, and the reasons for any such recommendations.

B. **Agreed-upon conditions of approval.** Where the operator, the Director, the Colorado Division of Wildlife, and the surface owner agree to conditions of approval for oil and gas locations as a result of consultation, these conditions of approval shall be incorporated into approvals of an Oil and Gas Location Assessment, Form 2A or Application for Permit-to-Drill, Form 2, where applicable.

C. **Permit-Specific Conditions.** Where the consultation called for in this subsection results in permit-specific conditions of approval that are more restrictive than the provisions of these rules, the Director shall attach such permit-specific conditions only with the consent of the affected surface owner.

D. **Standards for consultation and initial decision.** Following consultation and subject to subsection C above, the Director shall decide whether to attach conditions of approval to a Form 2A or Form 2, where applicable. In making this decision, the Director shall minimize adverse impacts to wildlife resources, consistent with other statutory obligations.

E. **Notification of decision to consulting agency.** Where consultation occurs under Rule 306.c, the Director shall provide to the Colorado Division of Wildlife the conditions of approval for the Application for Permit-to-Drill, Form 2, or Oil and Gas Location Assessment, Form 2A, on the same day that he or she announces a decision to approve the application.

d. Consultation with the Colorado Department of Public Health and Environment.

(1) **Consultation to occur.** The Commission shall consult with the Colorado Department of Public Health and Environment on an Oil and Gas Location Assessment, Form 2A, where:

A. The local governmental designee requests, within seven (7) days of notice, the participation of the Colorado Department of Public Health and Environment in the Commission's consideration of an Application for Permit-to-Drill, Form 2, or Oil and Gas Location Assessment, Form 2A, based on concerns regarding public health, safety, welfare, or impacts to the environment;

B. The operator seeks from the Director a variance from a provision of one of the following rules intended for the protection of public health, safety, welfare, or the environment:

i. Rule 317B. Surface Water Drinking Water Protection Areas;

ii. Rule 325. Underground Disposal of Water;

iii. Rule 603. Setback Requirements in High Density Areas;

iv. Rule 608. Coalbed Methane Wells;

v. Rule 805. Odors and Dust;

vi. 900-Series E&P Waste Management; or

vii. Rule 1002.g. Stormwater Management.

C. An operator requests a well density increase pursuant to Rule 508 or the Commission develops a basin-wide order that can reasonably be anticipated to have impacts on public health, welfare, safety, or environmental concerns or protections.

D. Notwithstanding the foregoing, the requirement to consult with the Colorado Department of Public Health and Environment may be waived by the Colorado Department of Public Health and Environment at any time.

(2) Procedure for consultation.

A. The Commission and the Colorado Department of Public Health and Environment shall have forty (40) days to conduct the consultation called for in this section.

B. The consultation called for in this section shall focus on identifying potential impacts to public health, safety, welfare or the environment from activities associated with the proposed oil and gas location, and development of conditions of approval or other measures to minimize adverse impacts.

C. Where consultation occurs pursuant to Rule 306.d.(1)(A), it may include:

i. Review of the permit application;

ii. Discussions with the local governmental designee to better understand local government's concerns;

iii. Discussions with the Commission, operator, surface owner, or the adjacent landowner; and

iv. Review of public comments.

D. Where consultation occurs pursuant to Rule 306.d.(1)(B), the Colorado Department of Public Health and Environment shall have the opportunity to:

i. Review the permit application, the request for variance, and the basis for the request; and

ii. Discuss the request with the operator, the surface owner, and the Commission.

E. Where consultation occurs pursuant to Rule 306.d.(1)(C), the Colorado Department of Public Health and Environment shall have the opportunity to:

- i. Review the well-density increase application or draft Commission order; and
- ii. Discuss the request with the operator or proponent, the Commission, and the local governmental designee.

(3) Results of consultation under Rule 306.d.

A. As a result of consultation called for in this subsection, the Colorado Department of Public Health and Environment may make written recommendations to the Commission on conditions of approval necessary to protect the public health, safety, and welfare or the environment. Such recommendations may include, but are not limited to, monitoring requirements or best management practices. Where applicable, the Colorado Department of Public Health and Environment may also make written recommendations on whether a variance request should be granted, under what conditions, and the reasons for any such recommendations.

B. Agreed-upon conditions of approval. Where the operator, the Director, the Colorado Department of Public Health and Environment, and the surface owner agree to conditions of approval for oil and gas locations as a result of consultation, these conditions of approval shall be incorporated into approvals of Oil and Gas Location Assessment, Form 2A or Applications for Permit-to-Drill, Form 2, where applicable.

C. Standards for consultation and Director decision. Following consultation, the Director shall decide whether to attach conditions of approval recommended by the Colorado Department of Public Health and Environment to a Form 2A or Form 2, where applicable. This decision shall minimize adverse impacts to public health, safety and welfare, including the environment, consistent with other statutory obligations.

D. Notification of decision to consulting agency. Where consultation occurs under Rule 306.d, the Director shall provide to the Colorado Department of Public Health the conditions of approval for the Application for Permit-to-Drill, Form 2, or Oil and Gas Location Assessment, Form 2A, on the same day that he or she announces a decision to approve the application.

eb. Final reclamation consultation. In preparing for final reclamation and plugging and abandonment, the operator shall use its best efforts to consult in good faith with the affected surface owner (or the tenant when the surface owner has requested that such consultation be made with the tenant). Such good faith consultation shall allow the surface owner (or appointed tenant) the opportunity to provide comments concerning preference for timing of such operations and all aspects of final reclamation, including but not limited to the desired final land use and seed mix to be applied.

fe. Tenants. Operators shall have no obligation to consult with tenant farmers, lessees, or any other party ("tenant") that may own or have an interest in any crops or surface improvements that could be affected by the proposed operation unless the surface owner appoints such tenant for such purposes. Nothing shall prevent the surface owner from including the tenant during the consultation.

d. Waiver. The requirement to consult with the surface owner under this Rule 306, may be waived by the affected surface owner or the surface owner's appointed tenant at any time.

307. COGCC Form 4. SUNDRY NOTICES AND REPORTS ON WELLS

The Sundry Notice, Form 4, is a multipurpose form which shall be used by an operator to request approval from or provide notice to the Director as required by rule or when no other specific form exists, i.e., well name or number change. The rules requiring the use of the Sundry Notice, Form 4, are listed in Appendix I.

308A. COGCC Form 5. DRILLING COMPLETION REPORT

Within thirty (30) days of the setting of production casing, the plugging of a dry hole, the deepening or sidetracking of a well, or any time the wellbore configuration is changed, the operator shall transmit to the Director the Drilling Completion Report, Form 5, and two (2) copies of all logs run, be they mechanical, mud, or other, submitted as one (1) paper copy and, as available, one (1) digital LAS (log ASCII) formatted copy, or a format approved by the Director. Additionally, if drill stem tests, core analyses, or directional surveys are run, they shall be submitted at the same time and together with this completion report. All Sections 1 - 22 (if applicable) and the attachment checklist shall be completely filled out. The latitude and longitude coordinates in decimal degrees to an accuracy and precision of five (5) decimals of a degree using the North American Datum (NAD) of 1983 (e.g.; latitude 37.12345 N, longitude 104.45632 W), Position Dilution of Precision (PDOP) reading, instrument operator's name and the date of the measurement of the "as drilled" well location shall be reported on the Form 5. If GPS technology is utilized to determine the latitude and longitude, all GPS data shall meet the requirements set forth in Rule 215. a. through h.

Within thirty (30) days of the suspension of commenced drilling activities prior to reaching total depth, the operator shall file a Drilling Completion Report, Form 5, notifying the Director of the date of such suspension of drilling activity stating the reason for suspension and the anticipated date and method of resumption of drilling, showing the details of all work performed to date. In cases of an uncompleted well, the initial Drilling Completion Report, Form 5, shall state "preliminary" at the top of the form. A supplementary Form 5 shall be submitted within thirty (30) days of reaching total depth.

308B. COGCC Form 5A. COMPLETED INTERVAL REPORT

The Completed Interval Report, Form 5A, shall be submitted within thirty (30) days of completing a formation (successful or not), when a formation is temporarily abandoned or permanently abandoned, for a recompletion, reperforation or restimulation, or when a formation is commingled.

In order to resolve completed interval information uncertainties, the Director may require an operator to submit a Completed Interval Report, Form 5A.

308C. CONFIDENTIALITY

Upon submittal of a Sundry Notice, Form 4, request by the operator, completion reports, including Drilling Completion Reports, Form 5 and Completed Interval Reports, Form 5A, and mechanical logs of exploratory or wildcat wells shall be marked "confidential" by the Director and kept confidential for six (6) months after the date of completion, unless the operator gives written permission to release such logs at an earlier date.

309. COGCC Form 7. OPERATOR'S MONTHLY PRODUCTION REPORT

Each producer or operator of an oil or gas well shall file with the Commission, within forty-five (45) days after the month in which production occurs, a report on Operator's Monthly Production Report, Form 7, containing all information required by said form. In addition, all fluids produced during the initial testing and completion shall be reported on Operator's Monthly Production Report, Form 7 within forty-five (45) days after the month in which testing and completion occurs.

310. COGCC Form 8. MILL LEVY

On or before March 1, June 1, September 1 and December 1 of each year, every producer or purchaser, whichever disburses funds directly to each and every person owning a working interest, a royalty interest, an overriding royalty interest, a production payment and other similar interests from the sale of oil or natural gas subject to the charge imposed by §34-60-122(1)(a) C.R.S., 1973, as amended, shall file a return with the Director showing by operator, the volume of oil, gas or condensate produced or purchased during the preceding calendar quarter, including the total consideration due or received at the point of delivery. No filing shall be required when the charge imposed is zero mill (\$0.0000) per dollar value. *Eff 09/30/2007*

The levy shall be an amount fixed by order of the Commission. The levy amount may, from time to time, be reduced or increased to meet the expenses chargeable against the oil and gas conservation and environmental response fund. The present charge imposed, as of July 1, 2007, is seven tenths of a mill (\$0.0007) per dollar value. *Eff 09/30/2007*

311. COGCC Form 6. WELL ABANDONMENT REPORT

Notice shall be given to the Director, and approval obtained in advance of the time the operator expects to abandon a well on Form 6. When filing an intent to abandon, the form shall be completed and attachments included to fully describe the proposed operations. This includes the proposed depths of mechanical plugs and casing cuts, the proposed depths and volumes of all cement plugs, the amount, size and depth of casing and junk to be left in the well, the volume and weight of fluid to be left in the wellbore and the nature and quantities of any other materials to be used in the plugging. If the well is not plugged within six (6) months of intent approval a new intent shall be filed.

Within thirty (30) days after abandonment, the Well Abandonment Report, Form 6, shall be filed with the Director. The abandonment details shall include an account of the manner in which the abandonment or plugging work was performed. Additionally, plugging verification reports detailing all procedures are required. A Plugging Verification Report shall be submitted for each person or contractor actually setting the plugs. The Well Abandonment Report, Form 6, and the Plugging Verification Reports shall detail the depths of mechanical plugs and casing cuts, the depths and volumes of all cement plugs, the amount, size and depth of casing and junk left in the well, the volume and weight of fluid left in the wellbore and the nature and quantities of any other materials used in the plugging. Plugging Verification Reports shall conform with the operator's report and both shall show that plugging procedures are at least as extensive as those approved by the Director. When filing a subsequent report of abandonment, the entire form shall be completed except for the second block, background information. (See Rule 319 for well abandonment requirements and procedures.)

312. COGCC Form 10. CERTIFICATE OF CLEARANCE AND/OR CHANGE OF OPERATOR

- a. Each operator of any oil or gas well completed after April 30, 1956, shall file with the Director, within thirty (30) days after initial sale of oil or gas a Certificate of Clearance and/or Change of Operator, Form 10, in accordance with the instructions appearing on such form, for each well producing oil or gas or both oil and gas. A Certificate of Clearance shall be filed for any well from which oil, gas or other hydrocarbon is being produced.

A Certificate of Clearance shall be filed within thirty (30) days should the oil transporter (first purchaser) and/or the gas gatherer (first purchaser) change. In addition, within fifteen (15) days of an operator change for any well, a Change of Operator, Form 10, shall be filed with a filing and service fee as set by the Commission. (See Appendix III)

- b. Each operator of a Class II injection well shall file a new Form 10 with the Director within fifteen (15) days of the transfer of ownership.
- c. Whenever there shall occur a change in the producer or operator filing the certificate under Rule 310 (a) hereof, or whenever there shall occur a change of transporter from any well within the State, a new Form 10 shall be executed and filed within fifteen (15) days in accordance with the

instructions appearing on such form. In the case of temporary use of oil for well treating or stimulating purposes, no new form need be executed. In the case of other temporary change in transporter involving the production of less than one month, the producer or operator may, in lieu of filing a new certificate, notify the Commission and the transporter authorized by the certificate on file with the Commission by letter of the estimated amount to be moved by the temporary transporter and the name of such temporary transporter. A copy of such notice shall also be furnished such temporary transporter.

- d. In no instance shall the temporary transporter move any quantity greater than the estimated amount shown in said notice.
- e. The certificate, when properly executed and approved by the Commission, shall constitute authorization to the pipeline or other transporter to transport the authorized volume from the well named therein; provided that this section shall not prevent the production or transportation in order to prevent waste, pending execution and approval of said certificate. Permission for the transportation of such production shall be granted in writing to the producer and transporter.
- f. The certificate shall remain in force and effect until:
 - (1) The producer or operator filing the certificate is changed; or
 - (2) The transporter is changed; or
 - (3) The certificate is canceled by the Commission.
- g. A copy of each Form 10 to be filed hereunder shall be sent by the Director to those local governmental designees who so request.
- h. It is the operator's responsibility to mail approved copies of the Certificate of Clearance and/or Change of Operator, Form 10, to the transporter and/or gatherer for each well listed.
- i. A completed Form 10 shall be required for any change of operator for all oil and gas facilities, excluding gathering systems, gas-processing plants, and gas storage facilities as those shall be changed with a Form 12, Gas Facility Registration/Change of Operator.

313. COGCC Form 11. MONTHLY REPORT OF NATURAL GAS PROCESSING FACILITIES~~GASOLINE OR OTHER EXTRACTION PLANTS~~

All operators of natural gas processing facilities~~gasoline or other extraction plants~~ shall make monthly reports to the Director on Monthly Report of Natural Gas Processing Facilities, Form 11. Such forms shall contain all information required thereon and shall be filed with the Director on or before the twenty-fifth (25th) day of each month covering the preceding month.

313A. COGCC Form 12. GAS FACILITY REGISTRATION/CHANGE OF OPERATOR

Beginning January 1, 2009, all operators of gas facilities that are processing, gathering, or storing natural gas shall submit Gas Facility Registration/Change of Operator, Form 12, to the Director. Form 12 shall also be submitted by a purchaser of a gas facility within ten (10) business days of the date of final sale to indicate a change of operator.

The Form 12 submittal shall include a topographic map, submitted as a paper copy and in an electronic format, showing the governmental section where the gas processing facility is located or is proposed to be sited, an as-built or proposed facility layout of the gas processing facility, submitted as a paper copy and in an electronic format, and a representative map, in an electronic format such as ESRI shape file, showing the current or proposed gathering system associated with each gas processing facility. Updated

facility layouts or maps of the gathering system shall be submitted as an attachment with a Sundry Notice, Form 4, annually on or before February 15 if the system is changed or at the request of the Director.

Operators shall provide a list of any notices, permits, and permit numbers or other similar types of notifications for the facility or gathering system from local governments or other agencies to the Director for review prior to Commission approval of the registration.

Operators shall submit the aforementioned information on existing facilities by July 1, 2009.

314. COGCC Form 17. BRADENHEAD TEST REPORT

Results of bradenhead tests, as required by Rule 207.b., shall be submitted to the Director within ten (10) days of completion. A wellbore diagram shall be submitted if not previously submitted or if the wellbore configuration has changed. If sampled, then the results of any gas and liquid analysis shall be submitted.

315. REPORT OF RESERVOIR PRESSURE TEST

Where the Director believes it is necessary to prevent waste, protect correlative rights, or prevent a significant adverse impact, the Director may require subsurface pressure measurements. Whenever such measurements are made, results shall be reported on Sundry Notice, Form 4, within twenty (20) days after completion of tests, or submitted on any company form approved by the Director containing the same information.

316A. COGCC Form 14. MONTHLY REPORT OF FLUIDS INJECTED

Except for fluids involved with fracturing, acidizing or other similar treatment elsewhere required to be reported on a Completed Interval Report, Form 5A, all operators engaged in the injection of fluids into any formation in dedicated injection wells shall file monthly with the Commission a detailed account of such operation on Form 14, or any company form containing the same information previously approved by the Director. Types of chemicals used to treat injection water, as well as the date of initial fluid injection for new injection wells, are to be reported on said form under Remarks. The type and amount of fluids received from transporters shall be included on the report. Operators of simultaneous injection wells shall, by March 1 of each year, report to the Director the calculated injected volume for the previous year by month on Form 14. Operators of gas storage projects shall, by March 1 of each year, report to the Director the amount of gas injected and withdrawn for the previous year and the amount of gas remaining in the reservoir as of December 31 of that year.

316B. COGCC Form 21. MECHANICAL INTEGRITY TEST

Results of mechanical integrity tests of injection wells or shut-in wells shall be submitted on Form 21, within thirty (30) days after the test. A pressure chart shall accompany this report. Not less than ten (10) days prior to the performance of any mechanical integrity test the Director shall be notified, in writing, of the scheduled date on which the test will be performed. The form shall be completely filled out except for Part II, which is required only if the well is a permitted or pending injection well.

317. GENERAL DRILLING RULES

Unless altered, modified, or changed for a particular field or formation upon hearing before the Commission the following shall apply to the drilling or deepening of all wells.

- a. **Blowout prevention equipment (“BOPE”)**. The operator shall take all necessary precautions for keeping a well under control while being drilled or deepened. BOPE, if any, shall be indicated on the Application for Permit to Drill, Deepen, Re-enter, or Recomplete and Operate (Form 2), as well as any known subsurface conditions (e.g. under or over-pressured formations). The working

pressure of any BOPE shall exceed the anticipated surface pressure to which it may be subjected, assuming a partially evacuated hole with a pressure gradient of 0.22 psi/ft. [For BOPE requirements in high density areas see Rule 603.b.(4)B. For statewide BOPE specification, inspection, operation and testing requirements see Rule 603.f.]

- (1) The Director shall have the authority to designate specific areas, fields or formations as requiring certain BOPE. Any such proposed designation shall occur by notice describing the area, field or formation in question and shall be given to all operators of record within such area or field and by publication. The proposed designation, if no protest is timely filed, shall be placed on the Commission consent agenda for its next regularly scheduled meeting following the month in which such notice was given. The matter shall be approved or heard by the Commission in accordance with Rule 520. Such designation shall be effective immediately upon approval by the Commission, except as to any previously-approved Form 2.
 - (2) The Director shall have the authority, outside areas designated pursuant to Rule 317.a.(1), to condition approval of any application for permit to drill by requiring BOPE which the Director determines to be necessary for keeping the well under control. Should the operator object to such condition of approval, the matter shall be heard at the next regularly scheduled meeting of the Commission, subject to the notice requirements of Rule 507.
- b. **Bottom hole location.** Unless authorized by the provisions of Rule 321., all wells shall be so drilled that the horizontal distance between the bottom of the hole and the location at the top of the hole shall be at all times a practical minimum.
 - c. **Requirement to post permit at the rig and provide spud notice.** A copy of the approved Application for Permit to Drill, Deepen, Re-enter, or Recomplete and Operate, Form 2, shall be posted in a conspicuous place on the drilling rig or workover rig. A notice shall be provided to the Director on a Sundry Notice, Form 4, no later than five (5) days following the spudding of a well. The Director may apply a condition of approval for Application for Permit to Drill, Deepen, Re-enter, or Recomplete and Operate, Form 2 requiring not less than twenty-four (24) hours nor more than seventy-two (72) hours verbal or written notice prior to spud.
 - d. **Casing program to protect hydrocarbon horizons and ground water.** The casing program adopted for each well must be so planned and maintained as to protect any potential oil or gas bearing horizons penetrated during drilling from infiltration of injurious waters from other sources, and to prevent the migration of oil, gas or water from one (1) horizon to another, that may result in the degradation of ground water. A Sundry Notice, Form 4, including a detailed work plan and a wellbore diagram, shall be submitted and approved by the Director prior to any routine or planned casing repair operations. During well operations, prior verbal approval for unforeseen casing repairs followed by the filing of a Sundry Notice, Form 4, after completion of operations shall be acceptable.
 - e. **Surface casing where subsurface conditions are unknown.** In areas where pressure and formations are unknown, sufficient surface casing shall be run to reach a depth below all known or reasonably estimated utilizable domestic fresh water levels and to prevent blowouts or uncontrolled flows, and shall be of sufficient size to permit the use of an intermediate string or strings of casings. Surface casing shall be set in or through an impervious formation and shall be cemented by pump and plug or displacement or other approved method with sufficient cement to fill the annulus to the top of the hole, all in accordance with reasonable requirements of the Director. In the D–J Basin Fox Hills Protection Area surface casing will be set in accordance with Rule 317A. (See also subparagraph g.).
 - f. **Surface casing where subsurface conditions are known.** For wells drilled in areas where subsurface conditions have been established by drilling experience, surface casing, size at the

owner's option, shall be set and cemented to the surface by the pump and plug or displacement or other approved method at a depth and in a manner sufficient to protect all fresh water and to ensure against blowouts or uncontrolled flows. In the D–J Basin Fox Hills Protection Area surface casing shall be set in accordance with Rule 317A. (See also subparagraph g.).

- g. **Alternate aquifer protection by stage cementing.** In areas where fresh water aquifers are of such depth as to make it impractical or uneconomical to set the full amount of surface casing necessary to comply fully with the requirement to cover or isolate all fresh water aquifers as required in subparagraph e. and f., the owner may, at its option, comply with this requirement by stage cementing the intermediate and/or production string so as to accomplish the required result. If unanticipated fresh water aquifers are encountered after setting the surface pipe they shall be protected or isolated by stage cementing the intermediate and/or production string with a solid cement plug extending from fifty (50) feet below each fresh water aquifer to fifty (50) feet above said fresh water aquifer or by other methods approved by the Director in each case. In the D–J Basin Fox Hills Protection Area any stage cementing shall occur only in accordance with Rule 317A. If the stage cement is not circulated to surface, a temperature log or cement bond log shall be run to determine the top of the stage cement to ensure aquifers are protected.
- h. **Surface and intermediate casing cementing.** The operator shall ensure that all surface and intermediate casing cement required under this rule shall be of adequate quality to achieve a minimum compressive strength of three hundred (300) psi after twenty-four (24) hours and eight hundred (800) psi after seventy-two (72) hours measured at ninety-five degrees fahrenheit (95 °F) and at eight hundred (800) psi. All surface casing shall be cemented with a continuous column from the bottom of the casing to the surface. After thorough circulation of the wellbore, cement shall be pumped behind the intermediate casing to at least two hundred (200) feet above the top of the shallowest known production horizon and as required in 317.g. Cement placed behind the surface and intermediate casing shall be allowed to set a minimum of eight (8) hours, or until three hundred (300) psi calculated compressive strength is developed, whichever occurs first, prior to commencing drilling operations. If the surface casing cement level falls below the surface, to the extent safety or aquifer protection is compromised, remedial cementing operations shall be performed.
- i. **Production casing cementing.** The operator shall ensure that all cement required under this rule placed behind production casing shall be of adequate quality to achieve a minimum compressive strength of at least three hundred (300) psi after twenty-four (24) hours and eight hundred (800) psi after seventy-two (72) hours measured at ninety-five degrees fahrenheit (95 °F) and at eight hundred (800) psi. After thorough circulation of a wellbore, cement shall be pumped behind the production casing (200) feet above the top of the shallowest known producing horizon. All fresh water aquifers which are exposed below the surface casing shall be cemented behind the production casing. All such cementing around an aquifer shall consist of a continuous cement column extending from at least fifty (50) feet below the bottom of the fresh water aquifer which is being protected to at least fifty (50) feet above the top of said fresh water aquifer. Cement placed behind the production casing shall be allowed to set seventy-two (72) hours, or until eight hundred (800) psi calculated compressive strength is developed, whichever occurs first, prior to the undertaking of any completion operation.
- j. **Production casing pressure testing.** The installed production casing shall be adequately pressure tested for the conditions anticipated to be encountered during completion and production operations.
- k. **Protection of aquifers and production stratum and suspension of drilling operations before running production casing.** In the event drilling operations are suspended before production string is run, the Director shall be notified immediately and the operator shall take adequate and proper precautions to assure that no alien water enters oil or gas strata, nor potential fresh water aquifers during such suspension period or periods. If alien water is found to be entering the production stratum or to be causing significant adverse environmental impact to fresh water

aquifers during completion testing or after the well has been put on production, the condition shall be promptly remedied.

- l. Flaring of gas during drilling and notice to local emergency dispatch.** Any gas escaping from the well during drilling operations shall be, so far as practicable, conducted to a safe distance from the well site and burned. The operator shall notify the local emergency dispatch as provided by the local governmental designee of any such flaring. Such notice shall be given prior to the flaring if the flaring can be reasonably anticipated, and in all other cases as soon as possible but in no event more than two (2) hours after the flaring occurs.
- m. Protection of productive strata during deepening operations.** If a well is deepened for the purpose of producing oil and gas from a lower stratum, such deepening to and completion in the lower stratum shall be conducted in such a manner as to protect all upper productive strata.
- n. Requirement to evaluate disposal zones for hydrocarbon potential.** If a well is drilled as a disposal well then the disposal zone shall be evaluated for hydrocarbon potential. The proposed hydrocarbon evaluation method shall be submitted in writing and approved by the Director prior to implementation. The productivity results shall be submitted to the Director upon completion of the well.
- o. Requirement to log well.** For all new drilling operations, the operator shall be required to run a minimum of a resistivity log with gamma-ray or other petrophysical log(s) approved by the Director that adequately describe the stratigraphy of the wellbore. A cement bond log shall be run on all production casing or, in the case of a production liner, the intermediate casing, when these casing strings are run. This log and all other logs run shall be submitted with the Well Completion or Recompletion Report and Log, Form 5. Open hole logs shall be run at depths that ~~to~~ adequately verify the setting depth of surface casing and any aquifer coverage. These requirements shall not apply to the unlogged open hole completion intervals, or to wells in which no open hole logs are run.
- p. Remedial cementing during recompletion.** The Director may apply a condition of approval for Application for Permit to Drill, Deepen, Re-enter, or Recomplete and Operate, Form 2, to require remedial cementing during recompletion operations consistent with the provisions for protecting aquifers and hydrocarbon bearing zones in this Rule 317.

317A. SPECIAL DRILLING RULES - D-J BASIN FOX HILLS PROTECTION AREA

The following special drilling rules shall apply to wells in the D-J Basin Fox Hills Protection Area as defined in the 100 Series of the Rules and Regulations:

- a. Surface Casing - Minimum Requirements for Well Control.** In all wells drilled within the D-J Basin Fox Hills Protection Area, surface casing shall be run to a minimum depth of five percent (5%) of the projected total depth to which the well is to be drilled, provided that in no event shall the surface casing be run to a depth less than two hundred (200) feet. The Director may, on a case-by-case basis, grant variances in this five percent (5%) requirement where the Director finds that the well is a development well in which pressures can be accurately predicted and finds that, based upon those predictions, the five percent (5%) requirement should be varied to achieve effective well control. In all cases, however, the actual depth at which the surface casing is set shall be calculated to position the casing seat to a depth within a competent formation (preferably shale) which will contain the maximum pressure to which the casing will be exposed during normal drilling operations.
- b. Surface Casing - Aquifer Protection.** For purposes of aquifer protection, surface casing must be set as follows in wells which are not exploratory wells:

- (1) Surface casing shall be run to a depth at least fifty (50) feet below the Fox Hills transition zone in wells drilled within Townships 5 South through 5 North, Ranges 65 West through 70 West or within Townships 3 North through 5 North, Range 64 West.
- (2) With respect to Townships 5 South through 5 North, Ranges 58 West through 63 West, Townships 5 South through 2 North, Range 64 West; and Township 6 South, Ranges 65 West through 70 West, in all wells located within one (1) mile of a permitted producing water well, surface casing shall be set to a depth sufficient to protect the deepest permitted producing water well within such one mile area. Said depth shall be at least fifty (50) feet below the depth of the base of the aquifer from which said deepest water well is producing, or fifty (50) feet below the base of the Fox Hills Transition Zone if such deepest water well produces from the Fox Hills Aquifer.

Upon the request of the operator, the Director (or the Commission upon appeal) may grant a variance to the requirements of this subparagraph b. upon a showing to the Director, or the Commission upon appeal, that the variance does not violate the basic intent of said requirements. For such variance purpose, the basic intent of said requirements is stated to be to provide reasonable aquifer protection for the water well(s) which are permitted by the State of Colorado Division of Water Resources and are currently producing in the area potentially affected by the oil or gas well to be drilled.

c. **Exploratory Wells.** For purposes of the D–J Basin Fox Hills Protection Area only, the term exploratory well means any well:

- (1) Which targets the classically demonstrated zones with limited geographic extent such as channel, bar, valley fill and levee type sandstones that were deposited prior to the x-bentonite time stratigraphic event; or
- (2) Which can be demonstrated to be separated from a known producing horizon by a dry hole; or
- (3) Which can be demonstrated to be targeted to a horizon which is geologically separate from the producing horizon in an offsetting producing well, or
- (4) Which the Director, or the Commission upon appeal, may define as an exploratory well by variance, it being the basic intent of this definition that the requirements of subparagraph b. not operate to discourage the drilling of high risk wells.

317B. SURFACE WATER DRINKING WATER SUPPLY AREAS

a. Applicability determination. The applicability of Rules 317B.b and 317B.c will be determined by reviewing the Source Water Drinking Water Supply Area Map, located on the Commission website or by entering the longitude and latitude coordinates into the Source Water Drinking Water Supply Area Applicability Determination Tool, also located on the Commission website.

b. Oil and gas operations located in Surface Water Drinking Water Supply Area(s).

Oil and gas operations shall be located a minimum distance of five hundred (500) feet from a classified surface water supply segment for a distance of five (5) miles upstream of a public water supply intake used as a public water supply. Oil and gas operations shall also be located a minimum distance of five hundred feet from a water supply spring or ground water well under the influence of surface water, used as a public water supply.

c. Performance standards for oil and gas operations located in Surface Water Drinking Water Supply Area(s).

The following performance standards shall be implemented when oil and gas operations occur within a distance of one-half (1/2) mile from a classified surface water supply segment for a distance of five (5) miles upstream of a public water supply intake used as a public water supply. The following performance standards shall also be implemented when oil and gas operations occur within a distance of one-half (1/2) mile from a water supply spring or groundwater well under the influence of surface water, used as a public water supply:

- (1) Pitless drilling systems or containment of all drilling waste with impervious liners is required, as provided in Rule 904.
- (2) Baseline surface water data collection, a post-drilling surface water sample immediately downgradient of the oil and gas location, and a follow-up surface water sample at the same location three (3) months after the conclusion of all drilling activities and operations. The sample parameters must include:
 - a. pH;
 - b. alkalinity;
 - c. Specific conductance;
 - d. Major cations/anions (chloride, fluoride, sulfate, sodium);
 - e. Total dissolved solids;
 - f. BTEX/GRO/DRO;
 - g. TPH;
 - h. PAH's (including benzo(a)pyrene);
 - i. Nitrite/nitrate; and
 - j. Metals (arsenic, barium, calcium, chromium, iron, magnesium, selenium).
- (3) The Commission requires that current applicable analytical methods for drinking water be used and that analyses be performed by laboratories that maintain state or national accreditation programs.
- (4) Copies of all test results described above shall be provided to the Commission and the operator of the public water supply within three (3) months of collecting the samples. In addition, the analytical results and surveyed sample locations shall be submitted to the Commission in an electronic data deliverable format.
- (5) Operators shall develop, maintain, and immediately implement an emergency spill response program that includes employee training and maintenance at all times of current direct contact information for any downstream public water supplier(s) as well as the ability to notify any such downstream public water supplier(s).

In the event of a spill or release, the operator shall immediately implement the emergency response procedures.

If a spill or release impacts or threatens to impact the surface water drinking water supply, the operator shall notify the affected public water supplier(s) immediately following discovery of the release, and the spill or release shall be reported to the

Commission in accordance with Rule 906.b.(3), and to the Environmental Release/Incident Report Hotline (1-877-518-5608) in accordance with Rule 906.b.(4).

d. **Variances.** An oil and gas operator may request a variance from the setbacks or performance standards provided for in this section. The Commission may grant such a variance, in consultation with the Colorado Department of Public Health and Environment pursuant to Rule 306.d, if the operator demonstrates that the proposed oil and gas operations and applicable performance standards will provide sufficient protection for drinking water quality in the subject area.

318. LOCATION OF WELLS

All wells drilled for oil or gas to a common source of supply shall have the following setbacks:

- a. **Wells ~~deeper than 2,500 feet~~ or greater in depth.** A well to be drilled ~~in excess of~~ two thousand five hundred (2,500) feet ~~t or deeper in depth~~ shall be located not less than six hundred (600) feet from any lease line, and shall be located not less than one thousand two hundred (1,200) feet from any other producible or drilling oil or gas well when drilling to the same common source of supply, unless authorized by order of the Commission upon hearing.
- b. **Wells less than 2,500 feet in depth.** A well to be drilled to less than a depth of two thousand five hundred (2,500) feet below the surface shall be located not less than two hundred (200) feet from any lease line, and not less than three hundred (300) feet from any other producible oil or gas well, or drilling well, in said source of supply, except that only one producible oil or gas well in each such source of supply shall be allowed in each governmental quarter-quarter section unless an exception under Rule 318.c. is obtained.
- c. **Exception locations.** The Director may grant an operator's request for a well location exception to the requirements of this rule or any order because of geologic, environmental, topographic or archaeological conditions, irregular sections a surface owner request, or for other good cause shown provided that a waiver or consent signed by the lease owner toward whom the well location is proposed to be moved, agreeing that said well may be located at the point at which the operator proposes to drill the well and where correlative rights are protected. If the operator of the proposed well is also the operator of the drilling unit or unspaced offset lease toward which the well is proposed to be moved, waivers shall be obtained from the mineral interest owners under such lands. If waivers cannot be obtained from all parties and no party objects to the location, the operator may apply for a variance under Rule 502.b. If a party or parties object to a location and cannot reach an agreement, the operator may apply for a Commission hearing on the exception location.
- d. **Exemptions to Rule 318.**
 - (1) This rule shall not apply to authorized secondary recovery projects.
 - (2) This rule shall apply to fracture or crevice production found in shale, except from fields previously exempted from this rule.
 - (3) In a unit operation, approved by federal or state authorities, the rules herein set forth shall not apply except that no well in excess of two thousand five hundred (2,500) feet in depth shall be located less than so hundred (600) feet from the exterior or interior (if there be one) boundary of the unit area and no well less than two thousand five hundred (2,500) feet in depth below the surface shall be located less than two hundred (200) feet from the exterior or interior (if there be one) boundary of the unit area unless otherwise authorized by the order of the Commission after proper notice to owners outside the unit area.

- e. **Wells located near a mine.** No well drilled for oil or gas shall be located within two hundred (200) feet of a shaft or entrance to a coal mine not definitely abandoned or sealed, nor shall such well be located within one hundred (100) feet of any mine shaft house, mine boiler house, mine engine house, or mine fan; and the location of any proposed well shall insure that when drilled it will be at least fifteen (15) feet from any mine haulage or airway.

318A. GREATER WATTENBERG AREA SPECIAL WELL LOCATION, SPACING AND UNIT DESIGNATION RULE

- a. **GWA, GWA wells, GWA windows and unit designations.** The Greater Wattenberg Area ("GWA") is defined to include those lands from and including Townships 2 South to 7 North and Ranges 61 West to 69 West, 6th P.M. In the GWA, operators may utilize the following described surface drilling locations ("GWA windows") to drill, twin, deepen, or recomplete a well ("GWA well") and to commingle any or all of the Cretaceous Age formations from the base of the Dakota Formation to the surface:
- (1) A square with sides four hundred (400) feet in length, the center of which is the center of any governmental quarter-quarter section ("400' window"); and,
 - (2) A square with sides eight hundred (800) feet in length, the center of which is the center of any governmental quarter section ("800' window").
 - (3) Absent a showing of good cause, which shall include the existence of a surface use or other agreement with the surface owner authorizing a surface well location outside of a GWA window, all surface wellsites shall be located within a GWA window.
 - (4) Unit designations.
 - A. 400' window. When completing a GWA well in a 400' window to a spaced formation, the operator shall designate drilling and spacing units in accordance with existing spacing orders.
 - B. 800' window. When completing a GWA well in an 800' window, whether in spaced or unspaced formations, the operator shall: (i) designate drilling and spacing units in accordance with existing spacing orders where units are not smaller than a governmental quarter section; or (ii) form a voluntary drilling and spacing unit consisting of a governmental quarter section; or (iii) where designating a drilling and spacing unit smaller than a governmental quarter section, secure waiver(s) from the operator or from the mineral owners (if the operator is also the holder of the mineral lease) of the lands in the governmental quarter section that are not to be included in the spacing unit; or (iv) apply to the Commission to form an alternate unit or to respace the area.
 - C. Unspaced areas and wellbore spacing units. When completing a GWA well to an unspaced formation, the operator shall designate a drilling and spacing unit not smaller than a governmental quarter-quarter section if such well is proposed to be located greater than four hundred sixty (460) feet from the quarter-quarter section boundary in which it is located. If a well is proposed to be located less than four hundred sixty (460) feet from the governmental quarter-quarter section boundary, a wellbore spacing unit ("wellbore spacing unit") for such well shall be comprised of the four (4) governmental quarter-quarter sections nearest to the wellbore regardless of section or quarter section lines.

- b. **Recompletion/commingling of existing wells.** Any GWA well in existence prior to the effective date of this rule, which is not located as described above, may also be utilized for deepening to or recompletion in any Cretaceous Age formation and for the commingling of production therefrom.
- c. **Surface locations.** Prior to the approval of any Application for Permit-to-Drill submitted for a GWA well, the proposed surface well location shall be reviewed in accordance with the following criteria:
- (1) A new surface well location shall be approved in accordance with Commission rules when it is less than fifty (50) feet from an existing surface well location.
 - (2) When the operator is requesting a surface well location greater than fifty (50) feet from a well (unless safety or mechanical considerations of the well to be twinned or topographical or surface constraints justify a location greater than fifty (50) feet), the operator shall provide a consent to the exception signed by the surface owner on which the well is proposed to be located in order for the Director to approve the well location administratively.
 - (3) If there is no well located within a GWA window but there is an approved exception location well located outside of a GWA window that is attributed to such window, the provisions of subsections (1) and (2) of this subsection c. shall be applicable to such location.
- d. **Prior wells excepted.** This rule does not alter the size or configuration of drilling units for GWA wells in existence prior to the effective date of this rule. Where deemed necessary by an operator for purposes of allocating production, such operator may allocate production to any drilling and spacing unit with respect to a particular Cretaceous Age formation consistent with the provisions of this rule.
- e. **GWA infill.** This subsection applies to the following area of the GWA: Township 1 North, Ranges 66 West through 68 West; Township 1 North, Range 69 West: E½; Township 2 North, Ranges 64 West through 68 West; Township 2 North, Range 69 West: E½; Township 3 North, Ranges 64 West through 67 West; Township 4 North, Ranges 63 through 67 West; Township 5 North, Ranges 63 West through 67 West; Township 6 North, Ranges 63 West through 66 West, 6th P.M.
- (1) **Interior infill wells.** Additional bottom hole locations for the “J” Sand, Codell and Niobrara Formations are hereby established greater than four hundred sixty (460) feet from the outer boundary of any existing 320-acre drilling and spacing unit (“interior infill wells”). Pursuant to the well location provisions of subsection a., above, interior infill well locations shall be reached by utilizing directional drilling techniques from the GWA windows.
 - A. If a bottom hole location for an interior infill well is proposed to be located less than four hundred sixty (460) feet from the outer boundary of an existing drilling and spacing unit, a wellbore spacing unit as defined in a.(4)C., above, shall be designated by the operator for such well.
 - B. If a bottom hole location for an interior infill well is proposed to be located greater than four hundred sixty (460) feet from an existing 80-acre or existing 320-acre drilling and spacing unit, the spacing unit for such well shall conform to the existing 80-acre or existing 320-acre drilling and spacing unit.
 - (2) **Boundary wells.** Additional bottom hole locations for the “J” Sand, Codell and Niobrara Formations are hereby established less than four hundred sixty (460) feet from the outer boundary of a 320-acre governmental half section or from the outer boundary of any

existing 320-acre drilling and spacing unit ("boundary wells"). A wellbore spacing unit as defined in a.(4)C., above, shall be designated by the operator for such well.

- (3) **Additional producing formations.** An operator wanting to complete an interior infill well or boundary well in a formation other than the "J" Sand, Codell, or Niobrara Formations ("additional producing formation") must request an exception location prior to completing the additional producing formation. The spacing unit dedicated to the exception location shall comply with subsections (1) or (2), above, as appropriate.
- (4) **Water well sampling.** The Director shall require initial baseline testing prior to the first interior infill well or boundary well ("proposed GWA infill well") drilled within a governmental section. The following shall be used as guidance for the Director in establishing initial baseline testing:
- A. Within the governmental quarter section of the proposed GWA infill well, the closest water well ("water quality testing well") completed in the Laramie/Fox Hills Aquifer shall be sampled.
 - B. If no Laramie/Fox Hills water wells are located within the governmental quarter section, then the deepest representative water quality testing well within the governmental quarter section of the proposed GWA infill well shall be sampled.
 - C. If no water wells are located within the governmental quarter section, a water quality testing well (preferably completed in the Laramie/Fox Hills Aquifer) within one-half (½) mile of the proposed GWA infill well shall be selected.
 - D. If there are no water quality testing wells that meet the foregoing criteria, then initial baseline testing shall not be required.
 - E. Initial baseline testing shall include laboratory analysis of all major cations and anions, total dissolved solids, iron and manganese, nutrients (nitrates, nitrites, selenium), dissolved methane, pH, and specific conductance.
 - F. If free gas or a methane concentration level greater than 2 mg/l is detected in a water quality testing well, compositional analysis shall be performed to determine gas type (thermogenic, biogenic or an intermediate mix of both). If the testing results reveal biogenic gas, no further isotopic testing shall be required. If the testing results reveal thermogenic gas, carbon isotopic analyses of methane carbon shall be conducted. The Director may require further water well sampling at any time as a result of the laboratory results or in response to complaints from water well owners.
 - G. Copies of all test results described above shall be provided to the Director and the landowner where the water quality testing well is located within three (3) months of collecting the samples used for the test. Laboratory results shall also be submitted to the Director in an electronic format.
- (5) **Existing production facilities.** To the extent reasonably practicable, operators shall utilize existing roads, pipelines, tank batteries and related surface facilities for all interior infill wells and boundary wells.
- (6) **Notice and hearing procedures.** For proposed boundary wells, wellbore spacing units, and additional producing formations provided by this subsection e., the following process shall apply:

- A. Notice shall be given by certified mail by the operator of a proposed boundary well or wellbore spacing unit to all owners in the proposed wellbore spacing unit. Notice shall be given by certified mail by the operator of a proposed additional producing formation to all owners in cornering and contiguous spacing units of the requested completion and the proposed spacing unit; if the additional producing formation is unspaced only the owner in the proposed spacing unit needs to be notified.
- B. Each owner shall have a twenty (20) day period after receipt of such notice to object in writing to the operator to such well location, proposed spacing unit, or additional producing formation. If a timely objection is received, the matter shall be set on the docket at the next available Commission hearing. Absent receipt of an objection by the operator from an owner within such twenty (20) day period, the Director may administratively approve the boundary well, wellbore spacing unit, or additional producing formation, provided that it does not exceed eight (8) producing completions in the "J" Sand, Codell or Niobrara Formations in the 160-acre governmental quarter section as set forth in subsection f. below. A location plat evidencing the well location, wellbore spacing unit, or additional producing formation and applicable spacing unit shall be submitted to the Director together with copies of any surface waivers and a certification that no timely objections were received. An Application for Permit-to-Drill, Form 2, specifically identifying that a boundary well, a wellbore spacing unit, or an additional producing formation is proposed, shall also be filed with the Director in accordance with Rule 303.

(7) The Commission shall review the effectiveness of this subsection e. no later than March 1, 2008 and may require operators to submit data related to infill drilling performed under this subsection.

- f. **Limit on locations.** This rule does not limit the number of formations that may be completed in any GWA drilling and spacing unit nor, subject to subsection c., above, does it limit the number of wells that may be located within the GWA windows. However, absent Commission order otherwise, there shall be no more than eight (8) producing completions in the "J" Sand, Codell or Niobrara Formations in any 160-acre governmental quarter section.
- g. **GWA water sampling.** The Director may apply appropriate drilling permit conditions to require water well sampling near any proposed GWA wells in accordance with the guidelines set forth in subsection e.(4), above.
- h. **Exception locations.** The provisions of Rule 318.c. respecting exception locations shall be applicable to GWA wells, however, absent timely objection, boundary wells, wellbore spacing units, and additional producing formations shall be administratively approved as provided in subsection e.(6) above.
- i. **Correlative rights.** This rule shall not serve to bar the granting of relief to owners who file an application alleging abuse of their correlative rights to the extent that such owners can demonstrate that their opportunity to produce Cretaceous Age formations from the drilling locations herein authorized does not provide an equal opportunity to obtain their just and equitable share of oil and gas from such formations.
- j. **Supersedes orders and policy.** Subject to paragraph d. above, this rule supersedes all prior Commission drilling and spacing orders affecting well location and density requirements of GWA wells and supersedes and replaces the "Policy on Staff Administrative Application of the Greater Wattenberg Area Well Location Rule 318A.," dated April 26, 1999.

Rule No. 318B. Yuma/Phillips County Special Well Location Rule

- a. This Special Well Location Rule (“WLR”) governs wells drilled to and completed in the Niobrara Formation for the following lands: [Eff 07/30/2006](#)

Township 1 North Range 44 West: Sections 7, 18, 19, 30 through 33 Range 45 West: Sections 7 through 36 Range 46 West: Sections 4 through 9 Range 47 West: All Range 48 West: All [Eff 07/30/2006](#)

Township 2 North Range 46 West: All Range 47 West: All Range 48 West: All [Eff 07/30/2006](#)

Township 3 North Range 45 West: Sections 1 through 18 Range 46 West: All Range 47 West: All Range 48 West: All [Eff 07/30/2006](#)

Township 4 North Range 45 West: All Range 46 West: All Range 47 West: All Range 48 West: All [Eff 07/30/2006](#)

Township 5 North Range 45 West: All Range 46 West: All Range 47 West: All Range 48 West: All [Eff 07/30/2006](#)

Township 6 North Range 45 West: All Range 46 West: All Range 47 West: All Range 48 West: All [Eff 07/30/2006](#)

Township 7 North Range 45 West: All Range 46 West: All Range 47 West: All [Eff 07/30/2006](#)

Township 8 North Range 45 West: All Range 46 West: All Range 47 West: All [Eff 07/30/2006](#)

Township 9 North Range 45 West: Sections 19 through 36 Range 46 West: Sections 19 through 36 Range 47 West: Sections 19 through 36 [Eff 07/30/2006](#)

Township 1 South Range 44 West: Sections 3 through 10, 16 through 21, 27 through 34 Range 45 West: Sections 3 through 5 Range 46 West: Sections 4 through 9, 16 through 36 Range 47 West: All Range 48 West: All [Eff 07/30/2006](#)

Township 2 South Range 44 West: Sections 3 through 6 Range 45 West: Section 7: W½, Section 18: W½, Section 19: All Range 46 West: Sections 1 through 24 Range 47 West: All Range 48 West: All [Eff 07/30/2006](#)

Township 3 South Range 48 West: All [Eff 07/30/2006](#)

Township 4 South Range 48 West: All [Eff 07/30/2006](#)

Within the WLR Area, operators may conduct drilling operations to the Niobrara Formation as follows: [Eff 07/30/2006](#)

- (1) Four (4) Niobrara Formation wells may be drilled in any quarter section. [Eff 07/30/2006](#)
- (2) No more than one (1) well may be located in any quarter quarter section. [Eff 07/30/2006](#)
- (3) No minimum distance shall be required between wells producing from the Niobrara Formation in any quarter section. [Eff 07/30/2006](#)
- (4) Wells shall be located at least three hundred (300) feet from the ~~outer~~ boundary of said quarter section, and wells located outside any drilling units already established by the Commission in the WLR Area prior to this WLR’s effective date (July 30, 2006) shall, in

addition, be located at least three hundred (300) feet from any lease line. Further, wells shall be located not less than nine hundred (900) feet from any producible well drilled to the Niobrara Formation prior to this WLR's effective date (July 30, 2006) located in a contiguous or cornering quarter section unless exception is approved by the Director. *Eff 07/30/2006*

- b. Any well drilled to the Niobrara Formation in the WLR Area prior to the effective date (July 30, 2006) of this WLR which is legally located when this WLR becomes effective but is not located as listed above shall be treated as properly located for purposes of this WLR. *Eff 07/30/2006*
- c. This WLR does not alter the size or configuration of any drilling units already established by the Commission in the WLR Area prior to this WLR's effective date (July 30, 2006). *Eff 07/30/2006*
- d. This WLR shall not serve to bar the granting of relief to owners who file an application alleging abuse of their correlative rights to the extent that such owners can demonstrate that their opportunity to produce from the Niobrara Formation at locations herein authorized does not provide an equal opportunity to obtain their just and equitable share of oil and gas from such formation. *Eff 07/30/2006*
- e. Well exception locations to this WLR shall be subject to the provisions of Rule 318.c. *Eff 07/30/2006*
- f. This WLR is a well location rule and supersedes existing Commission orders in effect at the time of its adoption only to the extent that the existing orders relate to permissible well locations and the number of wells that may be drilled in a quarter section. Commission orders in effect when this Rule 318B. is adopted nonetheless apply with respect to the size of drilling units already established by the Commission in the WLR Area. This WLR is not intended to establish well spacing. Accordingly, when an area subject to Rule 318B. is otherwise unspaced, it does not act to space the area but instead provides the permissible locations for any new Niobrara Formation wells. Similarly, Rule 318B. does not affect production allocation for existing or future wells. An operator may allocate production in accordance with the applicable lease, contract terms or established drilling and spacing units recognizing the owner's right to apply to the COGCC to resolve any outstanding correlative rights issues. *Eff 07/30/2006*

319. ABANDONMENT

The requirements for abandoning a well shall be as follows:

a. Plugging

- (1) A dry or abandoned well, seismic, core, or other exploratory hole, must be plugged in such a manner that oil, gas, water, or other substance shall be confined to the reservoir in which it originally occurred. Any cement plug shall be a minimum of fifty (50) feet in length and shall extend a minimum of fifty (50) feet above each zone to be protected. The material used in plugging, whether cement, mechanical plug, or some other equivalent method approved in writing by the Director, must be placed in the well in a manner to permanently prevent migration of oil, gas, water, or other substance from the formation or horizon in which it originally occurred. The preferred plugging cement slurry is that recommended by the American Petroleum Institute (API) Environmental Guidance Document: Well Abandonment and Inactive Well Practices for U.S. Exploration and Production Operations, i.e., a neat cement slurry mixed to API standards. However, pozzolan, gel and other approved extenders may be used if the operator can document to the Director's satisfaction that the slurry design will achieve a minimum compressive strength of three hundred (300) psi after twenty-four (24) hours and eight hundred (800) psi after seventy-two (72) hours measured at ninety-five degrees fahrenheit (95 °F) and at eight hundred (800) psi.

- (2) The operator shall have the option as to the method of placing cement in the hole by (a) dump bailer, (b) pumping a balanced cement plug through tubing or drill pipe, (c) pump and plug, or (d) equivalent method approved by the Director prior to plugging. Unless prior approval is given, all wellbores shall have water, mud or other approved fluid between all plugs.
- (3) No substance of any nature or description other than normally used in plugging operations shall be placed in any well at any time during plugging operations. All final reports of plugging and abandonment shall be submitted on a Well Abandonment Report, Form 6, and accompanied by a job log or cement verification report from the plugging contractor specifying the type of fluid used to fill the wellbore, type and slurry volume of API Class cement used, date of work, and depth the plugs were placed.
- (4) In order to protect the fresh water strata, no surface casing shall be pulled from any well unless authorized by the Director.
- (5) All abandoned wells shall have a plug or seal placed at the surface of the ground or the bottom of the cellar in the hole in such manner as not to interfere with soil cultivation or other surface use. The top of the pipe must be sealed with either a cement plug and a screw cap, or cement plug and a steel plate welded in place or by other approved method, or in the alternative be marked with a permanent monument which shall consist of a piece of pipe not less than four (4) inches in diameter and not less than ten (10) feet in length, of which four (4) feet shall be above the general ground level, the remainder to be embedded in cement or to be welded to the surface casing.
- (6) The operator must obtain approval from the Director of the plugging method prior to plugging, and shall notify the Director of the estimated time and date the plugging operation of any well is to commence, and identify the depth and thickness of all known sources of groundwater. For good cause shown, the Director may require that a cement plug be tagged if a cement retainer or bridge plug is not used. If requested by the operator, the Director shall furnish written follow-up documentation for a requirement to tag cement plugs.
- (7) **Wells Used for Fresh Water.** When the well, seismic, core, or other exploratory hole to be plugged may safely be used as a fresh water well, and such utilization is desired by the landowner, the well need not be filled above the required sealing plug set below fresh water; provided that written authority for such use is secured from the landowner and, in such written authority, the landowner assumes the responsibility to plug the well upon its abandonment as a water well in accordance with these rules. Such written authority and assumption of responsibility shall be filed with the Commission, provided further that the landowner furnish a copy of the permit for a water well approved by the Division of Water Resources.

b. Shut-in and Temporary Abandonment.

- (1) A well may be ~~shut-in or~~ temporarily abandoned when completed, upon approval of the Director, for a period not to exceed six (6) months provided the hole is cased or left in such a manner as to prevent migration of oil, gas, water or other substance from the formation or horizon in which it originally occurred. All ~~shut-in or~~ temporarily abandoned wells shall be closed to the atmosphere with a swedge and valve or packer, or other approved method. The well sign shall remain in place. If an operator requests ~~shut-in or~~ temporary abandonment status in excess of six (6) months the operator shall state the reason for requesting such extension and state plans for future operation. A Sundry Notice, Form 4, or other form approved by the Director, shall be submitted annually stating the ~~status of method~~ the well is closed to the atmosphere and plans for future operation.

- (2) The manner in which the well is to be maintained should be reported to the Commission, and bonding requirements, as provided for in Rule 304, kept in force until such time as the well is permanently abandoned.
- (3) A well which has ceased production or injection ~~or and~~ is incapable of production or injection shall be abandoned within six (6) months thereafter unless the time is extended by the Director upon application by the owner. The application shall indicate why the well is ~~shut-in~~ temporarily abandoned and future plans for utilization. In the event the well is covered by a blanket bond, the Director may require an individual plugging bond on the ~~shut-in or~~ temporarily abandoned well. Gas storage wells are to be considered active at all times unless physically plugged.
- (4) In addition to the requirements of Rule 324, an injection well that is shut-in or temporarily abandoned shall have a mechanical integrity test performed within two years after the shut-in date in order to be retained in shut-in or temporarily abandoned status.
- (5) If an injection well which has been shut-in or temporarily abandoned is determined not to have mechanical integrity as a result of any test required by the Commission rules and regulations, it must, within six (6) months following such a test, be either repaired and pass a mechanical integrity test or be plugged and abandoned.

320. LIABILITY

The owner and operator of any well drilled for oil or gas production or injection purposes, or any seismic, core, or other exploratory holes, whether cased or uncased, shall be liable and responsible for the plugging thereof in accordance with the rules and regulations of the Commission regardless of whether the cost of such plugging and abandonment exceeds the amount of security as set forth in Rule 304.

321. DIRECTIONAL DRILLING

If an operator intends to drill a horizontal or deviated wellbore utilizing controlled directional drilling methods, other than whipstocking due to hole conditions, the plans shall accompany an application for Permit-to-Drill, Form 2. In addition to the information required on the plat in Rule 303.c., the plat shall also show the surface and bottom hole location. If the surface location is in a different section than the bottom hole location, a plat depicting each section is required. Additionally, the proposed directional survey including two (2) wellbore deviation plots, one depicting the plan view and one depicting the side view, shall accompany the application.

Within thirty (30) days of completion the operator shall submit a Drilling Completion Report, Form 5, according to Rule 308., with a copy of the directional survey coordinate listing and the wellbore deviation plots (plan and side views). The survey data shall be provided in a single analysis report with sufficient detail to determine the location of the wellbore from the base of the surface casing to the kick off point and from that point to total depth. It shall be the operator's responsibility to ensure that the wellbore complies with the setback requirements in Commission orders or rules prior to producing the well.

322. COMMINGLING

The commingling of production from multiple formations or wells is encouraged in order to maximize the efficient use of wellbores and to minimize the surface disturbance from oil and gas operations. Commingling may be conducted at the discretion of an operator, unless the Commission has issued an order or promulgated a rule excluding specific wells, geologic formations, geographic areas, or field from commingling in response to an application filed by a directly and adversely affected or aggrieved party or on the Commission's own motion.

This rule supercedes the procedural requirements to establish commingling and allocation contained in any Commission order as of the effective date of this rule, but does not supersede any allocation made under such order.

323. OPEN PIT STORAGE OF OIL OR HYDROCARBON SUBSTANCES

Storage of oil or any other produced liquid hydrocarbon substance in earthen pits or reservoirs is considered to constitute waste, except in emergencies where such substances cannot be otherwise contained. In such cases, these substances must be reclaimed and such storage eliminated as soon as practicable after the emergency is controlled, unless special permission to delay or continue is obtained from the Director.

324A. POLLUTION

- a. The operator shall take precautions to prevent significant adverse environmental impacts to air, water, soil, or biological resources to the extent necessary to protect public health, safety and welfare, ~~including the environment and wildlife resources by using~~ taking into consideration cost-effective ~~ness~~ ness and technically ~~feasibility~~ feasibility ~~le measures to protect environmental quality and to~~ prevent the unauthorized discharge or disposal of oil, gas, E&P waste, chemical substances, trash, discarded equipment or other oil field waste.
- b. No operator, in the conduct of any oil or gas operation shall perform any act or practice which shall constitute a violation of water quality standards or classifications established by the Water Quality Control Commission for waters of the state, or any point of compliance established by the Director pursuant to Rule 322D. The Director may establish one or more points of compliance for any event of pollution, which shall be complied with by all parties determined to be a responsible party for such pollution.
- c. No owner, in the conduct of any oil or gas operation, shall perform any act or practice which shall constitute a violation of any ~~comprehensive plan adopted by~~ applicable air quality laws, regulations, and permits as administered by the Air Quality Control Commission ~~or any other local or federal agency with authority for regulating air quality associated with such activities for the prevention, control and abatement of pollution of the air of the state.~~
- d. No injection shall be authorized pursuant to Rule 323 or Rule 401 unless the person applying for authorization to conduct the injection activities demonstrates that those activities will not result in the presence in an underground source of drinking water of any physical, chemical, biological or radiological substance or matter which may cause a violation of any primary drinking water regulation in effect as of July 12, 1982 and found at 40 C.F.R. Part 14~~12~~, or may otherwise adversely affect the health of persons. An underground source of drinking water is an aquifer or its portion:
 - (1) (a) which supplies any public water system; or
 - (b) which contains a sufficient quantity of ground water to supply a public water system; and
 - (i) currently supplies drinking water for human consumption; or
 - (ii) contains fewer than 10,000 milligrams per liter total dissolved solids; and
 - (2) which is not an exempted aquifer.
- e. No person shall accept water produced from oil and gas operations, or other oil field waste for disposal in a commercial disposal facility, without first obtaining a Certificate of Designation from the

County in which such facility is located, in accord with the regulations pertaining to solid waste disposal sites and facilities as promulgated by the Colorado Department of Public Health and Environment.

324B . EXEMPT AQUIFERS

a. **Criteria for aquifer exemption.** An aquifer or a portion thereof may be designated by the Director or the Commission as an exempted aquifer, in connection with the filing of an application pursuant to Rule 325, or Rule 401, and after notification to the Colorado Department of Public Health and Environment, Water Quality Control Division, if it meets the following criteria:

(1) It does not currently serve as a source of drinking water; and either subparagraph (2) or (3) below apply;

(2) It cannot now and will not in the future serve as a source of drinking water because:

A. It is mineral, hydrocarbon or geothermal energy producing, or can be demonstrated by a person filing an application pursuant to Rule 324, or Rule 401, to contain minerals or hydrocarbons that considering their quantity and location are expected to be commercially producible; or

B. It is situated at a depth or location which makes recovery of water for drinking water purposes economically or technologically impractical; or

C. It is so contaminated that it would be economically or technologically impractical to render the water fit for human consumption;

(3) The total dissolved solids content of the ground water is more than three thousand (3,000) and less than ten thousand (10,000) milligrams per liter and it is not reasonably expected to supply a public water system.

b. **Aquifer exemption public notice.** If an aquifer exemption is required as part of an injection permit process, the injection well applicant shall apply for an aquifer exemption. This application shall contain data and information which show that applicable aquifer exemption criteria set forth in Rule 324B.a. are met. After evaluation of the application and prior to designating an aquifer or a portion thereof as an exempted aquifer, the Director shall publish a notice of proposed designation in a newspaper of general circulation serving the area where the aquifer is located. The notice shall identify such aquifer or portion thereof which the Director proposes to designate as exempted, and shall state that any person who can make a showing to the Director that the requested designation does not meet the criteria set forth in Rule 324B.a. may request the Commission to hold a hearing thereon.

c. **Evaluation of written requests for public hearing.** Written requests for a public hearing before the Commission shall be reviewed and evaluated by the Director in consultation with the applicant to determine if the criteria set forth in Rule 324B.a. have been met. If, within thirty (30) days after publication of the notice, the Commission receives a hearing request for which the Director determines the criteria set forth in Rule 324B.a. have not been met, the Commission shall hold such a hearing in accordance with the provisions of §34-60-108, C.R.S., 1973, as amended, and shall make a final determination regarding designation.

d. **Aquifer exemption designation.** If, within thirty (30) days after publication of the notice described in subparagraph b. above, the Commission does not receive a hearing request or receives a hearing request for which the Director determines the criteria set forth in Rule 324B.a. have been met, said aquifer or portion thereof shall be considered exempted thirty (30) days after publication of the notice.

324C. QUALITY ASSURANCE FOR CHEMICAL ANALYSIS

For the purpose of application for a permit for all wells authorized under Rule 323 and Rule 401, collection and analysis of water samples must comply with the Commission's approved quality assurance project plan.

324D. CRITERIA TO ESTABLISH POINTS OF COMPLIANCE

In determining a point of compliance, the Director shall take into consideration recommendations of the operator or any responsible party or parties, if applicable, including technical and economic feasibility, together with the following factors:

- a. The classified use established by the Water Quality Control Commission, for any groundwater or surface water which will be impacted by contamination. If not so classified, the Director shall consider the quality, quantity, potential economic use and accessibility of such water;
- b. The geologic and hydrologic characteristics of the site, such as depth to groundwater, groundwater flow, direction and velocity, soil types, surface water impacts, and climate;
- c. The toxicity, mobility, and persistence in the environment of contaminants released or discharged from the site;
- d. Established wellhead protection areas;
- e. The potential of the site as an aquifer recharge area; and
- f. The distance to the nearest permitted domestic water well or public water supply well completed in the same aquifer affected by the event.
- g. The distance to the nearest permitted livestock or irrigation water well completed in the same aquifer affected by the event.

325. UNDERGROUND DISPOSAL OF WATER

- a. No person shall commence operations for the underground disposal of water, or any other fluids, into a Class II well, or any well regulated by the Commission, nor shall any person commence construction of such a well, without having first obtained written authorization for such operations from the Director. Persons wishing to obtain authorization to conduct underground disposal activities shall file with the Director an Underground Injection Formation Permit Application, Form 31 and an Injection Well Permit Application, Form 33. If the disposal well is to be drilled, this application shall be submitted concurrently with the Application for Permit-to-Drill, Form 2, along with a service and filing fee to be determined by the Commission. (See Appendix III)
- b. **Withholding approval of underground disposal of water.** The Director may withhold the issuance of a permit and the granting of approval of any Underground Injection Formation Permit Application, Form 31 and any Injection Well Permit Application, Form 33 for any proposed disposal well when the Director has reasonable cause to believe that the proposed disposal well could result in a significant adverse impact on the environment or public health, safety and welfare. In the event such approval is not granted, the Director shall immediately advise the operator and bring the matter to the Commission at its next regularly scheduled hearing.
- c. The application for a dedicated injection well shall include the following information:
 - (1) The name, description and depth of the formation into which water is to be injected, and all underground sources of drinking water which may be affected by the proposed operation.

A water analysis of the injection formation (if the total dissolved solids of the injection formation is determined to less than ten thousand (10,000) milligrams per liter, the aquifer must be exempted in accordance with Rule 322B.). The fracture pressure or fracture gradient of the injection formation.

- (2) A base plat covering the area within one-quarter (1/4) mile of the proposed disposal well showing location of the proposed disposal well or wells and the location of all oil and gas wells, domestic and irrigation wells of public record and the identification of all oil and gas wells currently producing from the proposed injection zone within one-half (1/2) mile of the disposal zone. The names, addresses and holdings of all surface and mineral owners as defined in C.R.S. 34-60-103 (7), within one-quarter (1/4) mile of the proposed disposal well or wells, or all owners of record in the field if a field-wide system is proposed. These owners shall be specifically outlined and identified on the base plat. A list of all domestic and irrigation wells of public record, within one-quarter (1/4) mile of the proposed disposal well or wells, including their location and depth. (This information may be obtained at the Colorado Division of Water Resources.) Remedial action shall be required for any well within one-quarter (1/4) mile of the proposed disposal well or wells in which the injection zone is not adequately confined. The applicant shall include information regarding the need for remedial action on any well(s) penetrating the injection zone within one-quarter (1/4) mile of the proposed disposal well or wells, which the applicant may or may not operate and a plan for the performance of any such remedial work. A copy of all plans and specifications for the system and its appurtenances.
 - (3) A resistivity log, run from the bottom of the surface casing to total depth of the disposal well or wells or any well within one (1) mile together with a log from that well that can be correlated with the injection well. If the disposal well is to be drilled, a description of the typical stratigraphic level of the disposal formation in the disposal well or wells, and any other available logging or testing data, on the disposal well or wells.
 - (4) A full description of the casing in the disposal well or wells. This shall include any information available on any remedial cement work performed to any casing string. This shall also include a schematic drawing showing all casing strings with cement volumes and tops, existing or as proposed, plug back total depth, depth of any existing open or squeezed perforations, setting depths of any bridge plugs existing or proposed, planned perforations in the injection zone, tubing and packer size and setting depth. A diagram of the surface facility showing all pipelines and tanks associated with the system. A listing of all leases connected directly by pipelines to the system.
 - (5) A listing of all sources of water, by lease and well, to be injected shall be submitted on a Source of Produced Water for Disposal, Form 26.
 - (6) Any proposed stimulation program.
 - (7) The estimated minimum and maximum amount of water to be injected daily with anticipated injection pressures. Maximum injection pressure will be set by the Director upon approval.
 - (8) The names and addresses of those persons notified by the applicant, as required by subparagraph i. of this rule.
- d. The application for a simultaneous injection well shall include the following:
- (1) The name, description and depth of the formation into which water is to be injected, and all underground sources of drinking water which may be affected by the proposed operation. A water analysis of the injection formation (if the total dissolved solids of the injection

formation is determined to be less than ten thousand (10,000) milligrams per liter, the aquifer must be exempted in accordance with Rule 324B.); a water analysis from the producing formation; and go fracture pressure or fracture gradient of the injection formation.

- (2) A base plat covering the area within one-quarter (1/4) mile of the proposed well showing the location of the proposed well or wells and the location of all oil and gas wells, domestic and irrigation wells of public record and the identification of all oil and gas wells currently producing from the proposed injection zone within one-half (1/2) mile of the disposal zone and the names, addresses and holdings of all mineral owners as defined in §34-60-103 (7), C.R.S., within one-quarter (1/4) mile of the proposed disposal well or wells, or all owners of record in the field if a field-wide system is proposed. These owners shall be specifically outlined and identified on the base plat. Remedial action shall be required for any well within one-quarter (1/4) mile of the proposed well or wells in which the injection zone is not adequately confined. The applicant shall include information regarding the need for remedial action on any well(s) penetrating the injection zone within one-quarter (1/4) mile of the proposed disposal well or wells, which the applicant may or may not operate and a plan for the performance of any such remedial work and a copy of all plans and specifications for the system and its appurtenances.
- (3) A resistivity log, run from the bottom of the surface casing to total depth of the disposal zone or such log from a well within one (1) mile together with a log from that well that can be correlated with the simultaneous injection well. If the simultaneous injection well is to be drilled, a description of the typical stratigraphic level of the injection formation in the simultaneous injection well or wells, and any other available logging or testing data, on the simultaneous injection well or wells.
- (4) A full description of the casing in the simultaneous injection well or wells. This shall include any information available on any remedial cement work performed to any casing string. This shall also include a schematic drawing showing all casing strings with cement volumes and tops, existing or as proposed, plug back total depth, depth of any existing open or squeezed perforations, setting depths of any bridge plugs existing or proposed, planned perforations in the injection zone, downhole pump setting depth and any tubing and or packer size and setting depth.
- (5) Any proposed stimulation program.
- (6) The estimated amount of water to be injected daily.
- (7) Downhole pump specifications, together with a calculation of maximum discharge pressure created under proposed wellbore configuration. Downhole pump configurations shall be designed to inject below the injection zone fracture gradient.
- (8) The names and addresses of those persons notified by the applicant, as required by subparagraph j. of this rule.

The following rules shall apply to both dedicated injection well and simultaneous injection well applications.

- e. **Mechanical integrity testing requirement.** Prior to application approval, the proposed disposal well must satisfactorily pass a mechanical integrity test in accordance with Rule 326.
- f. **Centralized and commercial disposal well requirements.** Prior to application approval, the appurtenant centralized and commercial disposal well operations shall comply with the requirements of Rules 704. and 908.

- g. **Multiple well applications.** Application may be made to include the use of more than one (1) disposal well on the same lease, or on more than one (1) lease. Wherever feasible and applicable, the application shall contemplate a coordinated plan for the entire field.
- h. The designated operator of a unitized or cooperative project shall execute the application.
- i. Notice of the application for a dedicated injection well shall be given by the applicant by registered or certified mail or by personal delivery, to each surface owner and owner as defined in §34-60-103(7), C.R.S., within one-quarter (1/4) mile of the proposed well or wells and to owners and operators of oil and gas wells producing from the injection zone within one-half (1/2) mile of the disposal well or to owners of cornering and contiguous units where injection will occur into the producing zones, whichever is the greater distance.
- j. Notice of the application for a simultaneous injection well shall be given by the applicant by registered or certified mail or by personal delivery, to each owner as defined in §34-60-103(7), C.R.S., within one-quarter (1/4) mile of the proposed well or wells and to owners and operators of oil and gas wells producing from the injection zone within one-half (1/2) mile of the disposal well or to owners of cornering and contiguous units where injection will occur into the producing zones, whichever is the greater distance.
- k. A copy of the notice of application shall be included with the disposal application filed with the Commission, and the applicant shall certify that notice by registered or certified mail or by personal delivery, to each of the owners specified in subparagraphs i. and j., has been accomplished.
- l. **Notice of application requirements.** The notice shall describe the proposed operation and shall state that any person who would be directly and adversely affected or aggrieved by the authorization of the underground disposal into the proposed injection zone may file, within fifteen (15) days of notification, a written request for a public hearing before the Commission, provided such request meets the protest requirements specified in subparagraph m. of this rule. The notice shall also state that additional information on the operation of the proposed disposal well may be obtained at the Commission office.
- m. **Evaluation of written requests for public hearing.** Written requests for public hearing before the Commission by a person, notified in accordance with subparagraphs i. and j. of this rule, who may be directly and adversely affected or aggrieved by the authorization of the underground disposal into the proposed injection zone, shall be reviewed and evaluated by the Director in consultation with the applicant. Written protests shall specifically provide information on:
- (1) Possible conflicts between the injection zone's proposed disposal use and present or future use as a source of drinking water or present or future use as a source of hydrocarbons, or
 - (2) Operations at the well site which may affect potential and current sources of drinking water.
- n. **Dedicated injection well public notice.** The Director shall publish a notice of the proposed disposal permit for dedicated injection wells in a newspaper of general circulation serving the area where the well(s) is (are) located. The notice shall briefly describe the disposal application and include legal location, proposed injection zone, depth of injection and other relevant information. Comment period on the proposed disposal application shall end thirty (30) days after date of publication. If any data, information, or arguments submitted during the public comment period appear to raise substantial questions concerning potential impacts to the environment, public health, safety and welfare raised by the proposed disposal well permit the Director may request that the Commission hold a hearing.

- o. **Injection application deadlines.** If all of the data or information necessary to approve the disposal application has not been received within six (6) months of the date of receipt, the application will be withdrawn from consideration. However, for good cause shown, a ninety (90) day extension may be granted, if requested prior to the date of expiration.

326. MECHANICAL INTEGRITY TESTING

For the purpose of this rule, a mechanical integrity test of a well is a test designed to determine if there is a significant leak in the casing, tubing, or packer of the well, and there is significant fluid movement into an underground source of drinking water through vertical channels adjacent to the wellbore.

a. **Injection Wells** - A mechanical integrity test shall be performed on all injection wells.

- (1) The mechanical integrity test shall include one (1) of the following tests to determine whether significant leaks are present in the casing, tubing, or packer:
 - A. A pressure test with liquid or gas at a pressure of not less than three hundred (300) psi or the minimum injection pressure, whichever is greater, and not more than the maximum injection pressure; or
 - B. The monitoring and reporting to the Director, on a monthly basis for sixty (60) consecutive months, of the average casing-tubing annulus pressure, following an initial pressure test; or
 - C. In lieu of A. and B. any equivalent test or combinations of tests approved by the Director.
- (2) The mechanical integrity test shall include one (1) of the following tests to determine whether there are significant fluid movements in vertical channels adjacent to the well bore:
 - A. Cementing records which shall only be valid for injection wells in existence prior to July 1, 1986;
 - B. Tracer surveys;
 - C. Cement bond log or other acceptable cement evaluation log;
 - D. Temperature surveys; or
 - E. In lieu of A.-D., any other equivalent test or combination of tests approved by the Director.
- (3) No person shall inject fluids into a new injection well unless a mechanical integrity test on the well has been performed and supporting documents including Mechanical Integrity Test, Form 14B, submitted and approved by the Director. Verbal approval may be granted for continuous injection following the test.
- (4) Following the performance of the initial mechanical integrity test required by subparagraph (3), additional mechanical integrity tests shall be performed on each type of injection well as follows:
 - A. Dedicated injection well. As long as it is used for the injection of fluids, mechanical integrity tests shall be performed at the rate of not less than one (1) test every five (5) years. The first five (5) year period shall commence on the date the initial mechanical integrity test is performed.

B. Simultaneous injection well. No additional tests will be required after the initial mechanical integrity test.

(5) Following the performance of the initial mechanical integrity test required by subparagraph (3), additional mechanical integrity tests shall be performed on each well, as long as it is used for the injection of fluids, at the rate of not less than one (1) test every five (5) years. The first five (5) year period shall commence on the date the initial mechanical integrity test is performed.

b. **Shut-in Wells** - All shut-in wells shall pass a mechanical integrity test.

(1) A mechanical integrity test shall be performed on each shut-in well within two (2) years of the initial shut-in date. A mechanical integrity test shall be performed on each shut-in well on five (5) year intervals from the date the initial mechanical integrity test was performed. If, at any time, surface equipment is removed or the well becomes incapable of production, a mechanical integrity test must be performed within thirty (30) days. The mechanical integrity test for a shut-in well shall be:

A. Isolation of the wellbore with a bridge plug or similar approved isolating device set one hundred (100) feet or less above the highest perforations and a pressure test with liquid or gas at a pressure of not less than three hundred (300) psi surface pressure or any equivalent test or combination of tests approved by the Director.

B. Following the performance of the initial mechanical integrity test for shut-in wells, additional tests, other than the five (5) year interval test, may be required.

c. Not less than ten (10) days prior to the performance of any mechanical integrity test required by this rule, any person required to perform the test shall notify the Director, in writing, of the scheduled date on which the test will be performed.

d. All wells shall maintain mechanical integrity. All wells which lack mechanical integrity shall be repaired or plugged and abandoned within six (6) months of failing a mechanical integrity test or of a determination through any other means that the well lacks mechanical integrity, and the well site reclaimed in accordance with Rule 1004.a. All injection wells which fail a mechanical integrity test, or which are determined through any other means to lack mechanical integrity, shall be shut-in immediately.

327. LOSS OF WELL CONTROL

The operator shall take all reasonable precautions, in addition to fully complying with Rule 317, to prevent any oil, gas or water well from blowing uncontrolled and shall take immediate steps and exercise due diligence to bring under control any such well, and shall report such occurrence to the Director as soon as practicable, but no later than twenty-four (24) hours following the incident. Within fifteen (15) days after all occurrences the operator shall submit a written report giving all details. The Director shall maintain these written reports in a central file.

328. MEASUREMENT OF OIL

The volume of production of oil shall be computed in terms of barrels of clean oil on the basis of properly calibrated meter measurements or tank measurements of oil-level differences, made and recorded to the nearest one-quarter (1/4) inch of 100% capacity tables, subject to the following corrections:

a. **Correction for Impurities.** The percentage of impurities (water, sand and other foreign substances not constituting a natural component part of the oil) shall be determined to the satisfaction of the

Director, and the observed gross volume of oil shall be corrected to exclude the entire volume of such impurities.

- b. **Temperature Correction.** The observed volume of oil corrected for impurities shall be further corrected to the standard volume of 60°F in accordance with Atomic Standards and Testing Methods (A.S.T.M.) D-1250 Table 7, ~~or any revisions thereof and any supplements thereto~~ or any close approximation thereof approved by the Director.
- c. **Gravity Determination.** The gravity of oil at 60° F. shall be determined in accordance with Atomic Standards and Testing Methods (A.S.T.M.) D-1250 Table 5, ~~or any revisions thereof and any supplements thereto~~ or any close approximation thereof approved by the Director.

329. MEASUREMENT OF GAS

Production of gas of all kinds shall be measured by meter unless otherwise agreed to by the Director. For computing volume of gas to be reported to the Commission, the standard pressure base shall be 14.73 psia, regardless of atmospheric pressure at the point of measurement, and the standard temperature base shall be 60°F. All volumes of gas to be reported to the Commission shall be adjusted by computation to these standards, regardless of pressures and temperatures at which the gas was actually measured, unless otherwise authorized by the Director.

330. MEASUREMENT OF PRODUCED AND INJECTED WATER

- a. The volume of produced water shall be computed and reported in terms of barrels on the basis of properly calibrated meter measurements or tank measurements of water-level differences, made and recorded to the nearest one-quarter (1/4) inch of one hundred (100%) percent capacity tables. If measurements are based on oil/water ratios, the oil/water ratio must be based on a production test performed during the last calendar year. Other equivalent methods for measurement of produced water may be approved by the Director.
- b. The volume of water injected into a Class II dedicated injection well shall be computed and reported in term of barrels on the basis of property calibrated meter measurements or tank measurements of water-level differences made and recorded to the nearest one-quarter (1/4) inch of one hundred percent (100%) capacity tables. If water is transported to an injection facility by means other than direct pipeline, measurement of water is required by a properly calibrated meter
- c. The volume of water injected and produced in simultaneous injection wells shall be computed and reported in terms of barrels on the basis of calculated pump volumes, on the basis of property calibrated meter measurements, or on the basis of a produced gas to water ratio based on an annual production test.

331. VACUUM PUMPS ON WELLS

The installation of vacuum pumps or other devices for the purpose of imposing a vacuum at the wellhead or on any oil or gas bearing reservoir may be approved by the Director upon application therefore, except as herein provided. The application shall be accompanied by an exhibit showing the location of all wells on adjacent premises and all offset wells on adjacent lands, and shall set forth all material facts involved and the manner and method of installation proposed. Notice of the application shall be given by the applicant by registered or certified mail, or by delivering a copy of the application to each producer within one-half (1/2) mile of the installation.

In the event no producer within one-half (1/2) mile of the installation or the Commission itself files written objection or complaint to the application within fifteen (15) days of the date of application, then the application shall be approved, but if any producer within one-half (1/2) mile of said installation or the

Commission itself files written objection within fifteen (15) days of the date of application, then a hearing shall be held as soon as practicable.

332. USE OF GAS FOR ARTIFICIAL GAS LIFTING

Gas may be used for artificial gas lifting of oil where all such gas returned to the surface with the oil is used without waste. Where the returned gas is not to be so used, the use of gas for artificial gas lifting of oil is prohibited unless otherwise specifically ordered and authorized by the Commission upon hearing.

333. SEISMIC OPERATIONS

a. **COGCC Form 20, Notice of Intent to Conduct Seismic Operations.** Seismic operations require an approved Form 20 which shall be submitted to the Director prior to commencement of shothole drilling or recording operations. An informational copy of the Form 20 shall be filed by the operator with the local governmental designee at or before the time of filing with the Director. Any change of plans or line locations may be implemented without Director approval provided that after such change is performed, the Director shall receive written notice of the change within five (5) days.

A map shall be included with the notice. This map shall be at a scale of at least 1:48,000 showing sections, townships and ranges and providing the location of the proposed seismic lines, including source and receiver line locations.

The Notice of Intent to Conduct Seismic Operations, Form 20, shall be in effect for six (6) months from the date of approval. An extension of time may be granted upon written request submitted prior to the expiration date.

b. **Surface owner consultation.** Prior to the commencement of any seismic operation, a good faith effort shall be made to consult with all surface owners of the lands included in the seismic project area.

c. **Exploration requiring the drilling of shotholes:**

(1) **Explosive storage.** All explosives shall be legally and safely stored and accounted for in magazines when not in use in accordance with relevant regulations of the Alcohol, Tobacco and Firearms Division of the Federal Department of the Treasury.

(2) **Blasting safety setbacks.** Blasting shall be kept a safe distance from ~~occupied~~ building units, water wells or springs, unless by special written permission of the surface owner or lessee, according to the following minimum setback distances:

CHARGES IN LBS. GREATER THAN	CHARGES IN LBS. UP TO AND INCLUDING	MINIMUM SETBACK DISTANCE IN FEET
0	2	200
2	5	300
5	6	360
6	7	420
7	8	480
8	9	540
9	10	600
10	11	649
11	12	696
12	13	741
13	14	784
14	15	825

CHARGES IN LBS. GREATER THAN	CHARGES IN LBS. UP TO AND INCLUDING	MINIMUM SETBACK DISTANCE IN FEET
15	16	864
16	17	901
17	18	936
18	19	969
19	20	1000
20		1320

(3) Prior to any shothole drilling, the operator shall contact the Utility Notification Center of Colorado at 1-800-922-1987.

(4) **Drilling and plugging.** The following guidelines shall be used to plug shotholes unless the operator can demonstrate that another method will provide adequate protection to ground water quality and movement and long-term land stability:

- A. Any slurry, drilling fluids, or cuttings which are deposited on the surface around the seismic hole shall be raked or otherwise spread out to at least within one (1) inch of the surface, such that the growth of the natural grasses or foliage shall not be impaired.
- B. All shotholes shall be preplugged or anchored to prevent public access if not immediately shot. In the event the preplug does not hold, seismic holes shall be properly plugged and abandoned as soon as practical after the shot has been fired. However, a fired hole shall not be left unplugged for more than thirty (30) days without approval of the Director. In no event shall shotholes be left open, but shall be covered with a tin hat or other similar cover until they are properly plugged. The hats shall be imprinted with the seismic contractor's name or identification number or mark.
- C. The hole shall be filled to a depth of approximately three (3) feet below ground level by returning the cuttings to the hole and tamping the returned cuttings to ensure the hole is not bridged. A non-metallic perma-plug either imprinted or tagged with the operator name or the identification number or mark described in the notice of intent shall be set at a depth of three (3) feet, and the remaining hole shall be filled and tamped to the surface with cuttings and native soil. A sufficient mound of native soil shall be left over the hole to allow for settling.
- D. When non-artesian water is encountered while drilling seismic shotholes, the holes shall be filled from the bottom up with a high grade coarse ground bentonite to ten (10) feet above the static water level or to a depth of three (3) feet from the surface; the remaining hole shall be filled and tamped to the surface with cuttings and native soil, unless the operator otherwise demonstrates that use of another suitable plugging material may be substituted for bentonite without harm to ground water resources.
- E. If artesian flow (water rising above the depth at which encountered) is encountered in the drilling of any seismic hole, cement or high grade coarse ground bentonite shall be used to seal off the water flow with the selected material placed from the bottom of the hole to the surface or at least fifty (50) feet above the top of the water-bearing material, thereby preventing cross-flow between aquifers, erosion or contamination of fresh water supplies. Said holes shall be plugged immediately.

- d. **COGCC Form 20A, Completion Report for Seismic Operations.** A Form 20A shall be submitted to the Director within sixty (60) days after completion of the project. The report shall include: maps (with a scale not less than 1:48,000) showing the location of all receiver lines, energy source lines and any shotholes. Shotholes encountering artesian flow shall be indicated on the map.

If the program included any shotholes, then the completion report shall be accompanied by the following:

- (1) a certification by the party responsible for plugging the holes that all shotholes are plugged as prescribed by these rules and approved by the Director, and
- (2) the latitude and longitude of each shothole location. The latitude and longitude coordinates shall be referenced in decimal degrees to an accuracy and precision of five decimals of a degree using the North American Datum (NAD) of 1983 (e.g.; latitude 37.12345 N, longitude 104.45632 W) or reported in other form as approved by the Director. If GPS technology is utilized to determine the latitude and longitude, all GPS data shall meet the requirements set forth in Rule 215. a. through h.

- e. **Bonding Requirements.** The company submitting the Notice of Intent to Conduct Seismic Operations, Form 20, shall file financial assurance in accordance with Rule 705. prior to the commencement of operations. The bond shall remain in effect until a request is made by the company to release the bond for the following reasons:

- (1) The shotholes have been properly plugged and abandoned, and source and receiver lines have been reclaimed in accordance with this Rule 333., and
- (2) There are no outstanding complaints received from surface owners that have not been investigated by the Director and addressed as provided for in Rule 522.

- f. **Reclamation requirements.** Upon completion of seismic operations the surface of the land shall be restored as nearly as practicable to its original condition at the commencement of seismic operations. Appropriate reclamation of disturbed areas will vary depending upon site specific conditions and may include compaction alleviation and revegetation. All flagging, stakes, cables, cement, mud sacks or other materials associated with seismic operations shall be removed.

334. PUBLIC HIGHWAYS AND ROADS

All persons subject to the act and these rules and regulations while using public highways or roads shall be subject to the State Vehicles and Traffic Laws pursuant to Title 42, C.R.S. and the State Highway and Roads Laws, Title 43, C.R.S., pertaining to the use of public highways or roads within the state.

335. COGCC Form 15. PIT CONSTRUCTION REPORT/PERMIT

A Pit Construction Report/Permit, Form 15, shall be submitted for approval by the Director in accordance with Rule 903.

336. COGCC Form 18. COMPLAINT FORM

Any party who wishes to file a complaint regarding oil and gas operations is encouraged to submit a Form 18. The Director shall investigate any complaint and determine what, if any, action shall be taken in accordance with Rule 522.

337. COGCC Form 19. SPILL/RELEASE REPORT

All spills and releases of E&P waste exceeding five (5) barrels shall be reported on a Spill/Release Report, Form 19. Form 19 shall be filed with the Director pursuant to the reporting requirements in Rule 906.

338. COGCC Form 24. SOIL ANALYSIS REPORT

Soil Analysis Report, Form 24, shall be submitted where soil composition data is required, in accordance with Rule 910.

339. COGCC Form 25. WATER ANALYSIS REPORT

Water Analysis Report, Form 25, shall be submitted where water quality data is required, in accordance with Rule 910.

340. COGCC Form 27. SITE INVESTIGATION AND REMEDIATION WORKPLAN

Site Investigation and Remediation Workplan, Form 27, shall be submitted when required in accordance with Rule 909.

341. BRADENHEAD MONITORING DURING WELL STIMULATION OPERATIONS

The placement of all stimulation fluids shall be confined to the objective formations during treatment.

During stimulation operations, bradenhead annulus pressure shall be continuously monitored and recorded on all wells being stimulated.

If at any time during stimulation operations the bradenhead annulus pressure increases more than 100 psig, the operator shall verbally notify the Director as soon as practicable, but no later than twenty-four (24) hours following the incident. Within fifteen (15) days after the occurrence, the operator shall submit a sundry notice, Form 4, giving all details, including corrective actions taken.

If intermediate casing has been set on the well being stimulated, the pressure in the annulus between the intermediate casing and the production casing shall also be monitored and recorded.

The operator shall keep all well stimulation records and pressure charts on file and available for inspection by the Commission for a period of at least five (5) years.

400 SERIES UNIT OPERATIONS, ENHANCED RECOVERY PROJECTS, AND STORAGE OF LIQUID HYDROCARBONS

401. AUTHORIZATION

- a. No person shall perform any enhanced recovery operations, cycling or recycling operations including the extraction and separation of liquid hydrocarbons from natural gas in connection therewith, or operations for the storage of gaseous or liquid hydrocarbons, nor shall any person carry on any other method of unit or cooperative development or operation of a field or a part of either, without having first obtained written authorization from the Commission to perform the aforementioned activities or operations. No person shall commence construction of a well for use in either enhanced recovery operations or for storage of gaseous or liquid hydrocarbons without having first obtained written authorization from the Commission to do so. These provisions shall not apply to existing gas storage projects or to projects that have received approval of the Federal Energy Regulatory Commission; provided however, that a copy of such application and approval shall be submitted to the Commission and made a part of their records.

- b. Persons wishing to obtain such authorization shall file an application for authorization with the Commission. The application may be filed by any one or more of the parties involved, or by the operator of the project for which authorization is sought. The application shall include the following:
- (1) A plat showing the area involved, together with the well or wells, including drilling wells, dry and abandoned wells located thereon, all properly designated. If the plan of operation involves injection of fluids for enhanced recovery operations, or storage of liquid hydrocarbons, such plat shall show the names of owners of record within one-quarter (1/4) mile of the injection well or wells indicating whether they are surface owners, mineral interest owners, or working interest owners. The application shall also include information regarding the need for remedial action on wells penetrating the injection zone within one-quarter (1/4) mile of each injection well and a plan for the performance of any such remedial work.
 - (2) A full description of the particular operation for which authorization is required.
 - (3) Copies of the unit or co-operative agreement and operating agreement, unless these agreements have already been provided to the Commission.
 - (4) Where injection of fluids for enhanced recovery operations or storage of liquid hydrocarbons is proposed, the application shall also contain:
 - A. the name, description, thickness and depth of the following formations: those from which wells are producing or having produced; those which will receive any fluids to be injected; those capable of limiting the movement of any fluids to be injected;
 - B. the name and the depth to the bottom of all underground sources of drinking water which may be affected by the proposed activity or operation;
 - C. a resistivity log, run from the bottom of the surface casing to total depth of the injection well or wells, or a resistivity log of any well within one (1) mile together with a log from that well that can be correlated with a similar log of the injection well. If the injection well is to be drilled, a description of the typical stratigraphic level of the injection formation and any other available logging or testing data;
 - D. a description of the casing of the injection well or wells or the proposed casing program, including a schematic drawing of the surface and subsurface construction details of the system and a full description of cement jobs already in place or proposed;
 - E. a statement specifying the type of fluid to be injected, chemical analysis of the fluid to be injected, the source of the fluid, the estimated amounts to be injected daily, the anticipated injection pressures, water analysis of receiving formation, any available data on the compatibility of the fluid with the receiving formations and known or calculated fracture gradient (maximum authorized surface injection pressure will be set by the Director);
 - F. a description of any proposed stimulation program;
 - G. the name and address of the operator or operators of the project and those persons notified by the applicant.
 - (5) This Rule does not apply to gas storage projects in existence on August 18, 1986.

402. NOTICE AND DATE OF HEARING

Upon the filing of any application, the Commission shall issue notice thereof, as provided by the Act and these regulations. Said application shall be set for public hearing at such time as the Commission may fix.

403. ADDITIONAL NOTICE

If injection of fluids is proposed by said application, in addition to the notice required by the Act, a copy of such application shall be given in person or by first class mail to each owner of record of the reservoir involved within one-quarter (1/4) mile of the proposed intake well or wells. Such delivery, whether in person or by mail, shall take place on or before the date the application is filed. An affidavit shall be attached to the application showing the parties to whom the notice has been given and their addresses.

404. CASING AND CEMENTING OF INJECTION WELLS

Wells used for injection of fluids into the producing formation shall be cased with safe and adequate casing or tubing so as to prevent leakage, and shall be so set or cemented that damage will not be caused to oil, gas or fresh water resources. (Each injection well must satisfactorily pass a mechanical integrity test in accord with Rule 324 prior to injection.)

405. NOTICE OF COMMENCEMENT AND DISCONTINUANCE OF INJECTION OPERATIONS

The following provisions shall apply to all injection projects whether or not they are approved by the Commission:

- a. Immediately upon the commencement of injection operations, the operator shall notify the Commission of the injection date.
- b. Within ten (10) days after the discontinuance of injection operations the operator shall notify the Commission of the date of such discontinuance and the reasons therefore.
- c. When any well in an approved enhanced recovery unit operation is converted to or from an injection status, notice shall be given on a Sundry Notice, Form 4, within thirty (30) days.
- d. Before any intake well shall be plugged, notice shall be given to the Commission by the owner of said well, and the same procedure shall be followed in the plugging of such well as is provided for the plugging of oil and gas wells.

500-SERIES RULES OF PRACTICE AND PROCEDURE

501. APPLICABILITY OF RULES OF PRACTICE AND PROCEDURE

- a. **General.** These rules shall be known and designated as “Rules of Practice and Procedure before the Oil and Gas Conservation Commission of the State of Colorado,” and shall apply to all proceedings before the Commission. These rules shall be liberally construed to secure just, speedy, and inexpensive determination of all issues presented to the Commission.
- b. **Prohibition of abuse.** Notwithstanding any provision of these rules, the Commission shall, upon its own motion or upon the motion of a party to a proceeding, act to prohibit or terminate any abuse of process by an applicant, protestant, intervenor, witness or party offering a statement pursuant to Rule 510. in a proceeding. Such action may include, but is not limited to, summary dismissal of an application, protest, intervention or other pleading; limitation or prohibition of harassing or abusive testimony; and finding a party in contempt. Grounds for such action include, but are not limited to, the use of the Commission's procedures for reasons of obstruction and delay; misrepresentation in pleadings or testimony; or, other inappropriate or outrageous conduct.

- c. **Judicial review.** Any rule, regulation, or final order of the Commission, or any approval of an Application for Permit-to-Drill, Form 2, or Oil and Gas Location Assessment, Form 2A by the Director for which a hearing is not requested within ten (10) days pursuant to Rule 303.m.1., shall be subject to judicial review in accordance with the provisions of the Administrative Procedure Act, §24-4-101 to -108, C.R.S., and any other applicable provisions of law. The statutory time period for filing a notice of appeal from any Commission decision shall commence on the date the order is served or that is three (3) business days after the date the order is mailed.

502. PROCEEDINGS NOT REQUIRING THE FILING OF AN APPLICATION

- a. **Commission's own motion.** The Commission may, on its own motion, initiate proceedings upon any questions relating to conservation of oil and gas or the conduct of oil and gas operations in the State of Colorado, or to the administration of the Act, by notice of hearing or by issuance of an emergency order without notice of hearing. Such emergency order shall be effective upon issuance and shall remain effective for a period not to exceed fifteen (15) days. Notice of an emergency order shall be given as soon as possible after issuance.
- b. **Variances.**
- (1) Variances to any Commission rules, regulations, or orders may be granted in writing by the Director without a hearing upon written request by an operator to the Director, or by the Commission after hearing upon application. The operator or the applicant requesting the variance shall make a showing that it has made a good faith effort to comply, or is unable to comply, with the specific requirements contained in ~~these~~ rules, regulations, or orders, from which it seeks a variance, including, without limitation, to securing a waiver or an exception, if any, and that the requested variance will not violate the basic intent of the Oil and Gas Conservation Act.
 - (2) No variance to the rules and regulations applicable to the Underground Injection Control Program shall be granted by the Director without consultation with the U.S. Environmental Protection Agency, Region VIII, Waste Water Management Division Director.
 - (3) The Director shall report any variances granted at the monthly Commission hearing following the date on which such variance was granted.

503. ALL OTHER PROCEEDINGS COMMENCED BY FILING AN APPLICATION

- a. All proceedings other than those initiated by the Commission or variance requests submitted for Director approval shall be commenced by filing with the Commission the original and thirteen (13) ~~nine (9)~~ copies of a typewritten or printed petition which shall be titled "application." ~~Whenever possible, the~~ application shall also be submitted on compatible electronic media. The application shall set forth in reasonable detail the relief requested and the legal and factual grounds for such relief. The original of the application shall be executed by a person with authority to do so on behalf of the applicant, and the contents thereof shall be verified by a party with sufficient knowledge to confirm the facts contained therein. With the exception of those from state and local government agencies, ~~e~~Each application shall be accompanied by a docket fee established by the Commission (see Appendix III), except applications seeking an order finding violation or an emergency order.
- b. Applications to the Commission may be filed by the following applicants:
- (1) For purposes of applications for the creation of drilling units, applications for additional wells within existing drilling units, other applications for modifications to existing drilling unit orders, or applications for exceptions to Rule 318., only those owners within the proposed

drilling unit, or within the existing drilling unit to be affected by the application, may be applicants.

- (2) For purposes of applications for involuntary pooling orders made pursuant to §34-60-116, C.R.S., only those persons who own an interest in the mineral estate of the tracts to be pooled may be applicants.
- (3) For purposes of applications for unitization made pursuant to §34-60-118, C.R.S., only those persons who own an interest in the mineral estate underlying the tract or tracts to be unitized may be applicants.
- (4) For purposes of seeking an order finding violation, only the Director or a party who made a complaint under Rule 522. may be an applicant.
- (5) For purposes of seeking a variance from the Commission, only the operator, mineral owner, surface owner or tenant of the lands which will be affected by such variance, other state agencies, any local government within whose jurisdiction the affected operation is located, or any person who may be directly and adversely affected or aggrieved if such variance is not granted, may be an applicant.
- (6) For purposes of seeking a hearing on an Application for Permit-to-Drill, Form 2, under Rules 303.d. and 303.k.(32), the relevant local government shall be the applicant, and the hearing shall be conducted in similar fashion as is specified in Rule 508.j., k. and l. with respect to a public issues hearing. It shall be the burden of the local government applicant to bring forward evidence sufficient for the Commission to make the preliminary findings specified in subsection j. of Rule 508. at the outset of such hearing.

(7) For purposes of seeking a hearing pursuant to Rules 216.e.(3), 303.e.(2), or 303.m.(5), the operator seeking approval of the Application for Permit-to-Drill, Form 2, or an Oil and Gas Location Assessment, Form 2A, may be the applicant.

(8) For purposes of seeking a hearing on approval of an Oil and Gas Location Assessment, Form 2A, under Rules 216.e.(4) or 303.m.(4), any of the following may be the applicant:

A. The operator;

B. The owner of the affected surface land;

C. The relevant local government;

D. The Colorado Department of Public Health and Environment, solely to raise issues relating to minimizing adverse impacts to public health, safety, and welfare, including the environment or wildlife resources; or

E. The Colorado Division of Wildlife, solely to raise issues relating to minimizing adverse impacts to public health, safety, and welfare, including the environment or wildlife resources.

(9) For purposes of seeking a hearing on provisions related to measurement pursuant to Rule 328 or 329, the mineral interest owner may be the applicant.

(107) For purposes of seeking relief or a ruling from the Commission on any other matter not described in (1) through (96) above, only persons who can demonstrate that they are directly and adversely affected or aggrieved by the conduct of oil and gas operations or

an order of the Commission and that their interest is entitled to legal protection under the act may be an applicant.

c. Applications subject to the requirements for local public forums under Rule 508.a. shall be accompanied by a proposed plan (the "Proposed Plan") to address protection of ~~the environment,~~ public health, safety, and welfare, including the environment and wildlife resources, and a description of the current surface occupancy/use. The Proposed Plan shall include the rules and regulations of the Commission as they are applied to oil and gas operations in the application lands along with any procedures or conditions the applicant will voluntarily follow to address the protection of ~~the environment,~~ public health, safety, and welfare, including the environment and wildlife resources.

d. Upon the filing of an application, the Secretary shall set the matter for hearing and ensure that notice is given.

~~de.~~ No later than seven (7) days after the application is filed, the applicant shall submit to the Commission a certificate of service demonstrating that the applicant served a copy of the application on all persons entitled to notice pursuant to these rules by mailing a copy thereof, first-class postage prepaid, to the last known mailing address of the person to be served, or by personal delivery. The applicant shall at the same time submit to the Commission a list of all persons entitled to notice pursuant to these rules on compatible electronic media. If the applicant is unable to submit an electronic media list of persons noticed the applicant shall submit a written list of persons noticed no later than seven (7) days after the application is filed.

~~ef.~~ The applicant shall enjoy a rebuttable presumption that it has properly served notice on persons entitled to notice of the proceeding by demonstrating through certification or testimony that notice was provided pursuant to Rules 507. and 508.

~~fg.~~ In order to continue to receive copies of the pleadings filed in a specific proceeding a party who receives notice of the application shall file with the Secretary a protest or intervention in accordance with these rules.

~~gh.~~ Subsequent to the initiation of a proceeding, all pleadings filed by any party shall be offered by filing with the Secretary the original and ~~nine-thirteen~~ (913) copies bearing the cause number assigned to such proceeding. Each pleading shall include the certificate of the party filing the pleading that the pleading has been served on all persons who have filed a protest or intervention in accordance with these rules, by mailing a copy thereof, first-class postage prepaid, to the last known mailing address of the person to be served, or by personal delivery.

504. DOCKET NUMBER OF PROCEEDINGS

When a proceeding is initiated the Secretary of the Commission shall assign it a new docket number and enter on a separate page of a docket provided for such purpose, the proceeding with the date of the filing of the application, or the date of the entry of the Commission order, initiating such proceeding. All subsequent pleadings shall be assigned the same docket number and shall be noted with the date of filing upon the docket page or continued docket page, for such proceeding, as the case may be.

505. REQUIREMENT OF PUBLIC HEARING

Before the Commission adopts any rule ~~or,~~ regulation, or enters any order, or amendment thereof, or grants any variance pursuant to Rule 502., the Commission shall hold a public hearing, scheduled in accordance with Rule 506. at such time and place as may be prescribed by the Commission. Any party shall be entitled to be heard as provided in these rules and regulations. The foregoing shall not apply to the issuance of an emergency order, notice of alleged violation, or cease and desist order.

506. HEARING DATE/CONTINUANCE

- a. All applications shall be filed no later than fifty (50) days in advance of the hearing date for which the applicant proposes the matter be docketed provided the docket has not been filled by the Secretary. The Secretary shall have the discretion to accept applications later than fifty (50) days prior to the hearing date, subject to docket availability and the notice requirements of Rules 507. and 508. The Secretary shall grant the first request by an applicant for a continuance of any matter three (3) business days before the scheduled hearing, provided that a protest has not been filed. For contested matters the Secretary shall have the discretion to grant any motion for continuance stipulated to by the applicant and any protestants or intervenors. The Secretary shall notify the Commission of any continuances granted at the next regularly scheduled Commission meeting. The Commission may at any time direct the Secretary to discontinue granting continuances in any matter. In all other cases, requests for continuance shall be reviewed by the Commission before approval or denial. When a continuance request is heard by the Commission the moving party shall demonstrate good cause in order for the Commission to grant the continuance.
- b. In all rulemaking proceedings, hearings shall be held in accordance with Rule 529.
- c. The Commission may for good cause cancel or continue any hearing to another date by issuing written notice at any time prior to the close of the record, or by announcement at hearing. Good cause shall include, but shall not be limited to the Commission's acknowledgment that it will not have sufficient time at any regularly scheduled meeting to hear any matter. Any continuance of a hearing shall not extend the filing deadline for the filing of protests or interventions in accordance with Rule 509., unless the application is amended, or as otherwise allowed by the Commission.
- d. When a Commission hearing is scheduled for multiple days the Secretary may estimate the time and date that a given matter may be heard by the Commission. The Commission may change at its discretion the proposed hearing docket, including the time or date of any scheduled hearing. It shall be the responsibility of the participating party and its attorney to be present when the Commission hears the matter.

507. NOTICE FOR HEARING

a . General notice provisions.

- (1) When any proceeding has been initiated, the Commission shall cause notice of such proceeding to be given to all persons specified in the relevant sections of Rules 507.-b and 507.-c. at least twenty (20) days in advance of any Commission hearing at which the matter will first be heard. Notice shall be provided in accordance with the requirements of §34-60-108(4), C.R.S.
- (2) The applicant shall assume the cost for publication, and if the number of notices exceeds one hundred (100), responsibility for mailing the notices.
- (3) The Secretary shall give notice to any person who has filed a request to be placed on the Commission hearing notice list, and paid the annual fee therefor. Notice by publication or notice provided pursuant to the hearing notice list shall not confer interested party status on any person.

b. Notice for specific applications.

- (1) **Applications affecting drilling units.** For purposes of applications for the creation of drilling units, applications for additional wells within existing drilling units or other applications for modifications of or exceptions to existing drilling unit orders (except for applications for

well exception locations to existing orders which are addressed in subsection 54 of this rule) notice of the application shall be served on the owners within the proposed drilling unit or within the existing drilling unit to be affected by the applications.

- (2) **Applications for involuntary pooling.** For purposes of applications for involuntary pooling orders made pursuant to §34-60-116, C.R.S. notice of the application shall be served on those persons who own any interest in the mineral estate of the tracts to be pooled, except owners of an overriding royalty interest.
- (3) **Applications for unitization.** For purposes of applications for unitization made pursuant to §34-60-118, C.R.S., notice of the application shall be served on those persons who own any interest in the mineral estate underlying the tract or tracts to be unitized and the owners within one-half (1/2) mile of the tract or tracts to be unitized.
- (4) **Applications changing certain well location setbacks.** For purposes of applications that change the permitted minimum setbacks for established drilling and spacing units, notice of the application shall be served on those owners of contiguous or cornering tracts who may be affected by such change.
- (5) **Applications for well location exception.** For purposes of applications made for exceptions to Rule 318, exceptions to legal locations within drilling and spacing units, or for an exception location to an existing order, notice of the application shall be served on the owners of any contiguous or cornering tract toward which the well location is proposed to be moved, provided that when the applicant owns any interest covering such tract, the person who owns the mineral estate underlying the tract covered by such lease shall also be notified. If there is more than one owner within a single drilling unit and the owners have designated a party as the operator on their behalf, notice shall be presumed sufficient if served upon the designated operator of the affected formation.
- (6) **Orders related to violations.** With respect to the resolution of a Notice of Alleged Violation (NOAV) through an Administrative Order by Consent (AOC), and to applications for an Order Finding Violation (OFV), notice shall be provided to the complainant, to the violator, responsible party, or operator, as applicable, and by publication in accordance with §34-60-108(4), C.R.S.

(7) Application for Memorandum of Agreement with Local Government. With respect to an application to enter into a Memorandum of Agreement with a local government pursuant to Rule 521, notice shall be posted by the local government and published in a newspaper of local circulation for a period not less than two (2) weeks.

- c. **Notice to local government, Colorado Department of Public Health and Environment, and Colorado Division of Wildlife.** For purposes of intervention pursuant to Rule 509, notice shall also be given to the local governmental designee, the Colorado Department of Public Health and Environment, and the Colorado Division of Wildlife of applications made under subsections b. (1), (3), and (4), (5), and (7) of this rule at the same time that notice is provided to the Commission.

508. LOCAL PUBLIC FORUMS, HEARINGS ON APPLICATIONS FOR INCREASED WELL DENSITY, AND PUBLIC ISSUES HEARINGS, AND GEOGRAPHIC AREA PLANS.

- a. **Applicability of rule.** The provisions of this Rule 508 apply only to a Applications that would result in more than one (1) well site or multi-well site per forty (40) acre nominal governmental quarter-quarter section or that request approval for additional wells that would result in more than one (1) well site or multi-well site per forty (40) acre nominal governmental quarter-quarter section, within existing drilling units, not previously authorized by Commission order (together, for purposes of

~~this rule, an “application for increased well density” or “application”) shall be subject to the provisions of this Rule 508.~~

b. Local public forum.

- (1) The rules and regulations of the ~~Oil and Gas Conservation~~ Commission as they are applied to oil and gas operations are expected to adequately address impacts to ~~the environment and~~ public health, safety and welfare, including the environment and wildlife resources, which may be raised by an application for increased well density.
- (2) A local public forum may, however, be convened to consider potential issues related to ~~the environment or~~ public health, safety, and welfare, including the environment and wildlife resources, that may be raised by an application for increased well density that may not be completely addressed by these rules or the Proposed Plan submitted ~~with the application to address protection of the environment, public health, safety, and welfare as described in pursuant to~~ Rule 503.c.
 - A. A local public forum shall be convened on the Commission's own motion, or upon request from ~~the~~ local governmental designee, the Colorado Department of Public Health and Environment, the Colorado Division of Wildlife, or the applicant.
 - B. A local public forum may be convened at the Director's discretion, or upon receipt of a request for a local public forum from a citizen of the county(ies) in which the application area is situated, after the Director's consideration of the following factors:
 - (i) The size of the application area and the number and density of surface location requested;
 - (ii) The population density of the application area;
 - (iii) The distribution of Indian, federal and fee lands within the application area;
 - (iv) The level of current or past public interest in increased well density in the vicinity of the application area;
 - (v) Whether the application is limited to the deepening or recompletion of existing wells, or directional drilling from existing surface locations; ~~or;~~
 - (vi) Whether the application is limited to an exploratory unit formed for involuntary pooling purposes.
- (3) The Director shall notify the local governmental designee, the Colorado Department of Public Health and Environment, and the Colorado Division of Wildlife of any application for increased well density no later than five (5) days after receipt of such application. If the local governmental designee, the Colorado Department of Public Health and Environment, or the Colorado Division of Wildlife elects to require a local public forum it shall notify the Director of its decision within five (5) days of receipt of notice of the application.
- (4) The Director shall notify the applicant of any decision to convene a local public forum no later than ten (10) days after receipt of the application.

c. Local public forums on federal and Indian lands.

- (1) If the surface and the minerals of the application area are comprised in their entirety of federal or Indian lands no local public forum shall be convened because potential impacts to the environment or public health, safety, and welfare on such lands are subject to federal or tribal requirements. All proceedings on any application for increased well density on federal or Indian lands shall be conducted to comply with the obligations contained in any intergovernmental or tribal memoranda of understanding governing the conduct of oil and gas operations on federal or Indian lands.
- (2) If the application area is comprised in part of federal or Indian lands, the Director shall consult with the appropriate federal or Indian authorities before scheduling any public forum on the application. Insofar as the application includes federal or Indian lands, proceedings thereon shall be conducted in accordance with this rule and any obligations contained in any intergovernmental or tribal memoranda of understanding governing the conduct of oil and gas operations on federal or Indian lands.
- (3) The Director shall notify the appropriate federal and Indian authorities of any local public forum to be convened to evaluate an application area that includes federal or Indian lands. Federal or Indian participation in the local public forum may include, without limitation, presentation of the most recent applicable resource management plan(s) and any environmental assessment(s) or environmental impact statement(s) that cover or include all or any portion of the application area.

d. Notice of the local public forum.

- (1) Within five (5) days from the date the applicant receives notice from the Director that a local public forum shall be convened, the applicant shall submit to the Director a list of the surface owners within the application area. In determining the identity and address of a surface owner for the purpose of giving all notices under this rule the records of the assessor for the county in which the lands are situated may be relied upon.
- (2) At least twenty (20) days before the date of the local public forum the Director shall mail to the listed surface owners notice thereof.
- (3) Within ten (10) days of receipt of an application for increased well density the Director shall, by regular or electronic mail or by facsimile copy, provide to the local governmental designee(s), the Colorado Department of Public Health and Environment, and the Colorado Division of Wildlife notice of the local public forum or notice that based on the factors in Rule 508.b.(2)B. above, the Director will not conduct a local public forum
- (4) At least ten (10) days before the date of the local public forum the Director shall publish notice thereof in a newspaper of general circulation in the count(ies) where the application lands are located.
- (5) The notice for the local public forum shall state that the forum is being conducted to consider any issues raised by the application that may affect ~~the environment or~~ public health, safety, and welfare, including the environment and wildlife resources that are not addressed by the rules or the Proposed Plan.
- (6) Within five (5) days of receipt of an application for increased well density, the Director shall post a description of such application on the COGCC-Commission internet-website-page.

e. Timing and location of the local public forum.

- (1) As soon as practicable after publication of notice, but at least ten (10) days prior to the scheduled Commission hearing on the application, the Director shall conduct the local

public forum at a location reasonably proximate to the lands affected by the application. In the alternative, if the hearing is to be held at a location reasonably proximate to the lands affected by the application, the local public forum shall be replaced by the presentation of statements in accordance with Rule 510. during the hearing on the application.

- (2) The Director shall immediately notify the applicant of the scheduled time and location of the local public forum.
- (3) To the extent practicable, the local public forum shall be scheduled to accommodate the Director or the Director's designee, the participants and the applicant.
- (4) If the application area is comprised of lands located in more than one jurisdiction the Director shall coordinate the local public forum to provide for a single forum at a reasonable location reasonably proximate to the lands affected by the application.

f. Conduct of the local public forum.

- (1) A ~~COGCC~~-Hearing Officer shall preside over the local public forum. The ~~COGCC~~-Hearing Officer shall provide to the participants an explanation of the purpose of the local public forum and how the Commission may use the information obtained from the local public forum. The purpose of the local public forum is to address the sufficiency of the rules or the Proposed Plan with respect to protection of ~~the environment or~~ public health, safety, and welfare, including the environment and wildlife resources.
- (2) The conduct of the local public forum shall be informal, and participants shall not be required to be sworn, represented by attorneys, or subjected to cross examination.
- (3) Attendance or participation at the local public forum by a Commissioner shall not constitute a violation of Rule 515.
- (4) The applicant shall participate in the local public forum and present information related to the application.
- (5) The Director shall create a record of the local public forum by video-tape, audio-tape, or by court reporter. Such record shall be made available to all Commissioners for review prior to the hearing on the application and may be relied upon in making a decision to convene a public issues hearing.

g. Statements.

The local public forum shall be conducted to allow elected officials, local government personnel and citizens to express concerns not completely addressed by the rules or the Proposed Plan or make statements regarding the potential impacts from applications for increased well density that relate to ~~the environment or~~ public health, safety, and welfare, including the environment and wildlife resources. Issues raised in the local public forum may include the following:

- (1) Impact to local infrastructure;
- (2) Impact to the environment;
- (3) Impact to wildlife resources;
- (4) Impact to ground water resources;

- (5) Potential reclamation impact; and
- (6) Other impact to public health, safety, and welfare.

The local public forum shall be limited to matters that are within the jurisdiction of the Commission.

h. **Report to the Commission.** At the conclusion of the local public forum the ~~presiding Hearing~~ Officer shall prepare and submit to the Commission a report of the proceedings. A copy of the report shall be made available, no later than five (5) days prior to the hearing on the application, to the Commissioners, the applicant, the Colorado Department of Public Health and Environment if it consulted on the application, any affected local government and the public and shall be posted ~~to~~ on the ~~COGCC Commission's Internet~~ web site page. The report on the local public forum presented to the Commission shall be included in the administrative record for the application, taking into consideration the nature of the local public forum process.

i. **Conduct of the hearing on the application for increased well density.**

- (1) The hearing on the application shall be conducted in accordance with Rule 528.
- (2) The Commission shall approve or deny the application based solely on the application's technical merits in accordance with §34-60-116, C.R.S.
- (3) The ~~presiding eHearing~~ Officer for any local public forum shall present to the Commission the report of the local public forum.
- (4) At the conclusion of the hearing on the application, the Commission shall consider and decide whether to convene a public issues hearing based on the local public forum or statements made under Rule 510. and any motions to intervene, and the Commission may:
 - A. Approve the application without condition
 - B. Approve the application with conditions based on the technical testimony presented at the hearing on the application;
 - C. Approve the application, and with the applicant's consent, attach to the order on the application conditions the Commission determines are necessary to address issues related to ~~the environment or~~ public health, safety or welfare, including the environment and wildlife resources;
 - D. Approve the application and stay its effective date to convene a public issues hearing in accordance with Rule 508.j.; or
 - E. Deny the application.
- (5) If the Commission orders a public issues hearing it shall set the public issues hearing for the next regularly scheduled Commission meeting, unless the applicant requests at a prehearing conference, and the Commission agrees, to convene the public issues hearing immediately following the hearing on the application.

~~(6) If the Commission orders a public issues hearing it shall set the public issues hearing for the next regularly scheduled Commission meeting.~~

j. **Public issues hearing.**

Upon a request by an applicant, protestant, or intervenor, or on the Commission's own motion, a public issues hearing shall be convened provided the Commission makes the following preliminary findings:

- (1) That the public issues raised by the application reasonably relate to potential significant adverse impacts to ~~the environment or~~ public health, safety and welfare, including the environment and wildlife resources, that are within the Commission's jurisdiction to remedy; ~~and~~
- (2) That the potential impacts were not adequately addressed by:
 - A. In the case of an application for increased well density, the application or by the Proposed Plan; or
 - B. In the case of an Application for Permit-to-Drill, by such permit; ~~and~~
- (3) That the potential impacts are not adequately addressed by the rules and regulations of the Commission.

k. Conduct of the public issues hearing.

- (1) The rules and regulations of the Commission shall apply to all participants in the public issues hearing.
 - (2) The public issues hearing shall be conducted, to the extent practicable, in accordance with Rule 528.
 - (3) After the public issues hearing the Commission may attach conditions to its order on the application ~~to protect the environment from significant adverse impacts or~~ to protect public health, safety and welfare, including the environment and wildlife resources, as are warranted by the relevant testimony; ~~and that are not otherwise addressed by these rules and regulations and the Proposed Plan.~~ In addition, the Commission may without limitation:
 - A. Direct the applicant to amend its Proposed Plan for Commission review and approval for all or a portion of the application area to address specific issues related to ~~the environment or~~ public health, safety and welfare, including the environment and wildlife resources, including any identified impacts of increased well density within all or a portion of the application area, rather than on a single well basis.
 - B. Include in any order a provision to allow the Director discretion to attach specific conditions to individual well permits as the Commission determines are reasonable and necessary to protect ~~the environment or~~ public health, safety, and welfare, including the environment and wildlife resources.
 - (4) Any plan or conditions imposed by Commission order that would affect federal or Indian lands shall take into account conditions imposed by the federal or Indian authorities and any federal environmental analysis in order to facilitate regulatory consistency and minimize duplicative regulatory efforts.
 - (5) Any plan or conditions imposed shall take into account cost effectiveness and technical feasibility, and shall not be applied to prevent the drilling of new wells per se.
- I. The Director and the Commission shall use best efforts to comply with the provisions of this Rule 508., however, any deviation from this rule shall not invalidate the give rise to a challenge to

Commission's action on the local public forum, the application for increased well density, or the public issues hearing.

509. PROTESTS/INTERVENTIONS/PARTICIPATION IN ADJUDICATORY PROCEEDINGS

a. The applicant and persons that have filed with the Commission a timely and proper protest or intervention pursuant to this rule shall have the right to participate formally in any adjudicatory proceeding. ~~In the case of a local government,~~ intervention shall be granted by right and without fee to the relevant local government or the Colorado Department of Public Health and Environment solely to raise environmental or public health, safety, and welfare concerns, and to the Colorado Division of Wildlife solely to raise concerns about adverse impacts to wildlife resources.

(1) The protest or intervention shall be filed with the Secretary, and served on the applicant and its counsel at least ten (10) business days prior to the first hearing date on the matter.

(2) Description of affected interest:

A. A protest shall include information to demonstrate that the person is a protestant under these rules in order for the protest to be accepted by the Commission.

B. A local government, the Colorado Department of Public Health and Environment, or the Colorado Division of Wildlife intervening as a matter of right shall include in the intervention information describing concerns related to the environmental or public health, safety and welfare, including the environment and wildlife resources, ~~concerns~~ raised by the application. When an intervention is filed by any local government, the Colorado Department of Public Health and Environment, the Colorado Division of Wildlife, or any person on an application subject to Rule 508.a., information on the following shall be included:

i. That the public issues raised by the application reasonably relate to potential significant adverse impacts to ~~the environment or~~ public health, safety and welfare, including the environment and wildlife resources, that are within the Commission's jurisdiction to remedy; and

ii. That the potential impacts were not adequately addressed by the application or by the Proposed Plan; and

iii. That the potential impacts are not adequately addressed by the rules and regulations of the Commission.

C. A party desiring to intervene by permission of the Commission shall include in the intervention information to demonstrate why the intervention will serve the public interest, in which case granting the intervention shall be at the Commission's sole discretion. The Commission, at its discretion, may limit the scope of the permissive intervenor's participation at the hearing.

(3) The pleading shall include:

A. A general statement of the factual or legal basis for the protest or intervention;

B. The relief requested;

C. A description of the intended presentation including a list of proposed witnesses;

D. A time estimate to hear the protest or intervention; and

E. A certificate of service attesting that the pleading has been served, at least ten (10) business days prior to the first hearing date on the matter, on the applicant and any other party which has filed a protest or intervention in the proceeding. If the pleading is served by mail, the party filing the pleading shall provide an electronic or a facsimile copy of the pleading to the applicant and other persons who have filed a proper protest or intervention in the matter on or before the final date for protest or intervention. If for any reason the party filing the pleading is not able to furnish a copy of the pleading to the applicant and the other persons who have filed a proper protest or intervention on or before the final date for protest or intervention, the party filing the pleading shall so notify the Secretary, the applicant and the other parties to the proceeding.

b. The Secretary or the Director may require any additional information necessary pursuant to these rules to ensure the application, protest, or intervention is complete on its face.

c. Any person shall have the right to participate in an adjudicatory proceeding by making a 510 statement in accordance with these rules.

d. All pleadings filed pursuant to this rule shall be submitted with an original and ~~nine~~ thirteen (13) copies, and shall be accompanied by a docket fee established by the Commission (see Appendix III). The docket fee shall be refunded if an intervention is denied. In cases of extreme hardship, the docket fee may be refunded at the discretion of the Commission.

e. If the application is contested, the Commission or the Director, at its discretion, may direct the parties to engage in a prehearing conference in accordance with Rule 527. A prehearing conference may result in a continuance of the hearing, or bifurcation of hearing issues as determined by the Director, Hearing Officer, or Hearing Commissioner.

ef. Participation at the hearing:

(1) Adjudicatory hearings shall be conducted in accordance with Rule 528, and any applicable prehearing orders of the Commission, or its designated Hearing Officer.

(2) Testimony and cross-examination by a protestant or intervenor shall be limited to those issues that reasonably relate to the interests that the protestant or intervenor seeks to protect, and which may be adversely affected by an order of the Commission.

510. STATEMENTS AT HEARING

a. Any person may make an oral statement at a hearing or submit a written statement, a form for which is available on the COGCC website, prior to or at any hearing that relates to the proceeding before the Commission. The Commission, at its discretion, may limit the length of any oral statement or restrict repetitive statements. In an adjudicatory hearing, an oral statement shall not be accepted into the record unless:

(1) The statement is made under oath, and

(2) The parties to the hearing are allowed to cross-examine the maker of the statement.

b. The Commission, at its discretion, may accept a sworn written statement into the record with due regard to the fact the statement was not subject to cross-examination.

- c. The parties to the hearing shall have the right to object to inclusion of any statement under this Rule 510. into the record. The Commission shall note the objection for the record. If the Commission accepts the basis for excluding the 510. statement from the record the substance of the statement shall not be considered by the Commission in making a decision on the matter at issue.

511. UNCONTESTED HEARING APPLICATIONS PROCEDURE

- ~~a. Upon the filing of an application, the Secretary shall set the matter for hearing and ensure that notice is given.~~
- ~~ba.~~ If the matter is uncontested, the applicant may request, and the Director may recommend, approval ~~without a hearing based on review on the basis of the merits~~ of the merits of the verified application and the supporting exhibits. If the Director does not recommend approval of the application without hearing, the applicant may request an administrative hearing on the application. For purposes of this rule an uncontested matter shall mean any application that is not subject to a protest or an intervention objecting to the relief requested in the application and shall include matters in which all interested parties have consented in writing to the granting of an application without a hearing.
- ~~b.~~ Uncontested matters may be reviewed or heard administratively by a Hearing Officer and recommended for approval on the Commission's consent agenda. The Hearings Manager shall confer with hearing applicants as to which option under c. or d., below, is appropriate for each uncontested application. From time to time, uncontested applications recommended for approval by a Hearing Officer that may be of special interest to the Commission may be recommended for presentation to the Commission.
- c. **Applications where hearing officer review of sworn written testimony and exhibits is appropriate.** ~~If the application is contested, the Commission or the Director, at their discretion, may direct the parties to engage in a prehearing conference in accordance with Rule 527. A prehearing conference may result in a continuance of the hearing, or bifurcation of hearing issues as determined by the Director, Hearing Officer or Hearing Commissioner. An Applicant shall:~~
- ~~(1) Submit the following hard copy documents to the Hearings Manager no later than close of business on the day following the scheduled protest/intervention day:~~
- ~~A. One (1) original written request for approval under Rule 511 briefly describing reasons the application may be a candidate for recommendation for approval without a hearing based on review of the merits of the verified application and the supporting exhibits (rather than necessitating an administrative hearing before a Hearing Officer);~~
- ~~B. One (1) set of resumes/curricula vitae and sworn written testimony of witnesses verifying facts and accompanied by attachments or exhibits that adequately support the relief requested in the application;~~
- ~~C. A person having knowledge of the stated facts shall, under oath, sign a statement attesting to the facts stated in the written testimony and any attachments or exhibits. The sworn statement need not be notarized, but it shall contain language indicating that the signatory is affirming the testimony and supporting documents are true and correct to the best of the signatory's knowledge and belief and, if applicable, that they were prepared by the signatory or under the signatory's supervision;~~

D. A sworn statement that is a summary of the testimony to support the relief requested in the application, including a request to take administrative notice of repetitive general, technical, or scientific evidence, where appropriate;

E. One (1) set of exhibits which shall contain relevant highlights in bullet-point format on each exhibit; and

F. A draft proposed order with findings of fact and conclusions of law related to land, geology, engineering, and other appropriate subjects to support the relief requested in the application. Reference to testimony, exhibits, and previous Commission orders shall be included as findings in the draft proposed order.

(2) Submit one (1) email for each application containing editable attachments for each of the following documents to the Hearings Assistant.

A. Written request for approval;

B. Written testimony;

C. Summary of testimony; and

D. Draft proposed order.

d. Applications where an administrative hearing before one or more Hearing Officer is appropriate. An applicant shall:

(1) Submit the following hard copy documents to the Hearings Manager no later than at the time the administrative hearing is held:

A. Two (2) sets of resumes/curriculum vitae for the witnesses;

B. A written summary of the testimony to support the relief requested in the application, including a request to take administrative notice of repetitive general, technical, or scientific evidence, where appropriate;

C. Two (2) sets of exhibits which shall contain relevant highlights in bullet-point format on each exhibit; and

D. A draft proposed order providing land, geology, engineering, and other appropriate findings to support the relief requested in the application. Reference to previous testimony, exhibits, and orders shall be included as findings in the draft proposed order.

(2) Submit one (1) email for each application containing editable attachments for each of the following documents to the Hearings Assistant.

A. Written request for approval;

B. Written testimony;

C. Summary of testimony; and

D. Draft proposed order.

512. COMMISSION MEMBERS REQUIRED FOR HEARINGS AND/OR DECISIONS

~~Four-Five~~ (54) members of the Commission constitute a quorum for the transaction of business. Testimony may be taken and oath or affirmation administered by any member of the Commission.

513. ~~RESERVED~~ GEOGRAPHIC AREA PLANS

~~(1) **Purpose.** Geographic Area Plans are intended to enable the Commission to adopt basin-specific rules to address unique geologic or hydrologic features.~~

~~(2) **Scope.** Geographic Area Plans shall cover an entire oil and gas field or geologic basin, likely encompassing the activities of multiple operators, in multiple sub-basins or drainages, over a period of ten (10) years or more.~~

~~(2) **Procedure.**~~

~~A. The Commission's adoption of a Geographic Area Plan shall follow Rule 529.~~

~~B. The Commission may initiate a Geographic Area Plan for a basin by publishing notice of its intent to do so, and it may adopt a Geographic Area Plan after a public hearing, which shall include submittal of information from the public and public testimony.~~

~~C. In adopting a Geographic Area Plan, the Commission shall consult with the Colorado Department of Public Health and Environment, Colorado Division of Wildlife, and local governmental designees.~~

~~D. The Geographic Area Plan may include alternative development scenarios, designate units, adopt spacing orders, implement sampling or monitoring plans, or require consolidation of facilities within the area covered by the Plan.~~

514. ~~RESERVED~~ JUDICIAL REVIEW

~~Any Commission order constitutes final agency action for the purpose of judicial review except as may otherwise be specified under these rules. The statutory time period for filing a notice of appeal from any Commission decision shall commence on the date the order is mailed or served.~~

515. EX PARTE COMMUNICATIONS

a. The following provisions shall be applied in any adjudicatory proceeding before the Commission or a Hearing Officer.

(1) No person shall make or knowingly cause to be made to any member of the Commission or a Hearing Officer, an ex parte communication concerning the merits of a proceeding which has been noticed for hearing.

(2) No Commissioner or Hearing Officer shall make or knowingly cause to be made to any interested person an ex parte communication concerning the merits of a proceeding which has been noticed for hearing.

(3) A Commissioner or Hearing Officer who receives, or who makes or knowingly causes to be made, a communication prohibited by this rule shall place on the public record of a proceeding:

A. All such written communications and any responses thereto;

B. Memoranda stating the substance of any such oral communications and any responses thereto.

(4) Upon receipt of a communication knowingly made or knowingly caused to be made by a person in violation of this rule, the Commission or a Hearing Officer may require the person to show cause why their claim or interest in the proceeding should not be dismissed, denied, or otherwise adversely affected on account of such violation.

b. Oral or written communication with individual Commission members is permissible in a rulemaking proceeding. If such information is relied upon in final decision-making it shall be made part of the record by the Commission. After the rulemaking record is closed new information that is intended for the rulemaking record shall be presented to the Commission as a whole upon approval of a request to reopen the rulemaking record.

c. This rule shall not limit the right to challenge a decision of the Commission or a Hearing Officer on the grounds of bias or prejudice due to any ex parte communication.

516. STANDARDS OF CONDUCT

a. The purpose of this rule is to ensure that the Commission's decisions are free from personal bias and that its decision-making processes are consistent with the concept of fundamental fairness. The provisions of this rule are in addition to the requirements for Commission members set forth in Title 24, Article 18, Section 108.5 of the Colorado Revised Statutes. This rule should be construed and applied to further the objectives of fair and impartial decision making. To achieve these standards Commissioners and Hearing Officers should:

(1) Discharge their responsibilities with high integrity.

(2) Respect and comply with the law. Their conduct, at all times, should promote public confidence in the integrity and impartiality of the Commission.

(3) Not lend the prestige of the office to advance their own private interests, or the private interests of others, nor should they convey, or permit others to convey, the impression that special influence can be brought to bear on them.

b. **Conflicts of interest.** A conflict of interest exists in circumstances where a Commissioner or Hearing Officer has a personal or financial interest that prejudices that Commissioner's or Hearing Officer's ability to participate objectively in an official act.

(1) A Commissioner or a Hearing Officer shall disclose the basis for a potential conflict of interest to the Commission and others in attendance at the hearing before any discussion begins or as soon thereafter as the conflict is perceived. A conflict of interest may also be raised by other Commissioners, the applicant, any protestant or intervenor, or any member of the public.

(2) In response to an assertion of a conflict of interest, a Commissioner may withdraw or the Director may designate an alternate Hearing Officer. If the Commissioner does not agree to withdraw, the other Commissioners, after discussion and comments from any member of the public, shall vote on whether a conflict of interest exists. Such vote shall be binding on the Commissioner disclosing the conflict.

(3) In determining whether there is a conflict of interest that warrants withdrawal the Commission members or Hearing Officer shall take the following into consideration:

- A. Whether the official act will have a direct economic benefit on a business or other undertaking in which the Commissioner or Hearing Officer has a direct or substantial financial interest.
- B. Whether the potential conflict will result in the Commissioner or Hearing Officer not being capable of judging a particular controversy fairly on the basis of its own circumstances.
- C. Whether the potential conflict will result in the Commissioner or Hearing Officer having an unalterable closed mind on matters critical to the disposition of the proceeding.

c. **Discharge of duties.** In the performance of their official duties, the Commission shall apply the following standards:

- (1) To be faithful to and constantly strive to improve their competence in regulatory principles, and to be unswayed by partisan interests, public clamor or fear of criticism.
- (2) To maintain order and decorum in the proceedings before them.
- (3) To be patient, dignified and courteous to litigants, witnesses, lawyers and others with whom the Commission deals in an official capacity, and to require similar conduct of attorneys, staff and others subject to their direction and control.
- (4) To afford to every person who is legally interested in a proceeding, or their attorney, full right to be heard according to law.
- (5) To diligently discharge their administrative responsibilities, maintain professional confidence in Commission administration and facilitate the performance of the administrative responsibilities of other staff officials.

517. REPRESENTATION AT ADMINISTRATIVE AND COMMISSION HEARINGS

- a. Natural persons may appear on their own behalf and represent themselves at hearings before the Commission, and persons allowed to make oral or written statements may do so without counsel. Pro se participants shall be subject to these rules and regulations.
- b. Except as provided in a. and c. of this rule, representation at hearings before the Commission shall be by attorneys licensed to practice law in the State of Colorado, and provided that any attorney duly admitted to practice law in a court of record of any state or territory of the United States or in the District of Columbia, but not admitted to practice in Colorado, who appears at a hearing before the Commission may, upon motion, be admitted for the purpose of that hearing only, if that attorney has associated for purposes of that hearing with any attorney who:
 - (1) Is admitted to practice law in Colorado;
 - (2) Is a resident or maintains a law office within Colorado; and
 - (3) Is personally appearing with the applicant in the matter and in all proceedings connected with it.

The resident attorney shall continue in the case unless other resident counsel is submitted. Any notice, pleading, or other paper may be served upon the resident attorney with the same effect as if personally served on the non-resident attorney within this state. Resident counsel shall be present before the Commission unless otherwise ordered by the Commission.

- c. The Commission has the discretion to allow representation by a corporate officer or director of a community organization, a closely held corporation, a citizens' group duly authorized under Colorado law, or if a limited liability corporation, the member/manager in the following circumstances:
 - (1) Where the agency is adopting a rule of future effect;
 - (2) Local public forums;
 - (3) When an individual is appearing on behalf of a closely held corporation as provided in §13-1-127, C.R.S.;
- d. Unless a non-attorney is appearing pro se or pursuant to §13-1-127, C.R.S., or the Director is participating pursuant to Rule 528.c., a non-attorney shall not be permitted to examine or cross-examine witnesses, make objections or resist objections to the introduction of testimony, or make legal arguments.
- e. At administrative hearings before the Director, attorneys shall not be required.

518. SUBPOENAS

The Commission may, through the Secretary, issue subpoenas requiring attendance of witnesses and the production of books, papers, and other instruments to the same extent and in the same manner and in accordance with the procedure provided in the Colorado Rules of Civil Procedure which authorize issuance of subpoenas by Clerks of District Courts. A party seeking a subpoena shall submit the form of the subpoena to the Secretary for execution. Upon execution, the party requesting the subpoena has the responsibility to serve the subpoena in accordance with the Rules of Civil Procedure. Upon receipt of an objection to any subpoena issued by the Commission, the Commission has the discretion to limit the scope of the subpoena to matters that are within the scope of the Commission's jurisdiction under the Act.

519. APPLICABILITY OF COLORADO COURT RULES AND ADMINISTRATIVE NOTICE.

- a. The Commission adopts the rules of practice and procedure contained in the Colorado Rules of Civil Procedure insofar as the same may be applicable and not inconsistent with the rules herein set forth.
- b. In general, the rules of evidence applicable before a trial court without a jury shall be applicable, providing that such rules may be relaxed, where, by so doing, the ends of justice will be better served.
 - (1) To promote uniformity in the admission of evidence, the Commission, to the extent practical, shall observe and conform to the Colorado rules of evidence applicable in civil non-jury cases in the district courts of Colorado.
 - (2) When necessary to ascertain facts affecting substantial rights of the parties to a proceeding, the Commission may receive and consider evidence not admissible under the rules of evidence, if the evidence possesses probative value commonly accepted by reasonable and prudent persons in the conduct of their affairs.
 - (3) Informality in any proceeding or in the manner of taking testimony shall not invalidate any Commission order, decision, rule or regulation.
- c. **Administrative notice.** The Commission may take administrative notice of:
 - (1) Constitutions and statutes of any state and of the United States;

- (2) Rules, regulations, official reports, decisions, and orders of state and federal administrative agencies;
- (3) Decisions and orders of federal and state courts;
- (4) Reports and other documents in the files of the Commission;
- (5) Matters of common knowledge and undisputed technical or scientific fact;
- (6) Matters that may be judicially noticed by a Colorado district court in a civil non-jury case; and
- (7) Matters within the expertise of the Commission.

520. TIME OF HEARINGS AND HEARING/CONSENT AGENDA

- a. Regular hearings ~~will~~ shall be held before the Commission on such days as may be set by the Commission.
- b. The Secretary shall place on the consent agenda those matters recommended by a Hearing Officer for approval, those matters in which an Administrative Order by Consent (AOC) has been negotiated, and those uncontested matters for which a decision has been requested based on the verified application.
 - (1) The consent agenda shall be voted on without deliberation and without the necessity of reading the individual items, except any Commissioner may request clarification from the Director for any matter on the consent agenda.
 - (2) Applicants may be required to have witnesses available by telephone at the time of a Commission hearing to address Commissioners' questions prior to voting on the consent agenda.
 - (23) Any Commissioner may remove a matter from the consent agenda prior to voting thereon.
 - (43) Any matter removed from the consent agenda shall be heard at the end of the remaining agenda, if practicable and agreeable to the applicant, or, if not, scheduled for hearing at the next regularly scheduled meeting of the Commission.

521. RESERVED MEMORANDA OF AGREEMENT WITH LOCAL GOVERNMENTS.

- a. Pursuant to C.R.S. §29-20-105, and Section 128(4) of the Act, the Commission may enter into a memorandum of agreement with a local government to clarify, coordinate, and harmonize the relationship between the Commission's rules and the local government's regulations or ordinances. Such an agreement shall be consistent with the purposes and provisions of the Act, including fostering the responsible, balanced development, production, and utilization of oil and gas in a manner consistent with protection of public health, safety, and welfare, including protection of the environment and wildlife resources, as well as providing a timely and efficient procedure for permits and approvals. In negotiating the agreement, the Director shall consult with the Colorado Department of Public Health and Environment and the Colorado Division of Wildlife.
- b. The memorandum of agreement shall identify the local regulations or ordinances that apply to oil and gas operations and shall include such regulations or ordinances as an exhibit. If a local government amends its regulations or ordinances, the Commission shall review and may amend the agreement. As part of the agreement, and consistent with the purposes and provisions of the Act, the Commission may provide that compliance with the local regulations or ordinances shall constitute compliance with certain of the Commission's permitting and approval requirements for

operations within the local jurisdiction. Consistent with Section 106(15) of the Act, the Commission may also assign its inspection and monitoring function, but not its enforcement authority, to the local government. The Commission may also address other appropriate matters in the agreement.

- c. The memorandum of agreement and any amendment to such an agreement shall become effective only upon approval by the Commission through an order issued after a hearing pursuant to Rule 528 and by the local government. The application for such a hearing shall be filed by the local government. The Colorado Department of Public Health and Environment and the Colorado Division of Wildlife, as well as affected operators, mineral owners, surface owners, tenants, industry associations, environmental groups, and citizen alliances from the local jurisdiction shall be permitted to intervene under Rule 509 upon timely request or to file a statement at the hearing in accordance with Rule 510.
- d. The Commission shall annually review the implementation of the memorandum of agreement by the Director and the local government to ensure that such implementation remains consistent with the purposes and provisions of the Act.
- e. Neither the Commission nor a local government shall be required to enter into a memorandum of agreement pursuant to this section. Nothing in this section shall establish, alter, impair, or negate the authority of local governments to regulate land use related to oil and gas operations. Moreover, nothing in this section or the memorandum of agreement process outlined above shall diminish, abrogate, delegate, or otherwise alter the respective authority of the Commission, the Colorado Department of Public Health, the Colorado Division of Wildlife, or local government to regulate oil and gas operations in Colorado.

522. PROCEDURE TO BE FOLLOWED REGARDING ALLEGED VIOLATIONS

a. Notice of Alleged Violation.

- (1) A complaint requesting that the Director issue a Notice of Alleged Violation (NOAV) may be made by the mineral owner, surface owner or tenant of the lands upon which the alleged violation took place, by other state agencies, by the local government within whose boundaries the lands are located upon which the alleged violation took place, or by any other person who may be directly and adversely affected or aggrieved as a result of the alleged violation.
- (2) Oral complaints shall be confirmed in writing. Persons making a complaint are encouraged to submit a Complaint Form, Form 18.
- (3) If the Director, on the Director's own initiative or based on a complaint, has reasonable cause to believe that a violation of the Act, or of any rule, regulation, or order of the Commission, or of any permit issued by the Director, has occurred, the Director shall cause the operator to voluntarily remedy the violation, or shall issue an NOAV to the operator. Reasonable cause requires, at least, physical evidence of the alleged violation, as verified by the Director.
- (4) If the Director, after investigating a complaint made in accordance with this Rule 522.a.(1), decides not to issue an NOAV, the complainant may file an application to the Commission pursuant to Rule 503.b.(4), requesting the Commission enter an Order Finding Violation (OFV) in accordance with this rule.
- (5) **NOAV process.**

A. An NOAV issued by the Director shall be served on the operator or the operator's designated agent, ~~or on the operator if no agent has been designated~~, by personal delivery or by certified mail, return receipt requested.

~~B. The NOAV shall not be placed on the Commission docket, except as part of an application filed pursuant to subparagraph c. of this rule.~~

~~C.B.~~ The NOAV does not constitute final agency action for purposes of judicial appeal.

~~C.C.~~ The NOAV shall identify the statute, rule, regulation, order, permit or permit condition subject to Commission jurisdiction allegedly violated and the facts alleged to constitute the violation. The NOAV may propose appropriate corrective action and an abatement schedule if any, that the Director elects to require. The NOAV shall also describe the penalty, if any, which the Director may propose, to be recommended in accordance with Rule 523.

b. Resolution of a Notice of Alleged Violation.

(1) Informal procedures to resolve issues raised by an NOAV with the Director are encouraged. Such procedures may include, but are not limited to, meetings, phone conferences and the exchange of information. If, as a result of such procedures, the Director determines that no violation has occurred, the Director shall revoke the NOAV in writing and shall provide a copy of the written notification to the complainant, if any.

(2) NOAVs may be resolved by written agreement of the operator and the Director as to the appropriate corrective action and abatement schedule, a copy of which shall be provided by the Director to the complainant, if any. Such agreements do not require Commission approval and shall not be placed on the Commission docket, except at the request of the operator.

(3) NOAVs which are not resolved by written agreement for correction and abatement or which recommend the imposition of a penalty may be provisionally resolved by negotiation between the operator and the Director. If such negotiations result in a proposed agreement, an Administrative Order By Consent (AOC) containing such agreement shall be prepared and noticed for review and approval by the Commission. The Director may propose the terms for an AOC directly to the alleged violator. Upon Commission approval, the AOC shall become a final order, and the agreed penalty imposed. The AOC shall be placed on the consent agenda and Commission approval may be granted without hearing, unless an objection protest thereto is filed by the complainant. Unless the operator so agrees, such AOC shall not constitute an admission of the alleged violation.

(4) The Director shall advise the complainant of any informal procedures used to facilitate resolution of the NOAV. A complainant may object to the proposed resolution by an AOC. At the Director's discretion the AOC may be reviewed and modified based on the complainant's concerns, with the consent of the operator. If the complainant objects to the Director's final decision to revoke or settle the NOAV, the complainant shall have the right to file with the Commission an application for an Order Finding Violation (OFV). Such application shall be filed pursuant to Rule 503 within forty-five (45) days of the receipt of the Director's decision written determination and shall be served on the Director and the operator. For purposes of this rule, the Director's written determination shall be deemed to be received three (3) business days after mailing a copy thereof, first-class postage prepaid, to the last known address of the complainant. The application shall be served on the Director and the operator. The complainant shall have the burden of proof in an OFV hearing for which the complainant applies.

c. Order Finding Violation.

- (1) If the operator contests the NOAV, as to the existence of the violation, the appropriate corrective action and abatement schedule, or as to any proposed penalty, the Director shall make application to the Commission for an OFV and shall place the matter on the next available Commission docket, providing that at least twenty (20) days' notice of such application is provided to the operator.
- (2) If the Director decides not to issue a NOAV, the Commission may conduct a hearing to consider whether to issue an OFV upon twenty (20) days notice to the affected operator under the following circumstances:
 - A. On the Commission's own initiative if it believes that the Director has failed to enforce a provision of statute, rule, regulation, order, permit or permit condition subject to Commission jurisdiction.
 - B. On the application of a complainant pursuant to Rule 503.b.(4), provided that such complainant has first made a written request to the Director to issue an NOAV and the Director has determined in writing not to do so. An application for hearing by a complainant shall be filed within forty-five (45) days of the receipt of the Director's written determination. For purposes of this rule, the Director's written determination shall be deemed to be received three (3) business days after mailing a copy thereof, first-class postage prepaid, to the last known address of the complainant. The application shall be served on the Director and the operator. The complainant shall have the burden of proof in an OFV hearing for which the complainant applies.
- (3) Upon an operator's request a settlement conference shall be held with the Director no less than five (5) days before the hearing on an OFV. If an agreement is reached, an AOC containing such agreement shall be prepared and noticed for review and approval by the Commission, at its discretion. Upon such approval, the AOC shall become a final order and the agreed penalty shall be imposed. Such approval may be granted without hearing, unless an objection is filed -hearing thereon is requested by a complainant. Unless the operator so agrees, such AOC shall not constitute an admission of the alleged violation. If the complainant objects to settlement of the matter by an AOC, the complainant shall have the right to file with the Commission an application for an OFV. Such application shall be filed pursuant to Rule 503 within forty-five (45) days of the receipt of the Director's written determination. For purposes of this rule, the Director's written determination shall be deemed to be received three (3) business days after mailing a copy thereof, first-class postage prepaid, to the last known address of the complainant. The application shall be served on the Director and the operator. The complainant shall have the burden of proof in an OFV hearing for which the complainant applies.
- (4) A hearing to consider whether to issue an OFV shall be a de novo proceeding, unless the parties stipulate as to the facts, or as to the appropriate corrective action and abatement schedule, in which case the hearing may be accordingly limited.
- (5) The Director is always a necessary party to a hearing on an OFV. The operator against which an OFV is sought is always a necessary party but need not present a case. Any person, which is not the applicant for an OFV, but whose complaint initiated the enforcement proceeding, shall be granted intervenor status if so requested, pursuant to Rule 509., except that the filing fee shall be waived.

d. Cease and Desist Orders.

- (1) The Commission or the Director may issue a cease and desist order whenever an operator fails to take corrective action required by final AOC or OFV.
- (2) Whenever the Commission has evidence that a violation of any provision of the Act, any rule, permit, or order of the Commission has occurred under circumstances deemed to constitute an emergency situation, the Commission or the Director may issue a cease and desist order. If the order is entered by the Director it shall be immediately reported to the Commission for review and approval. Except as provided in subsection (3) below, ~~s~~Such order shall be considered a final order for purposes of judicial review.
- (3) The order shall be served by personal delivery or by certified mail, ~~return receipt requested,~~ or by confirmed electronic or facsimile copy followed by a copy provided by certified mail, return receipt requested, ~~to on the operator or the operator's designated agent, or on the operator if no agent has been designated for service of process~~ and shall state the provision alleged to have been violated, the facts alleged to constitute the violation, the time by which the acts or practices cited are required to cease, and any corrective action the Commission or the Director elects to require of the operator. Any protest by an operator to a cease and desist order issued by the Director shall automatically stay the effective date of the order, in which case the order shall not be considered final for purposes of judicial review until such protest is heard.
- (4) In the event an operator fails to comply with a cease and desist order, the Commission may request the attorney general to bring suit pursuant to §34-60-109, C.R.S.

523. PROCEDURE FOR ASSESSING FINES

- a. **Fines.** An operator who violates any provision of the Act or any rule, permit, or order issued by the Commission shall be subject to a fine which shall be imposed only by order of the Commission, after ~~an~~ hearing, or by an AOC approved by the Commission. All fines shall be calculated using the base fine amount for the particular violation as set forth in the fine schedule in subparagraph c. of this Rule 523. subject to the following:
 - (1) The Commission may in its discretion find that each day a violation exists constitutes a separate violation; however, no fine for any single violation shall exceed one thousand dollars (\$1,000) per day.
 - (2) All fines shall be subject to adjustment based upon the factors listed in subparagraph d. of this Rule 523.
 - (3) For a violation which does not result in significant waste of oil and gas resources, damage to correlative rights, or a significant adverse impact on public health, safety or welfare including the environment or wildlife resources, the maximum penalty for any single violation shall not exceed ten thousand dollars (\$10,000) regardless of the number of days of such violation.
 - (4) Fines for violations for which no base fine is listed shall be determined by the Commission at its discretion subject to subparagraphs (1), (2), and (3) of this Rule 523.a.
- b. **Voluntary disclosure.** Any operator who conducts a voluntary self-evaluation as defined in the 100 Series of the rules and makes a voluntary disclosure to the Director of a significant adverse impact on the environment or of a failure to obtain or comply with any necessary permits, shall enjoy a rebuttable presumption against the imposition of a fine for any violation relating to such impact or failure, under the following conditions:

- (1) The disclosure is made promptly after the operator learns of the violation as a result of the voluntary self-evaluation;
- (2) The operator making the disclosure cooperates with the Director regarding investigation of the issue identified in the disclosure; and
- (3) The operator making the disclosure has achieved or commits to achieve compliance within a reasonable time and pursues compliance with due diligence.

The Commission shall deny the presumption against the imposition of fines only, if, after hearing, it finds that any of the preceding conditions have not been met, or that the use of this process was engaged in for fraudulent purposes.

c. **Base fine schedule.** The following table sets forth the base fine for violation of the rules listed

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RULE NUMBER	BASE FINE
205	\$500 1000
206	\$500 1000
207	\$500 1000
208	\$500 1000
209	\$1000
210	\$250 500

RULE NUMBER	BASE FINE
401	\$500 1000
403	\$250 1000
404	\$1000
405	\$250 500

RULE NUMBER	BASE FINE
602	\$1000
603	\$1000
604	\$1000
605	\$750
606A	\$750 1000
606B	\$750 1000
607	\$750 1000
608	\$1000

RULE NUMBER	BASE FINE
703	\$1000
704	\$1000
705	\$1000
706	\$1000
707	\$1000
708	\$1000
709	\$1000

\$1000	331
712	\$1000

RULE NUMBER	BASE FINE
301	\$1000
302	\$500 1000
303	\$1000
305	\$1000
306	\$1000
307	\$250 500
308	\$500 1000
309	\$500 1000
310	\$500 1000
311	\$250 500
312	\$250 500
313	\$250 500
313A	\$1000
314A	\$250 500
315	\$250 500
316A	\$500 1000
316B	\$1000
317	\$1000
317A	\$1000
317B	\$1000
318	\$1000
319	\$1000
320	\$1000
321	\$500 1000
322	\$500 1000
323	\$1000
324	\$1000
325	\$1000
326	\$1000
327	\$1000
328	\$500 1000
329	\$500 1000
330	\$500 1000

\$500 1000	
341	\$1000

711

RULE NUMBER	BASE FINE
802	\$1000
803	\$250500
804	\$250500
<u>805</u>	<u>\$1000</u>

RULE NUMBER	BASE FINE
1002	\$1000
1003	\$1000
1004	\$1000

RULE NUMBER	BASE FINE
1101	\$1000
1102	\$1000
1103	\$1000

<u>RULE NUMBER</u>	<u>BASE FINE</u>
<u>1202</u>	<u>\$1000</u>
<u>1203</u>	<u>\$1000</u>
<u>1204</u>	<u>\$1000</u>
<u>1205</u>	<u>\$1000</u>
<u>1206</u>	<u>\$1000</u>
<u>1207</u>	<u>\$1000</u>
<u>1208</u>	<u>\$1000</u>
<u>1209</u>	<u>\$1000</u>

RULE NUMBER	BASE FINE
332	\$5001000
333	\$1000

RULE NUMBER	BASE FINE
901	\$1000
902	\$1000
903	\$1000
904	\$1000
905	\$1000
906	\$1000
907	\$1000
<u>907A</u>	<u>\$1000</u>
908	\$1000
909	\$1000
910	\$1000
911	\$1000
912	\$1000

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d. **Adjustment.** The fine may be increased (if base fine is less than \$1000) or decreased by application of the aggravating and mitigating factors set forth below.

Aggravating factors.

- (1) The violation was intentional or reckless.
- (2) The violation had a significant negative impact, or threat of significant negative impact on the environment or on public health, safety, or welfare.
- (3) The violation resulted in significant waste of oil and gas resources.
- (4) The violation had a significant negative impact on correlative rights of other parties.
- (5) The violation resulted in or threatened to result in significant loss or damage to public or private property.
- (6) The violation involved recalcitrance or recidivism upon the part of the violator.
- (7) The violation involved intentional false reporting or recordkeeping.
- (8) The violation resulted in economic benefit to the violator, including the economic benefit associated with noncompliance with the applicable rule, in which case the amount of such benefit may be taken into consideration.

(9) The violation results in significant, avoidable loss of wildlife and/or wildlife resources, including the ability of the land to produce vegetation supportive of wildlife.

Mitigating factors.

- (1) The violator self-reported the violation.
- (2) The violator demonstrated prompt, effective and prudent response to the violation, including assistance to any impacted parties.
- (3) The violator cooperated with the Commission, or other agencies with respect to the violation.
- (4) The cause(s) of the violation was (were) outside of the violator's reasonable control and responsibility, or is (are) customarily considered to be force majeure.
- (5) The violator made a good faith effort to comply with applicable requirements prior to the Commission learning of the violation.
- (6) The cost of correcting the violation reduced or eliminated any economic benefit to the ~~operator~~violator.
- (7) The ~~operator~~violator has demonstrated a history of compliance with Commission rules, regulations and orders.

e. **Public projects.** In lieu of or in reduction of fine amounts, an AOC may provide for the initiation of or participation in operator projects which are beneficial to the environment or public health, safety and welfare, and the Commission encourages AOCs which so provide.

f. **Payment of fines.** An operator against whom the Commission enters an order to pay a fine must pay the amount due within thirty (30) days of the effective date of the order, unless the Commission grants a longer period or unless the operator files for judicial appeal, in which event payment of the penalty shall be stayed pending resolution of such appeal. An operator's obligations to comply with the provisions of a Commission order requiring compliance with the Act, a permit condition or these rules and regulations shall not be stayed pending resolution of an appeal unless the stay is ordered by the court

524. DETERMINATION OF RESPONSIBLE PARTY

In all cases initiated by the Commission or at the request of the Director, it shall be the burden of the Director to present sufficient evidence to the Commission to determine responsible party status. In all other cases, the applicant shall have the burden to present sufficient evidence to the Commission to determine responsible party status.

- a. A hearing may be initiated on the Commission's own motion, upon application, or at the request of the Director to decide responsible party status upon at least twenty (20) days notice to the potentially responsible parties.
- b. Potential responsible parties shall be those persons that have or should have submitted Registration for Oil and Gas Operation, Form 1, or that have or should have submitted financial assurance for oil and gas operations pursuant to requirements of the 700-Series Rules.
- b.c. Potential responsible parties ~~Operators~~ shall provide to the Commission or Director such information as the Commission or Director may reasonably require in making such determination.

- ed.** The Commission shall make the determination under this section without regard to any contractual assignments of liability or other legal defenses between parties.
- de.** An operator shall enjoy a rebuttable presumption against mitigation liability under §34-60-124 (7) C.R.S., for ongoing significant adverse environmental impacts where the violation which led to such impacts was committed by a predecessor operator and where the operator has conducted an environmental investigation, with reasonable due diligence, of the environmental condition of the particular asset or activity and such investigation did not reveal such significant adverse environmental impacts. The failure to report any condition which is causing such impacts, upon subsequent knowledge by the operator, shall negate the rebuttable presumption against mitigation liability
- ef.** Where multiple persons are determined to be responsible parties, they shall share in the mitigation liability in proportion to their respective shares of production, respective periods of ownership or respective contributions to the problem, or any other factors as may serve the interests of fairness.
- fg.** The determination of responsible party status and mitigation liability shall require a showing that the responsible party conducted operations that have resulted in or have threatened to cause a significant adverse environmental impact to any air, water, soil or biological resource based on the conduct of oil or gas operations in contravention of any then applicable historic provisions of the Act or rules, whether or not the Commission has entered an order finding violation.

525. PERMIT-RELATED PENALTIES

- a. If the Commission determines, after a hearing, that an operator failed to perform any required corrective action/abatement or failed to comply with a cease and desist order issued by the Director or the Commission with regard to violation of a permit provision, the Commission may issue an order suspending, modifying or revoking ~~the a~~ permit or permits authorizing the operation. The order shall provide the condition(s) which must be met by the operator for reinstatement of the permit(s). An operator which is subject to an order that suspends, modifies or revokes a permit or permits shall continue the affected operations only for the purpose of bringing them into compliance with the permit(s) or modified permit(s) and shall do so under the supervision of the Director. Once the condition for reinstatement has been met to the satisfaction of the Director and any fine not subject to judicial review or appeal has been paid, the Director shall inform the Commission, and the Commission, if in agreement, shall reinstate the permit(s).
- b. Whenever the Commission or the Director has evidence that an operator is responsible for a pattern of violation of any provision of the Act, or of any rule, permit or order of the Commission, the Commission or the Director shall issue a notice to such operator to appear for a hearing before the Commission. If the Commission finds, after such hearing, that a knowing and willful pattern of violation exists, it may issue an order which shall prohibit the issuance of any new permits to such operator. When such operator edemonstrates to the satisfaction of the Commission that it has brought each of the violations into compliance and that any fine not subject to judicial review or appeal has been paid, such order denying new permits shall be vacated.

526. ADMINISTRATIVE HEARINGS IN UNCONTESTED MATTERS

- a. As to applications where there has been no protest or intervention filed with the Commission in accordance with Rule 509., and where the Director has not recommended approval based on the content of the verified application and supporting exhibits, the application may be heard administratively prior to or on the date of the scheduled Commission hearing. The date and time of the administrative hearing shall be scheduled for the mutual convenience of the applicant and the Hearing Officer. The administrative hearing may be conducted prior to the protest or intervention date, but no order shall be entered by the Commission until it has fully considered any timely and properly filed protest or intervention.

- b. One or more duly appointed Hearing Officers may hear the application at the administrative hearing. Administrative hearings shall proceed informally in a meeting format. The applicant may present its case using exhibits and witnesses. All witnesses shall be sworn. At the conclusion of the administrative hearing, the Hearing Officer shall make a decision concerning approval or denial of the application and so inform the applicant. The Hearing Officer shall put such decision in a written report to the Commission containing findings of fact, conclusions of law, if any, and a recommended order. If the Hearing Officer recommends denial or qualified approval of the application, the applicant shall be entitled to a hearing de novo at the next scheduled hearing of the Commission.
- c. The Commission may appoint Hearing Officers from the Commission staff for the purpose of hearing uncontested matters, presiding at local public forums or otherwise representing the Commission. The service of the Hearing Officers shall be at the Director's discretion.

527. PREHEARING PROCEDURES FOR CONTESTED ADJUDICATORY PROCEEDINGS BEFORE THE COMMISSION

- a. The Commission encourages the use of prehearing conferences between parties to a contested matter in order to facilitate settlement, narrow the issues, identify any stipulated facts, resolve any other pertinent issues, and reduce the hearing time before the Commission. A prehearing conference shall be conducted at the direction of the Commission or the Director upon receipt of a protest or an intervention, or upon the request of the applicant or any person who has filed a protest or intervention. For matters in which a staff analysis has been prepared, the Director shall participate in the prehearing conference to advise the parties of the content of the preliminary staff analysis. The prehearing conference shall be conducted under the following general guidelines.
- b. The Director, a Hearing Officer or Hearing Commissioner shall preside over any prehearing conference and rule on preliminary matters in any proceeding pending before the Commission.
- c. The Secretary shall notify the applicant and any person who has filed a protest or intervention of the prehearing conference, and shall direct the attorneys for the parties, and pro se parties, to appear in order to expedite the hearing or settle issues, or both.
- d. All parties shall be prepared to discuss all procedural and substantive issues, and shall be authorized to make binding commitments on all procedural matters.
- e. Preparation should include advance study of all materials filed and materials obtained through discovery.
- f. Failure of any person to attend the prehearing conference, after being notified of the date, time, and place shall be a waiver of any objection and shall be deemed to be a concurrence to any agreement reached, or to any order or ruling made at the prehearing conference.
- g. A prehearing statement may be required of any party.
- h. At any prehearing conference, the following matters may be considered:
 - (1) Offers of settlement or designation of issues;
 - (2) Simplification of and establishment of a list or summary of the issues;
 - (3) Bifurcation of issues for hearing purposes;

- (4) Admissions as to, or stipulations of facts not remaining in dispute or the authenticity of documents;
 - (5) Limitation of the number of fact and expert witnesses;
 - (6) Limitation on methods and extent of discovery, and a discovery schedule;
 - (7) Disposition of procedural motions; and
 - (8) Other matters raised by the parties, the Commission, or ~~presiding Hearing Officer~~.
- i. At any prehearing conference, the following information may be required:
- (1) ~~a~~An exchange and acceptance of service of exhibits proposed to be offered in evidence, and establishment of a list of exhibits to be offered;
 - (2) ~~e~~Establishment of a list of witnesses to be called and anticipated testimony times; and
 - (3) A timetable for the completion of discovery, if discovery is allowed.
- j. The parties shall reduce to writing any agreement reached or orders issued at a prehearing conference, which shall be filed with the ~~presiding Hearing Officer~~, who shall enter a decision approving or disapproving it, or recommend modification as a condition for approval. An agreement which is disapproved shall be privileged and inadmissible as evidence in any Commission proceeding.
- k. It is the intent of this rule that a prehearing order shall be binding upon the participating parties.
- l. Subsequent to the prehearing conference and ~~peer-prior~~ to the hearing on a contested matter, the parties shall each prepare and submit to the Hearing Officer a recommended order for the Commission to consider for adoption at the time of hearing.

528. CONDUCT OF ADJUDICATORY HEARINGS.

- a. **Contested applications.** Every party shall have the right to present its case by oral and/or documentary evidence. ~~The burden of proof shall be on the applicant for all contested applications.~~ The following shall be the order of presentation unless otherwise established by the Commission at the hearing:
- (1) Determination of whether any Commission members have a conflict of interest;
 - (2) Presentation of any prehearing order;
 - (3) Presentation of any motions and disposition of procedural matters;
 - (4) Presentation of ~~the-any~~ stipulations, ~~if any~~;
 - (5) Opening statement by the applicant;
 - (6) Opening statements by the respondent (and intervenor, if any);
 - (7) Presentation of the case-in-chief by the applicant;
 - (8) Presentations by respondent (and intervenor, if any);

- (9) Presentation of statements under Rule 510., if any;
- (10) Presentation of staff analysis, if requested by the Commission;
- (11) Rebuttal by the applicant;
- (12) Rebuttal by the respondent (and intervenor, if any);
- (13) Closing statement by the applicant;
- (14) Closing statements by the respondent (and intervenor, if any);
- (15) Rebuttal closing statement by the applicant;
- (16) Upon motion and for good cause shown, the Commission may permit surrebuttal; ~~and~~
- (17) Closing of the record.

b. **Uncontested applications not approved administratively.** For uncontested applications not approved administratively pursuant to Rule 526, the applicant may present evidence in support of its application to the Commission. The burden of proof shall be on the applicant to provide sufficient evidence to support its application. The order of presentation shall be as follows, unless otherwise established by the Commission at the hearing:

- (1) Determination of whether any Commission members have a conflict of interest;
- (2) Presentation of staff analysis, if requested by the Commission. The Commission, at its discretion, or upon request of the Director, may defer staff testimony until all of the evidence has been presented.
- (3) Presentation of the case-in-chief by the applicant;
- (4) Closing statement by the applicant;
- (5) Closing of the record.

c. **Enforcement hearings.** In order to assure that all parties against whom a fine or penalty may be imposed are afforded due process of law the Commission shall, at any hearing, permit the Director or the complainant pursuant to Rule 522.b.(4) to present evidence and argument and to conduct cross-examination required for a full disclosure of the facts. The enforcement matter shall be heard by the Commission de novo unless the operator waives its right to a de novo hearing prior to or at the Commission hearing. The burden of proof shall be on the applicant (the Director or the complainant pursuant to Rule 522.b.(4), as applicable). The order of presentation in a hearing for an enforcement matter shall be as follows, unless otherwise established by the Commission at the hearing:

- (1) Determination of whether any Commission members have a conflict of interest;
- (2) Opening statements by all parties;
- (3) Presentation by the Director;
- (4) Presentation by any complainant under Rule 522.b.(4);
- (5) Presentation by the operator;

- (6) Rebuttal by the Director;
- (7) Rebuttal by the respondent;
- (8) Closing statements by the parties;
- (9) Finding regarding existence of violation;
- (10) If the Commission first determines by a preponderance of the evidence that a violation or violations exist, presentation by the Director of any recommended fine or permit-related penalty, and/or recommended corrective action/abatement to be taken by the operator;
- (11) Response by any complainant under Rule 522.b.(4);
- (12) Presentation of statements under Rule 510, if any;
- (13) Response by the operator;
- (14) Rebuttal by the Director;
- (15) Closing statements by all parties; ~~and~~
- (16) Closing of the record.

d. **Closing of record.** At the conclusion of closing statements, the record shall be closed to the presentation of any further evidence, testimony, or statements, except as such may occur in response to questions from the Commission.

e. **Witnesses.** Each witness shall take an oath or affirmation before testifying. After a witness has testified, the applicant, the protestant or participating intervenors and any Commissioner may cross-examine that witness in the order established by the chairperson of the Commission.

f. **Limitation of testimony.** Where two or more protestants or intervenors have substantially similar interests and positions, the Commission may limit cross-examination or argument on motions and objections to fewer than all the intervenors. The Commission may also limit testimony to avoid undue delay, waste of time or needless presentation of cumulative evidence.

g. **Commission findings and order.** After due consideration of written and oral statements, the testimony, and the arguments presented at hearing, the Commission shall make its findings and order, based upon evidence in the record and, as appropriate, consistent with the Act and any rule, permit, or order made pursuant thereto.

529. PROCEDURES FOR RULEMAKING PROCEEDINGS

a. **~~Institution-Initiation~~ of rulemaking.** The Commission may ~~institute-initiate~~ rulemaking on its motion or in response to an application filed by any person.

b. **Applications for rulemaking.** Any person may petition the Commission to initiate rulemaking. All applications for rulemaking shall contain the following information:

- (1) The name, address, and telephone number of the person requesting the rulemaking;
- (2) A copy of the rule proposed in the application and a general statement of the reasons for the requested rule; and

(3) A proposed statement of the basis and purpose for the rule.

- c. **Notice of proposed rulemaking.** All rulemaking hearings of the Commission shall be noticed by publication in the Colorado Register not less than twenty (20) days ~~and not more than sixty (60) days~~ prior to the hearing and as otherwise specified in the Administrative Procedure Act, C.R.S. §24-4-103.
- d. **Time for rulemaking.** The rulemaking hearing shall not be held until the expiration of six (6) months from the date of application unless the Commission, in its discretion, decides that an earlier hearing is appropriate.
- e. **Development of proposed rules.** Prior to the notice of proposed rulemaking, the Commission or Director may use informal procedures to gather information, including, but not limited to, public forums, investigation by Commission staff, and formation of rulemaking teams. Commissioners may participate in such informal proceedings.
- f. **Content of notice.** The notice shall state the time, date, place, and general subject matter of the hearing to be held. It may include a statement indicating whether an informal public meeting will be held, the time, date, place, and general purpose of the meeting, any special procedures the Commission deems appropriate for the particular rulemaking proceeding and a statement encouraging public participation. The notice shall state that the proposed regulations will be available upon request from the office of the Commission, the date of availability, and any fee. The notice shall include a short and plain statement which summarizes the intended action and states generally the basis and purpose of the rule.
- g. **The rulemaking hearing.** The Commission shall hold a formal public hearing before promulgating any rules or regulations. At that hearing, the Commission shall afford any person an opportunity to submit data, views or arguments. The Commission may limit such testimony or presentation of evidence at its discretion and may prohibit repetitive, irrelevant or harassing testimony.
- h. **Conduct of rulemaking hearings.**
- (1) The Commission encourages any person to participate at rulemaking hearings. The times at which the public may participate ~~will~~ shall be determined at the discretion of the Commission. The Commission may, at its discretion, limit the amount of time a person may use to comment or make public statements. Oaths shall not be required for public participation.
 - (2) The Commission encourages witnesses to make plain, brief, and simple statements of their positions. It also encourages submittal of written statements prior to hearing, with only an oral summary of such a statement at the hearing.
 - (3) The order of presentation at a rulemaking hearing shall be as established by the Commission at the hearing.
 - (4) The Commission has the discretion to continue rulemaking hearings by announcement at the rulemaking hearing without ~~republication of~~ republishing the proposed rule.

530. INVOLUNTARY POOLING PROCEEDINGS

- a. An application for involuntary pooling pursuant to §34-60-116, C.R.S., may be filed at any time an ~~nonconsenting~~ owner within ~~a the~~ drilling and spacing unit established by Commission order fails or refuses to agree to bear ~~his-its~~ proportionate share of the costs and risks of drilling and operating the well or to lease its minerals. An application for involuntary pooling may be filed at any time prior to or after the drilling of a well; however, any involuntary pooling order issued shall

be retroactive to the date the application is filed with the Commission unless the payor agrees otherwise. As used herein a nonconsenting owner shall mean an

b. An owner shall be deemed a nonconsenting owner in the area to be pooled ~~wh~~if, after at least thirty (30) days' written notice of the following information, the owner does not elect in writing to consent to participate in the cost of the well concerning which the pooling order is sought:

- (1) The location and objective depth of the well;:-
- (2) The estimated drilling and completion cost of the well;:- and
- (3) The estimated spud date for the well or range of time within which spudding is to occur.
- (4) An authority for expenditure prepared by the operator and containing the information required above, together with additional information deemed appropriate by the operator shall satisfy this obligation.

b.c. An unleased owner shall be deemed a nonconsenting owner if, after at least thirty (30) days' written notice, the unleased owner has failed or refused a reasonable offer to lease. In determining whether a reasonable offer to lease has been tendered under §34-60-116(7)(d), C.R.S. the Commission shall consider the lease terms listed below for the drilling and spacing unit in the application and for all cornering and contiguous units that are under the proposed lease:

- (1) Date of lease and primary term or offer with acreage in lease;
- (2) Annual rental per acre;
- (3) Bonus payment or evidence of its non-availability;
- (4) Mineral interest royalty;
- (5) Such other lease terms as may be relevant.

600-SERIES SAFETY REGULATIONS

601. INTRODUCTION

The rules and regulations in this section are promulgated to protect the health, safety and welfare of the general public during the drilling, completion and operation of oil and gas wells and producing facilities. They do not apply to parties or requirements regulated under the Federal Occupational Safety and Health Act of 1970 (See Rule 212).

602. GENERAL

The training and action of employees, as well as proper location and operation of equipment is an important part of any safety program. While this section is general in nature, it is considered a basic part of the foundation of any safety program.

- a. Employees shall be familiarized with these rules and regulations as provided herein as they relate to their function in their respective jobs. Each new employee should have his job outlined, explained and demonstrated.
- b. Unsafe and potentially dangerous conditions as defined by these rules, should be reported immediately by employees to the supervisor in charge and shall be remedied as soon as practical. Any accident involving injury to wellsite personnel or to a member of the general public

which requires ~~hospitalization~~ professional medical attention, or significant damage to equipment or the wellsite shall be reported to the ~~Oil and Gas Conservation Commission Director~~ as soon as practicable, but in no event later than twenty-four (24) hours after the accident. A COGCC accident report, Form 22, shall be submitted to the Director within ten (10) days of the accident.

Where unsafe or potentially dangerous conditions exist, the owner or operator shall respond as directed by an agency with demonstrated authority to do so (such as sheriff, fire district director, etc.).

- c. Vehicles of persons not involved in drilling, production, servicing, or seismic operations shall be located a minimum distance of one hundred (100) feet from the wellbore, or a distance equal to the height of the derrick or mast, whichever is greater. Equivalent safety measures shall be taken where terrain, location or other conditions do not permit this minimum distance requirements.
- d. Existing wells are exempt from the provisions of these regulations as they relate to the location of the well.
- e. Existing producing facilities shall be exempt from the provisions of these regulations with respect to minimum distance requirements and setbacks unless they are found by the Director to be unsafe.
- f. Self-contained sanitary facilities shall be provided during drilling operations and at any other similarly staffed oil and gas operations facility

603. DRILLING AND WELL SERVICING OPERATIONS AND HIGH DENSITY AREA RULES

- a. **Statewide setbacks.** Subparagraph (1) below shall apply to all areas of the state except as provided under subparagraphs b. and e. of this rule. Subparagraph (2) below shall apply to all areas of the state.

(1) ~~a~~At the time of initial drilling of the well, the wellhead shall be located a distance of one hundred fifty (150) feet or one and one-half (1-1/2) times the height of the derrick, whichever is greater, from any ~~occupied~~ building unit, public road, major above ground utility line or railroad.

(2) A well shall be a minimum distance of one hundred fifty (150) feet from a surface property line. An exception may be granted by the Director if it is not feasible for the operator to meet this minimum distance requirement and a waiver is obtained from the offset surface owner(s). An exception request letter stating the reasons for the exception shall be submitted to the Director and accompanied by a signed waiver(s) from the offset surface owner(s). Such waiver shall be written and filed in the county clerk and recorder's office and with the Director.

- b. **High density area rules for building units.** A high density area shall be determined at the time the well is permitted on a well-by-well basis by calculating the number of ~~occupied~~ building units within the seventy-two (72) acre area defined by a one thousand (1000) foot radius from the wellhead or production facility. If thirty-six (36) or more actual or platted building units (as defined in the 100 Series rules) are within the one thousand (1000) foot radius or eighteen (18) or more building units are within any semi-circle of the one thousand (1000) foot radius (i.e., an average density of one (1) building unit per two (2) acres), it shall be deemed a high density area. If platted building units are used to determine the density, then fifty percent (50%) of said platted units shall have building units under construction or constructed.
- c. **High density area rules for other facilities.** If an educational facility, assembly building, hospital, nursing home, board and care facility, or jail is located within one thousand (1000) feet of a wellhead or production facility, high density area rules shall apply.

d. **Designated outside activity area.** The Commission, upon application and hearing, shall determine the appropriate boundary and setbacks for a designated outside activity area as defined in the 100 series rules. The minimum setback from the boundary of the designated outside activity area shall be three hundred fifty (350) feet.

e. The following rules shall apply in high density and designated outside activity areas:

(1) **Provisions for encroaching development.** If, by virtue of subsequent future surface development, an area becomes a high density area, subsections (2), (3), (7) and (14) shall not apply to the operator.

(2) **Setbacks for wellheads.** At the time of initial drilling of the well, the wellhead location shall be not less than three hundred fifty (350) feet from any building unit, educational facility, assembly building, hospital, nursing home, board and care facility, or jail.

(3) **Setbacks for production equipment.**

At the time of initial installation or construction, production tanks, pits, and/or associated on-site production equipment shall be located not less than three hundred fifty (350) feet from any building unit, and, if requested by the local governmental designee, Such pp production tanks, pits, or associated on-site production equipment shall be located five hundred (500) feet from an educational facility, assembly building, hospital, nursing home, board and care facility, jail or designated outside activity area. However, such five hundred (500) foot setback shall be decreased to the maximum achievable setback if five hundred (500) feet would extend beyond the area on which the operator has a legal right to place or construct such facilities. Should the operator object to such five hundred (500) foot setback for any reason, a variance hearing shall be conducted at the next regularly scheduled meeting of the Commission, subject to the notice requirements of Rule 507.

(4) A. **Blowout preventer equipment (“BOPE”) for high density area drilling operations.**

Blowout prevention equipment for drilling operations shall consist of (at a minimum):

- | | | |
|-----|---------------------------------|--|
| i. | Rig with k Kelley | double ram with blind ram and pipe ram; annular preventer or a rotating head |
| ii. | Rig without k Kelley | double ram with blind ram and pipe ram |

Mineral Management certification or Director approved training for blowout prevention shall be required for at least one (1) person at the wellsite during drilling operations.

B. **BOPE testing for high density area drilling operations.** Upon initial rig-up and at least once every thirty (30) days during drilling operations thereafter, pressure testing of the casing string and each component of the blowout prevention equipment including flange connections shall be performed to seventy percent (70%) of working pressure or seventy percent (70%) of the internal yield of casing, whichever is less. Pressure testing shall be conducted and the documented results shall be retained by the operator for inspection by the Director for a period of one (1) year. Activation of the pipe rams for function testing shall be conducted on a daily basis when practicable

C. **Pit level indicators.** Pit level indicators shall be used.

- D. **Drill stem tests.** Closed chamber drill stem tests shall be allowed in high density areas. All other drill stem tests shall require approval by the Director.
- (5) A. **BOPE for well servicing operations.** Adequate blowout prevention equipment shall be used on all well servicing operations.
- B. **Backup stabbing valves shall be required on well servicing operations during reverse circulation.** Valves shall be pressure tested before each well servicing operation using both low pressure air and high pressure fluid.
- (6) **Location requirement exceptions and waivers.** Exceptions to the location requirements set out in (2) and (3) above shall be granted by the Director if the Director determines that Rule 318. has been complied with and that a copy of waivers from each person owning ~~an occupied~~ building unit or building permitted for construction within three hundred fifty (350) feet of the proposed location is submitted as part of the Form 2, and that the proposed location complies with all other safety requirements of the rules and regulations.
- (7) **Fencing requirements.** At the time of initial installation, if a wellsite falls within a high density area, all pumps, pits, wellheads and production facilities shall be adequately fenced to restrict access by unauthorized persons. For security purposes, all such facilities and equipment used in the operation of a completed well shall be surrounded by a fence six (6) feet in height, constructed in conformance with local written standards as long as the material is non-combustible and allows for adequate ventilation, and the gate(s) shall be locked.
- (8) **Control of fire hazards.** Any material not in use that might constitute a fire hazard shall be removed a minimum of twenty-five (25) feet from the wellhead, tanks and separator. Any electrical equipment installations inside the bermed area shall comply with API RP 500 classifications and comply with the current national electrical code as adopted by the State of Colorado.
- (9) **Loadlines.** In high density areas, all loadlines shall be bullplugged or capped.
- (10) **Removal of surface trash.** All surface trash, debris, scrap or discarded material connected with the operations of the property shall be removed from the premises or disposed of in a legal manner.
- (11) **Guy line anchors.** All guy line anchors left buried for future use shall be identified by a marker of bright color not less than four (4) feet in height and not greater than one (1) foot east of the guy line anchor.
- (12) **Berm construction.** ~~Berms or other secondary containment devices in high density areas shall be constructed around crude oil, condensate, and produced water storage tanks and shall enclose an area sufficient to contain and provide secondary containment for one hundred fifty percent (150%) of the largest single tank and sufficient freeboard to contain precipitation.~~ Berms or other secondary containment devices shall be sufficiently impervious to contain any spilled or released material. All newly installed or replaced berms in high density areas, in the absence of remote impounding, shall be constructed around crude oil and condensate storage tanks and shall enclose an area sufficient to contain one hundred fifty percent (150%) of the largest single tank. No more than two (2) crude oil ~~and or~~ condensate storage tanks shall be located within a single berm. ~~All berms and containment devices shall be inspected at regular intervals and containment integrity maintained in good condition. No potential ignition sources shall be installed inside the secondary containment area unless the containment area encloses a~~

fired vessel. Refer to American Petroleum Institute Recommended Practices, API RP - D16.

- (13) **Tank specifications.** All newly installed or replaced crude oil and condensate storage tanks in high density areas shall be designed, constructed, and maintained in accordance with National Fire Protection Association's latest edition (NFPA 30). The operator shall maintain written records verifying proper design, construction, and maintenance, and shall make these records available for inspection by the Director.
 - (14) **Access roads.** If a wellsite falls within a high density area at the time of construction, all leasehold roads shall be constructed to accommodate local emergency vehicle access requirements, and shall be maintained in a reasonable condition.
 - (15) **Well site cleared.** Within ninety (90) days after a well is plugged and abandoned, the well site shall be cleared of all non-essential equipment, trash, and debris. For good cause shown, an extension of time may be granted by the Director.
 - (16) **Identification of plugged and abandoned wells in high density areas.** The operator shall identify the location of the wellbore with a permanent monument as specified in Rule 319.a.(5). The operator shall also inscribe or imbed the well number and date of plugging upon the permanent monument.
 - (17) **Development from existing well pads.** Where possible, operators shall provide for the development of multiple reservoirs by drilling on existing pads or by multiple completions or commingling in existing wellbores (see Rule 322). If any operator asserts it is not possible to comply with, or requests relief from, this requirement, the matter shall be set for hearing by the Commission and relief granted as appropriate.
- f. **Statewide rig floor safety valve requirements.** When drilling or well servicing operations are in progress on a well where there is any indication the well will flow hydrocarbons, either through prior records or present conditions, there shall be on the rig floor a safety valve with connections suitable for use with each size and type of tool joint or coupling being used on the job.
- g. **Statewide static charge requirements.** Rig substructure, derrick, or mast shall be designed and operated to prevent accumulation of static charge.
- h. **Statewide well servicing pressure check requirements.** Prior to initiating well servicing operations, the well shall be checked for pressure and steps taken to remove pressure or operate safely under pressure before commencing operations.
- i. **Statewide well control equipment and other safety requirements.** Well control equipment and other safety requirements are:
- (1) When there is any indication that a well will flow, either through prior records, present well conditions, or the planned well work, blowout prevention equipment shall be installed in accordance with Rule 317 or any special orders of the Commission.
 - (2) Blowout prevention equipment when required by Rule 317 shall be in accordance with API RP 53: Recommended Practices for Blowout Prevention Equipment Systems, or amendments thereto.
 - (3) While in service, blowout prevention equipment shall be inspected daily and a preventer operating test shall be performed on each round trip, but not more than once every twenty-four (24) hour period. Notation of operating tests shall be made on the daily report.

- (4) All pipe fittings, valves and unions placed on or connected with blowout prevention equipment, well casing, casinghead, drill pipe, or tubing shall have a working pressure rating suitable for the maximum anticipated surface pressure and shall be in good working condition as per generally accepted industry standards.
 - (5) Blowout prevention equipment shall contain pipe rams that enable closure on the pipe being used. The choke line(s) and kill line(s) shall be anchored, tied or otherwise secured to prevent whipping resulting from pressure surges.
 - (6) Pressure testing of the casing string and each component of the blowout prevention equipment, if blowout prevention equipment is required, shall be conducted prior to drilling out any string of casing except conductor pipe. The minimum test pressure shall be five hundred (500) psi, and shall hold for fifteen (15) minutes without pressure loss in order for the casing string to be considered serviceable. Upon demand the operator shall provide to the Commission the pressure test evidence. Drilling operations shall not proceed until blowout prevention equipment is tested and found to be serviceable.
 - (7) If the blind rams are closed for any purpose except operational testing, the valves on the choke lines or relief lines below the blind rams should be opened prior to opening the rams to bleed off any pressure.
 - (8) All rig employees shall have adequate understanding of and be able to operate the blowout prevention equipment system. New employees shall be trained in the operation of blowout prevention systems as soon as practicable to do so.
 - (9) Drilling contractors shall place a sign or marker at the point of intersection of the public road and rig access road.
 - (10) The number of the public road to be used in accessing the rig along with all necessary emergency numbers shall be posted in a conspicuous place on the drilling rig.
- j. **Statewide equipment, weeds, waste, and trash requirements.** All locations, including wells and surface production facilities, shall be kept free of the following: equipment, vehicles, and supplies not necessary for use on that lease; weeds; rubbish, and other waste material. The burning or burial of such material on the premises shall be performed in accordance with ~~may be subject to~~ other applicable local, state, or federal solid waste disposal regulations and in accordance with the 900 series rules. In addition, material may be burned or buried on the premises only with the prior written consent of the surface owner.
- k. **Statewide equipment anchoring requirements.** All equipment at drilling and production sites in geological hazard and floodplain areas shall be anchored to the extent necessary to resist flotation, collapse, lateral movement or subsidence.

604. OIL AND GAS PRODUCTION FACILITIES.

a. Crude Oil and Condensate Tanks

- (1) Atmospheric tanks used for crude oil storage shall be built in accordance with the following standards as applicable:
 - A. Underwriters Laboratories, Inc., No. UL-142, "Standard for Steel above ground Tanks for Flammable and Combustible Liquids"
 - B. American Petroleum Institute Standard No. 650, "Welded Steel Tanks for Oil Storage"

- C. American Petroleum Institute Standard No. 12B, "Bolted Tanks for Storage of Production Liquids"
 - D. American Petroleum Institute Standard No. 12D, "Field Welded Tanks for Storage of Production Liquids" or
 - E. American Petroleum Institute Standard No. 12F, "Shop Welded Tanks for Storage of Production Liquids".
- (2) Tanks shall be located at least two (2) diameters or three hundred fifty (350) feet, whichever is smaller, from the boundary of the property on which it is built. Where the property line is a public way the tanks shall be two thirds (2/3) of the diameter from the nearest side of the public way or easement.
- A. Tanks less than three thousand (3,000) barrels capacity shall be located at least three (3) feet apart.
 - B. Tanks three thousand (3,000) or more barrels capacity shall be located at least one-sixth (1/6) the sum of the diameters apart. When the diameter of one tank is less than one-half (1/2) the diameter of the adjacent tank, the tanks shall be located at least one-half (1/2) the diameter of the smaller tank apart.
- (3) At the time of installation, tanks shall be a minimum of two hundred (200) feet from any building unit residences, normally occupied buildings, or well defined normally occupied outside areas.
- (4) Berms or other secondary containment devices shall be constructed around crude oil, condensate and produced water tanks, in the absence of remote impounding to provide secondary containment for the largest single tank and sufficient freeboard to contain precipitation. Berms and secondary containment devices and all containment areas shall be sufficiently impervious to contain any spilled or released material. both methods shall enclose an area with sufficient volume to contain the entire contents of the largest tank in the enclosure. Berms shall be and secondary containment devices shall be inspected at regular intervals and maintained in good condition. When a berm is provided around tanks nNo potential ignition sources shall be installed inside the at area secondary containment area unless the containment area encloses a fired vessel.
- (5) Tanks shall be a minimum of seventy-five (75) feet from a fired vessel or heater-treater.
- (6) Tanks shall be a minimum of fifty (50) feet from a separator, well test unit or other non-fired equipment.
- (7) Tanks shall be a minimum of seventy-five (75) feet from a compressor with a rating of 200 horsepower, or more.
- (8) Tanks shall be a minimum of seventy-five (75) feet from a wellhead.
- (9) Gauge hatches on atmospheric tanks used for crude oil storage shall be closed at all times when not in use.
- (10) Vent lines from individual tanks shall be joined and ultimate discharge shall be directed away from the loading racks and fired vessels in accord with API RP 12R-1.

(11) During hot oil treatments on tanks containing thirty-five (35) degree or higher API gravity oil, hot oil units shall be located a minimum of one hundred (100) feet from any tank being serviced.

(12) Tank Specifications. All newly installed or replaced crude oil or condensate storage tanks shall be designed, constructed, and maintained in accordance with the National Fire Protection Association (NFPA) Code 30 (2008 version). The operator shall maintain written records verifying proper design, construction, and maintenance, and shall make these records available for inspection by the Director. Only the 2008 version of NFPA Code 30 applies to this rule. This rule does not include later amendments to, or additions of, the NFPA Code 30. NFPA Code 30 may be examined at any state publication depository library. In addition, NFPA Code 30 is available for public inspection during normal business hours, and copies may be obtained at a reasonable cost, from the Public Room Administrator at the office of the Commission, 1120 Lincoln Street, Suite 801, Denver, Colorado 80203.

(13) Labeling of tanks. All tanks shall be labeled in accordance with Rule 210(d).

b. Fired Vessel, Heater-Treater

(1) Fired vessels (FV) including heater-treaters (HT) shall be minimum of fifty (50) feet from separators or well test units.

(2) FV-HT shall be a minimum of fifty (50) feet from a lease automatic custody transfer unit (LACT).

(3) FV-HT shall be a minimum of forty (40) feet from a pump.

(4) FV-HT shall be a minimum of seventy-five (75) feet from a well.

(5) At the time of installation, fired vessels and heater treaters shall be a minimum of two hundred (200) feet from residences ~~occupied~~ building units, or well defined normally occupied outside areas.

(6) Vents on pressure safety devices shall terminate in a manner so as not to endanger the public or adjoining facilities. They shall be designed so as to be clear and free of debris and water at all times.

(7) All stacks, vents, or other openings shall be equipped with screens or other appropriate equipment to prevent entry by wildlife, including migratory birds.

c. Special Equipment. Under unusual circumstances special equipment may be required to protect public safety. The Director shall determine if such equipment should be employed to protect public safety and if so, require the operator to employ same. If the operator or the affected party does not concur with the action taken, the Director shall bring the matter before the Commission at public hearing.

(1) All wells located within one hundred fifty (150) feet of a residence(s), normally occupied building units, or well defined normally occupied outside area(s), shall be equipped with an automatic control valve that will shut the well in when a sudden change of pressure, either a rise or drop, occurs. Automatic control valves shall be designed so they fail safe.

(2) Pressure control valves required in (a) shall be activated by a secondary gas source supply, and shall be inspected at least every three (3) months to assure they are in good working

order and the secondary gas supply has volume and pressure sufficient to activate the control valve.

(3) All pumps, pits, and producing facilities shall be adequately fenced to prevent access by unauthorized persons when the producing site or equipment is easily accessible to the public and poses a physical or health hazard.

(4) Sign(s) shall be posted at the boundary of the producing site where access exists, identifying the operator, lease name, location, and listing a phone number, including area code, where the operator may be reached at all times unless emergency numbers have been furnished to the county commission or its designee.

d. **Mechanical Conditions.** All valves, pipes and fittings shall be securely fastened, inspected at regular intervals and maintained in good mechanical condition.

e. **Buried or partially buried tanks, vessels or structures.** Buried or partially buried tanks, vessels, or structures used for storage of E&P waste shall be properly designed, constructed, ~~and~~ installed, and operated in a manner to contain materials safely. Such vessels shall be tested for leaks after installation and maintained, repaired or replaced to prevent spills or releases of E&P waste.

f. **Produced water pits, special use and buried or partially buried vessels, or structures.** At the time of initial construction, pits shall be located not less than two hundred (200) feet from any building unit.

605. RESERVED

606A. FIRE PREVENTION AND PROTECTION

a. Gasoline-fueled engines shall be shut down during fueling operations if the fuel tank is an integral part of the engine.

b. Handling, connecting and transfer operations involving liquefied petroleum gas (LPG) shall conform to the requirements of the State Oil Inspector.

c. Flammable liquids storage areas within any building or shed shall:

(1) be adequately vented to the outside air;

(2) have two (2) unobstructed exits leading from the building in different directions if the building is in excess of five hundred (500) square feet;

(3) be maintained with due regard to fire potential with respect to housekeeping and materials storage;

(4) be identified as a hazard and appropriate warning signs posted;

d. Flammable liquids shall not be stored within fifty (50) feet of the wellbore, except for the fuel in the tanks of operating equipment or supply for injection pumps. Where terrain and location configuration do not permit maintaining this distance, equivalent safety measures should be taken.

e. Liquefied petroleum gas (LPG) tanks larger than two hundred fifty (250) gallons and used for heating purposes, shall be placed as far as practical from and parallel to the adjacent side of the rig or wellbore as terrain and location configuration permit. Installation shall be consistent with provisions of NFPA 58, "Standards for the Storage and Handling of Liquid Petroleum Gases".

- f. Smoking shall be prohibited at or in the vicinity of operations which constitute a fire hazard and such locations shall be conspicuously posted with a sign, "No Smoking or Open Flame".

Matches and all smoking equipment may not be carried into "No Smoking" areas.

- g. No source of ignition shall be permitted in an area where smoking has been prohibited unless it is first determined to be safe to do so by the supervisor in charge or his designated representative.
- h. Open fires, transformers, or other sources of ignition shall be permitted only in designated areas located at a safe distance from the wellhead or flammable liquid storage areas.
- i. Only approved heaters for Class I Division 2 areas, as designated by API RB 500B, shall be permitted on or near the rig floor. The safety features of these heaters shall not be altered.
- j. Combustible materials such as oily rags and waste shall be stored in covered metal containers.
- k. Material used for cleaning shall have a flash point of not less than one hundred (100° F) degrees Fahrenheit. For limited special purposes, a lower flash point cleaner may be used when it is specifically required and should be handled with extreme care.
- l. Firefighting equipment shall not be tampered with and shall not be removed for other than fire protection and firefighting purposes and services. A firefighting water system may be used for wash down and other utility purposes so long as its firefighting capability is not compromised. After use, water systems must be properly drained or properly protected from freezing.
- m. An adequate amount of fire extinguishers and other firefighting equipment shall be suitably located, readily accessible, and plainly labeled as to their type and method of operation.
- n. Fire protection equipment shall be periodically inspected and maintained in good operating condition at all times.
- o. Firefighting equipment shall be readily available near all welding operations. When welding, cutting or other hot work is performed in locations where other than a minor fire might develop, a person shall be designated as a fire watch. The area surrounding the work shall be inspected at least one (1) hour after the hot work is completed.
- p. Portable fire extinguishers shall be tagged showing the date of last inspection, maintenance or recharge. Inspection and maintenance procedures shall comply with the latest edition of the National Fire Protection Association's publication NFPA 10.
- q. Personnel shall be familiarized with the location of fire control equipment such as drilling fluid guns, water hoses and fire extinguishers and trained in the use of such equipment. They shall also be familiar with the procedure for requesting emergency assistance as terrain and location configuration permit. Installation shall be consistent with provisions of NFPA 58, "Standards for the Storage and Handling of Liquefied Petroleum Gases".

606B. AIR AND GAS DRILLING

- a. Drilling compressors (air or gas) shall be located at least one hundred twenty five (125) feet from the wellbore and in a direction away from the air or gas discharge line.
- b. The air or gas discharge line shall be laid in as nearly as a straight line as possible from the wellbore and be a minimum of one hundred fifty (150) feet in length. The line shall be securely anchored.

- c. A pilot flame shall be maintained at the end of the air or gas discharge line at all times when air, gas, mist drilling, or well testing is in progress.
- d. All combustible material shall be kept at least one hundred (100) feet away from the air and gas discharge line and burn pit.
- e. The air line from the compressors to the standpipe shall be of adequate strength to withstand at least the maximum discharge pressure of the compressors used, and shall be checked daily for any evidence of damage or weakness.
- f. Smoking shall not be allowed within seventy-five (75) feet of the air and gas discharge line and burn pit.
- g. All operations associated with the drilling, completion or production of a well shall be subject to the Colorado Air Quality Control Act, ~~Section~~ 25-7-101, C.R.S.

607. HYDROGEN SULFIDE GAS

- a. When well servicing operations take place in zones known to contain at or above one hundred (100) ppm hydrogen sulfide gas, as measured in the gas stream, the operator shall file a hydrogen sulfide drilling operations plan (United States Department of the Interior, Bureau of Land Management, Onshore Order No. 6, November 23, 1990).
- b. When proposing to drill a well in areas where hydrogen sulfide gas in excess of one hundred (100) ppm can reasonably be expected to be encountered, the operator shall submit as part of the Form 2, Application-for-Permit-to-Drill, a hydrogen sulfide drilling operations plan (United States Department of the Interior, Bureau of Land Management, Onshore Order No. 6, November 23, 1990).
- c. Any gas analysis indicating the presence of hydrogen sulfide gas shall be reported to the Commission and the local governmental designee.

608. COALBED METHANE WELLS

a. Assessment and monitoring of plugged and abandoned wells within one-quarter (1/4) mile of proposed coalbed methane (CBM) well.

(1) Operators shall attempt to identify all plugged and abandoned (P&A) wells located within one-quarter (1/4) mile of a proposed coalbed methane (CBM) well. Any P&A well within one-quarter (1/4) mile of a proposed CBM well that is identified shall be assessed for risk of leaking gas or water to the ground surface or into subsurface water resources, taking into account plugging and cementing procedures described in any recompletion or P&A report. The operator shall notify the Director of the results of the assessment of the plugging and cementing procedures. The Director shall review the assessment and take appropriate action to pursue further investigation and remediation if warranted.

(2) Operators shall conduct a soil gas survey at all P&A wells located within one quarter (1/4) mile of a proposed CBM well prior to production from the proposed CBM well and again one (1) year and thereafter every three (3) years after production has commenced. Operators shall submit the results of the soil gas survey to the Director within three (3) months of conducting the survey.

b. Water well sampling.

(1) If a conventional gas well or P&A well exists within one quarter (1/4) mile of a proposed CBM well, then the two (2) closest water wells within a one-half (1/2) mile radius of the conventional gas well or the P&A well shall be sampled ("Water Quality Testing Wells"). If possible, the water wells selected should be on opposite sides of the conventional gas well or the P&A well not exceeding a one-half (1/2) mile radius. If water wells on opposite sides of the conventional gas well or the P&A well cannot be identified, then the two (2) closest wells within a one-half (1/2) mile radius of the conventional gas well or the P&A well shall be sampled. If two (2) or more conventional wells or P&A wells are located within one-quarter (1/4) mile of the proposed CBM well, then the conventional well or the P&A well closest to a proposed CBM well shall be used for selecting water wells for sampling.

If there are no conventional gas wells or P&A wells located within a one-quarter (1/4) mile radius of the proposed CBM well, then the selected water wells shall be within one-quarter (1/4) mile of the proposed CBM well. In areas where two (2) or more water wells exist within one-quarter (1/4) mile of the proposed CBM well, then the two (2) closest water wells shall be sampled. If possible, the water wells selected should be on opposite sides of the proposed CBM well. If water wells on opposite sides of the proposed CBM well cannot be identified, then the two (2) closest wells within one-quarter (1/4) mile radius shall be sampled. If two (2) water wells do not exist within a one-quarter (1/4) mile radius, then the closest single water well within either a one-quarter (1/4) mile radius or within a one-half (1/2) mile radius shall be selected.

If no water well is located within a one-quarter (1/4) mile radius area as described or if access is denied, then a water well within one-half (1/2) mile of the proposed CBM well shall be selected. If no water wells meet the foregoing criteria, then sampling shall not be required. If the Commission has already acquired data on a water well within one-quarter (1/4) mile of the conventional well or the P&A well, but it is not the closest water well, then it shall be given preference in selecting a water well to be tested.

(2) The "initial baseline testing" described in this paragraph shall include all major cations and anions, total dissolved solids (TDS), iron, manganese, selenium, nitrates and nitrites, dissolved methane, field pH, sodium adsorption ration (SAR), presence of bacteria (iron related, sulfate reducing, slime, and coliform), and specific conductance. Hydrogen sulfide shall also be measured using a field test method. Field observations such as odor, water color, sediment, bubbles, and effervescence shall also be included. The location of the water well shall be surveyed in accordance with Rule 215.

(3) If free gas or a dissolved methane concentration level greater than 2 milligrams per liter (mg/l) is detected in a water well, gas compositional analysis and stable isotope analyses of the methane (carbon and deuterium) shall be performed to determine gas type. If the test results indicate biogenic gas, no further isotopic testing shall be done. If the test results indicate thermogenic or a mixture of thermogenic and biogenic gas, then the operator shall thereafter perform annual testing and submit to the Director an action plan to determine the source of the gas. If the methane concentration increases by more than 5 mg/l between sampling periods, or increases to more than 10 mg/l, the operator shall notify the Director and the owner of the water well immediately.

(4) Operators shall conduct initial baseline testing of the selected water wells prior to the drilling of the proposed CBM well. Within one (1) year after completion of the proposed CBM well, a "post completion" test shall be performed for the same analytical parameters listed above and repeated three (3) and six (6) years thereafter. If the methane concentration increases by more than 5 mg/l between sampling periods or increases to more than 10 mg/l, the operator shall prepare an action plan to determine the source of the gas and notify the Director and the water well owner immediately. If no significant changes from the baseline have been identified after the third test (i.e. the six-year test), no further

testing shall be required. Additional “post completion” test(s) may be required if changes in water quality are identified during follow-up testing. The Director may require further water well sampling at any time in response to complaints from water well owners.

(5) Copies of all test results described above shall be provided to the Commission and the water well owner within three (3) months of collecting the samples. The analytical data and surveyed well locations shall also be submitted to the Director in an electronic data deliverable format.

c. Coal outcrop and coal mine monitoring.

(1) If the CBM well is within two (2) miles of the outcrop of the stratigraphic contact between the coal-bearing formation and the underlying formation, or within two (2) miles of an active, inactive, or abandoned coal mine, the operator shall survey the outcrop or mine prior to drilling the CBM well to determine whether there are gas seeps in the area. If a gas seep is identified, then its location and aerial extent shall be surveyed in accordance with Rule 215 and the concentration of the soil gas shall be measured. If possible, a sample of gas shall be collected from the seep for compositional analysis and stable isotope analyses of the methane (carbon and deuterium). Thereafter, the operator shall annually inspect the gas seep, survey its aerial extent, and measure soil gas concentrations. The operator shall submit the results of the outcrop or mine monitoring to the Commission and the landowner within three (3) months of its completion of the field work. The analytical data shall also be submitted to the Director in an electronic data deliverable format.

(2) If the CBM well is within two (2) miles of the outcrop of the stratigraphic contact between the coal-bearing formation and the underlying formation, the operator shall survey the outcrop, review publicly available geologic and hydrogeologic data, and interview landowners to identify springs or water seeps that discharge from the coal-bearing formation. If such a water feature is identified, then the operator shall survey its location and aerial extent in accordance with Rule 215, measure the flow rate, photograph the feature, and collect and analyze a water sample in accordance with Rule 608.B.(2). Thereafter, the operator shall annually inspect, survey the aerial extent of, and measure the flow rate of the spring or water seep. The operator shall submit the results of the spring or water seep monitoring to the Commission and the landowner within three (3) months of its completion of the field work. The analytical data shall also be submitted to the Director in an electronic data deliverable format.

d. Post-completion pressure build-up tests. In addition to obtaining a bottom-hole pressure on all CBM wells, operators shall conduct a pressure build-up test two (2) to three (3) months after initial production begins and once every three (3) years thereafter. The operator shall provide the data acquired, an evaluation of the data, and a description of the procedures utilized to conduct the pressure build-up tests to the Director within thirty (30) days of the conclusion of each test. After reviewing the quality of the pressure build-up data and the adequacy of the geographic distribution of the data, the Director may reduce the number of wells subject to pressure build-up testing.

e. Bradenhead testing. Upon completion of any well, and on wells presently completed, the operator shall equip the bradenhead access to the annulus between the production and surface casing, as well as any intermediate casing, with approved fittings to allow safe and convenient determination of pressure and fluid flow. This rule shall apply to all wells, regardless of function, completed for CBM production or below the coal-bearing formation. All wells capable of production, injection, or observation shall be tested by the operator for pressure and flow, with results submitted to the Director on a bradenhead test report, Form 17, and to other applicable regulatory agencies. Bradenhead tests shall be performed on all wells on a bi-annual basis. Remedial requirements shall be determined by the appropriate regulatory agency.

f. Other testing or requirements. The Director may require additional information or apply additional requirements, such as obtaining a periodic pressure transient testing of high water/gas ratio wells and limiting water production in wells with anomalously high water rates and water/gas ratios.

700-SERIES FINANCIAL ASSURANCE AND ENVIRONMENTAL RESPONSE FUND

701. SCOPE

The rules in this series pertain to the provision of financial assurance by operators to ensure the performance of certain obligations imposed by the Oil and Gas Conservation Act (the Act), §34-60-106 (3.5), (11), (12) and (17) C.R.S., as well as the use of the Environmental Response Fund (ERF), §34-60-124 C.R.S., as a mechanism to plug and abandon orphan wells, perform orphaned site reclamation, and remediation, and to conduct other authorized environmental activities.

702. General.

Operators are required to provide financial assurance to the Commission to demonstrate that they are capable of fulfilling the obligations imposed by the Act, as described in this series. Except as otherwise specified herein, a surety bond, in a form and from a company acceptable to the Commission, is an approved method of providing financial assurance. Any other method of providing financial assurance identified in §34-60-106(B), C.R.S., shall be submitted to the Commission for approval, and shall be equivalent to the protection provided by a surety bond and may require detailed Commission review on an ongoing basis, including the use of third party consultants, the reasonable expense for which shall be charged to the operator proposing such alternative financial assurance.

- a. When the Director has reasonable cause to believe that the Commission may become burdened with the costs of fulfilling the statutory obligations described herein because an operator has demonstrated a pattern of non-compliance with oil and gas regulations in this or other states, because special geologic, environmental, or operational circumstances exist which make the plugging and abandonment of particular wells more costly, or due to other special and unique circumstances, the Director may petition the Commission for an increase in any individual or blanket financial assurance required in this series.
- b. The requirements of this series do not apply to situations where financial assurance has been provided to federal or Indian agencies for operations regulated solely by such agencies.

703. Surface owner protection.

Operators shall provide financial assurance to the Commission, prior to commencing any operations with heavy equipment, to protect surface owners who are not parties to a lease, surface use or other relevant agreement with the operator from unreasonable crop loss or land damage caused by such operations. The determination that crop loss or land damage is unreasonable shall be made by the Commission after the affected surface owner has filed an application in accordance with the 500 Series rules. Financial assurance for the purpose of surface owner protection shall not be required for operations conducted on state lands when a bond has been filed with the State Board of Land Commissioners.

The financial assurance required by this section shall be in the amount of two thousand dollars (\$2,000) per well for non-irrigated land, or five thousand dollars (\$5,000) per well for irrigated land. In lieu of such individual amounts, operators may submit statewide, blanket financial assurance in the amount of twenty five thousand dollars (\$25,000).

704. Centralized E&P waste management facilities.

An operator which makes application for an offsite, centralized E&P waste management facility shall, upon approval and prior to commencing construction, provide to the Commission financial assurance in an amount equal to the estimated cost the amount of fifty thousand dollars (\$50,000) to ensure the proper reclamation, closure and abandonment of such facility as set forth in Rule 908.g.(1) or in an amount voluntarily agreed to with the Director, or in an amount to be determined by order of the Commission. Operators of centralized E&P waste management facilities permitted prior to July 16, 2008 shall, by January 1, 2009, comply with Rule 908.g and this rule 704. This section does not apply to underground injection wells and multi-well pits covered under Rules 706. and 707.

705. Seismic operations.

Any operator submitting a Notice of Intent to Conduct Seismic Operations, Form 20, shall, prior to commencing such operations, provide financial assurance to the Commission in the amount of twenty five thousand dollars (\$25,000) statewide blanket financial assurance to ensure the proper plugging and abandonment of any shot holes and any necessary surface reclamation.

706. Soil protection and plugging and abandonment.

Prior to commencing the drilling of a well, or prior to the purchase of any well, an operator shall provide financial assurance to the Commission to ensure the protection of the soil and the proper plugging and abandonment of the well in accordance with the 300 Series of drilling regulations, the 900 Series of E&P waste management, the 1000 Series of reclamation regulations, and the 1100 Series of flowline regulations. The financial assurance required by this section shall be in the amount of five-ten thousand dollars (~~\$510,000~~) per well for wells less than 3000 feet in total measured depth and twenty thousand dollars (\$20,000) per well for wells greater than or equal to 3000 feet in total measured depth. In lieu of such individual amount, an operator may submit statewide blanket financial assurance in the amount of thirty-sixty thousand dollars (~~\$360,000~~) for the drilling and operation of less than one hundred (100) wells, or one hundred thousand dollars (\$100,000) for the drilling and operation of one hundred (100) or more wells. All oil and gas wells, excluding domestic gas wells, with financial assurance posted prior to July 1, 2008, as well as all new domestic gas wells, must have financial assurances in compliance with this section in place on July 1, 2009.

707. Inactive wells

- a. To the extent that an operator's inactive well count exceeds such operator's financial assurance amount divided by five-ten thousand dollars (~~\$510,000~~) for active wells less than 3000 feet in total measured depth or twenty thousand dollars (\$20,000) for inactive wells greater than or equal to 3000 feet in total measured depth, such additional wells shall be considered "excess inactive wells". For each excess inactive well, an operator's required financial assurance amount under Rule 706. shall be increased by five-ten thousand dollars (~~\$510,000~~) for wells less than 3000 feet in total measured depth or twenty thousand dollars (\$20,000) for active wells greater than or equal to 3000 feet in total measured depth. This requirement shall be modified or waived if the Commission approves a plan submitted by the operator for reducing such additional financial assurance requirement, for returning wells to production in a timely manner, or for plugging and abandoning such wells on an acceptable schedule.

In determining whether such plan is acceptable, the Commission shall take into consideration such factors as: the number of excess inactive wells; the cost to plug and abandon such wells; the proportion of such wells to the total number of wells held by the operator; any business reason the operator may have for shutting-in or temporarily abandoning such wells; the extent to which such wells may cause or have caused a significant adverse environmental impact; the financial condition of the operator, the capability of the operator to manage such plan in an orderly fashion; and the availability of plugging and abandonment services. If an increase in financial assurance is ordered pursuant to this subsection, the operator may, at its option and in compliance with these 700 Series rules, submit new financial assurance or supplement its existing financial assurance.

- b. Operators shall identify and list any shut-in or temporarily abandoned wells on their monthly production/ injection report. In addition, when equipment is removed from a well so as to render it temporarily abandoned, operators shall file a Sundry Notice, Form 4, with the Commission within thirty (30) days describing such activity.
- c. Any person, other than the operator, who causes equipment from a well to be removed so as to render temporarily abandoned shall, prior to conducting such activity, file a notice of intent to remove equipment and receive the approval of the Director. The Director may condition such approval on concurrent plugging and abandonment of the well or on provision of the financial assurance required of operators in this series.

708. ~~Public health, safety and welfare~~ General Liability Insurance.

All operators shall maintain general liability insurance coverage for property damage and bodily injury to third parties in the minimum amount of five hundred thousand dollars (\$500,000) per occurrence. Operators with wells or production facilities located in "high density areas" as defined in Rule 603.b. shall maintain such coverage in the minimum amount of one million dollars (\$1,000,000) per occurrence. Such policies shall include the Commission as a "certificate holder" so that the Commission may receive advance notice of cancellation.

709. Financial assurance.

All financial assurance provided to the Commission pursuant to this Series shall remain in-place until such time as the Director determines an operator has complied with the statutory obligations described herein, or until such time the Director determines a successor-in-interest has filed satisfactory replacement financial assurance, at which time the Director shall provide written approval for release of such financial assurance. Whenever an operator fails to fulfill any statutory obligation described herein, and the Commission undertakes to expend funds to remedy the situation, the Director shall make application to the Commission for an order calling or foreclosing the operator's financial assurance.

- a. Operators and third party providers of financial assurance shall be served with a copy of such application pursuant to Rule 503. and shall be accorded an opportunity to be heard thereon. Any third party provider of financial assurance which subsequently fails to comply with a Commission order to make such financial assurance available shall be considered an unacceptable provider of any new financial assurance to operators in Colorado, until such time as it applies for and receives an order of reinstatement. This provision shall be stayed by the filing of a judicial appeal. In addition, the Commission may institute suit to recover such monies.
- b. If an operator's financial assurance is called or foreclosed by the Commission, the called or foreclosed amount shall be deposited in the Environmental Response Fund to be expended by the Director for the purposes referenced in Rule 701., and an overhead recovery fee of ten percent (10%) of the funds expended by the Director as direct costs shall be charged against any excess of the financial assurance over such costs. Any remainder of such financial assurance after such cost recovery shall be returned to its provider. In no circumstances will the liability of a third party provider of financial assurance exceed the face amount of such financial assurance.
- c. If an operator's financial assurance is called or foreclosed by the Commission, such operator's Certificates of Clearance, Form 10, are forthwith suspended and no sales of gas or oil shall be allowed, except as may be allowed by the Commission order, until such time as the operator's financial assurance has been replaced or restored.

710. Environmental Response Fund.

The Commission shall ensure that the two-year average of the unobligated portion of ~~It is the intent of the Oil and Gas Conservation Commission that~~ and Environmental Response Fund (ERF) is maintained at a

~~level not to exceed four million dollars (\$4,000,000), and that there is an adequate balance in the fund to address environmental response needs—“emergency reserve”—of unobligated funds be maintained in the amount of one million dollars (\$1,000,000), which may be used in accordance with the Act and Rule 701.~~

711. Natural gas gathering, and natural gas processing ~~and underground natural gas storage~~ facilities.

Operators of active or inactive natural gas gathering, ~~or~~ natural gas processing, ~~or underground natural gas storage~~ facilities shall be required to provide ~~statewide blanket~~ financial assurance to ensure compliance with the 900 Series and 1000 Series rules in the amount of fifty thousand dollars (\$50,000) for each facility, or in an amount voluntarily agreed to with the Director, or in an amount to be determined by order of the Commission. In lieu of individual amounts, operators may submit statewide, blanket financial assurance in the amount of two hundred fifty thousand dollars (\$250,000). Operators of small systems gathering or processing less than five (5) MMSCFD may provide individual financial assurance in the amount of twenty-five thousand dollars (\$25,000). All operators of active or inactive natural gas gathering or natural gas processing facilities with financial assurance posted prior to July 1, 2008 must have financial assurances in compliance with this section in place on July 1, 2009.

712. Surface facilities and structures appurtenant to Class II Commercial Underground Injection control wells.

Operators of Class II Commercial Underground Injection Control (UIC) wells shall be required to provide financial assurance to ensure compliance with the 900 series rules in the amount of fifty-thousand dollars (\$50,000) for each facility, or in an amount voluntarily agreed to with the Director, or in an amount to be determined by order of the Commission. The financial assurance required by this Rule 712 shall apply to the surface facilities and structures appurtenant to the Class II commercial injection well and used prior to the disposal of E&P wastes into such well. The financial assurance requirements for the plugging and abandonment of Class II commercial UIC wells are specified in Rule 706.

800-SERIES AESTHETIC AND NOISE CONTROL REGULATIONS

801. INTRODUCTION

The rules and regulations in this section are promulgated to control aesthetics and noise impacts during the drilling, completion and operation of oil and gas wells and production facilities. Any Colorado county, home rule or statutory city, town, territorial charter city or city and county may, by application to the Commission, seek a determination that the rules and regulations in this section, or any individual rule or regulation, shall not apply to oil and gas activities occurring within the boundaries, or any part thereof, of any Colorado county, home rule or statutory city, town, territorial charter city or city and county, such determination to be based upon a showing by any Colorado county, home rule or statutory city, town, territorial charter city or city and county that, because of conditions existing therein, the enforcement of these rules and regulations is not necessary within the boundaries of any Colorado county, home rule or statutory city, town, territorial charter city or city and county for the protection of public health, safety and welfare.

802. NOISE ABATEMENT

- a. The goal of this rule is to identify noise sources related to oil and gas operations that impact surrounding landowners and to implement cost-effective and technically-feasible mitigation measures to bring oil and gas facilities into compliance with the allowable noise levels identified in subsection c. Operators should be aware that noise control is most effectively addressed at the siting and design phase, especially with respect to centralized compression and other downstream “gas facilities” (see definition in the 100 Series of these rules).

- b. Oil and gas operations at any well site, production facility or gas facility, shall comply with the following maximum permissible noise levels. Operations involving pipeline or gas facility installation or maintenance, the use of a drilling rig, completion rig, workover rig, or stimulation is subject to the maximum permissible noise levels for industrial zones. The type of land use of the surrounding area shall be determined by the Commission in consultation with the local governmental designee taking into consideration any applicable zoning or other local land use designation.
- c. In the hours between 7:00 a.m. and the next 7:00 p.m. the noise levels permitted below may be increased ten (10) db(A) for a period not to exceed fifteen (15) minutes in any one (1) hour period. The allowable noise level for periodic, impulsive or shrill noises is reduced by five (5) db(A) from the levels shown.

ZONE	7:00 am to next 7:00 pm	7:00 pm to next 7:00 am
Residential/Agricultural/Rural	55 db(A) 50db(A)	50 db(A) 45 db(A)
Construction commencing after January 1, 2007		
Commercial	60 db(A)	55 db(A)
Light industrial	70 db(A)	65 db(A)
Industrial	80 db(A)	75 db(A)

In remote locations, where there is no reasonably proximate occupied structure or designated outside activity area, the light industrial standard may be applicable.

Pursuant to Commission inspection or upon receiving a complaint from a nearby property owner or local governmental designee regarding noise related to oil and gas operations, the Commission shall conduct an onsite investigation and take sound measurements as prescribed herein.

The following provide guidance for the measurement of sound levels and assignment of points of compliance for oil and gas operations:

- (1) Sound levels shall be measured at a distance of three hundred and fifty (350) feet from the noise source. At the request of the complainant, the sound level shall also be measured at a point beyond three hundred fifty (350) feet that the complainant believes is more representative of the noise impact. If an oil and gas well site, production facility or gas facility is installed closer than three hundred fifty (350) feet from an existing occupied structure, sound levels shall be measured at a point twenty-five (25) feet from the structure towards the noise source. Noise levels from oil and gas facilities located on surface property owned, leased or otherwise controlled by the operator shall be measured at three hundred and fifty (350) feet or at the property line, whichever is greater.

In situations where measurement of noise levels at three hundred and fifty (350) feet is impractical or unrepresentative due to topography, the measurement may be taken at a lesser distance and extrapolated to a 350-foot equivalent using the following formula:

$$db(A)_{DISTANCE\ 2} = db(A)_{DISTANCE\ 1} - 20 \times \log_{10} (distance\ 2/distance\ 1)$$

- (2) Sound level meters shall be equipped with wind screens, and readings taken when the wind velocity at the time and place of measurement is not more than five (5) miles per hour.
- (3) Sound level measurements shall be taken four (4) feet above ground level.

- (4) Sound levels shall be determined by averaging minute-by-minute measurements made over a minimum fifteen (15) minute sample duration if practicable. The sample shall be taken under conditions that are representative of the noise experienced by the complainant (e.g., at night, morning, evening, or during special weather conditions).
 - (5) In all sound level measurements, the existing ambient noise level from all other sources in the encompassing environment at the time and place of such sound level measurement shall be considered to determine the contribution to the sound level by the oil and gas operation(s).
- d. In situations where the complaint or Commission onsite inspection indicates that low frequency noise is a component of the problem, the Commission shall obtain a sound level measurement twenty-five (25) feet from the exterior wall of the residence or occupied structure nearest to the noise source, using a noise meter calibrated to the db(C) scale. If this reading exceeds 65 db(C), the Commission shall require the operator to obtain a low frequency noise impact analysis by a qualified sound expert, including identification of any reasonable control measures available to mitigate such low frequency noise impact. Such study shall be provided to the Commission for consideration and possible action.
- e. Exhaust from all engines, motors, coolers and other mechanized equipment shall be vented in a direction away from all ~~occupied~~-building units.
- f. All facilities within four hundred (400) feet of ~~occupied~~-building units with engines or motors which are not electrically operated shall be equipped with quiet design mufflers or equivalent. All mufflers shall be properly installed and maintained in proper working order.

803. LIGHTING

To the extent practicable, site lighting shall be directed downward and internally so as to avoid glare on public roads and ~~occupied~~-building units within seven (700) hundred feet.

804. VISUAL IMPACT MITIGATION

Production facilities, ~~regardless of construction date, constructed or substantially repainted after May 30, 1992~~ which are observable from any public highway shall be painted with uniform, non-contrasting, non-reflective color tones, (similar to the Munsell Soil Color Coding System) and with colors matched to but slightly darker than the surrounding landscape. ~~Operators of those production facilities constructed prior to May 30, 1992 shall have until July 1, 2009 to comply with the requirements of this rule.~~

~~Consistent with an operator's right to conduct operations, the Director may require the employment of site-specific mitigation practices to protect aesthetic and visual resources, including siting of roads, well locations, and production facilities to minimize visual impacts; reducing unnecessary disturbance; modifying production facility or well pad shape or size; using low-profile pumping units and low-profile tanks; and completing interim reclamation on disturbed land.~~

805. ODORS AND DUST

a. General. Oil and gas facilities and equipment shall be operated in such a manner that odors and dust to do not constitute a nuisance or hazard to public health, safety, welfare, and the environment.

b. Odors.

(1) Compliance.

- A. Oil and gas operations shall be in compliance with the Department of Public Health and Environment, Air Quality Control Commission, Regulation No. 2 Odor Emission 5 CCR 1001-4.
- B. No oil and gas operation, wherever located, shall cause or allow the emission of odorous air contaminants from any single source such as to result in detectable odors which are measured in excess of the following limits:
- i. For areas used predominantly for residential or commercial purposes, it is a violation if odors are detected after the odorous air has been diluted with seven (7) or more volumes of odor-free air;
 - ii. In all other land use areas, it is a violation if odors are detected after the odorous air has been diluted with fifteen (15) or more volumes of odor-free air.
- C. No violation of Rule 805.b.(1) shall be cited by the Commission, provided that the practices identified in Rule 805.b.(2) are used.

(2) Production Equipment and Operations.

- A. Condensate Tanks.** All condensate tanks with a potential to emit volatile organic compounds (VOC) of five (5) tons per year (tpy) or greater, located in the Piceance and San Juan geologic basins and within ½ mile of a building unit, educational facility, assembly building, hospital, nursing home, board and care facility, jail, or designated outside activity area shall utilize a control device capable of achieving 95% control efficiency of volatile organic compounds (VOCs) and hold a valid permit from the Colorado Department of Public Health and Environment Air Pollution Control Division for the tank and control device.
- B. Crude Oil and Produced Water Tanks.** All crude oil and produced water tanks in the Piceance and San Juan geologic basins, with a potential to emit VOC of five (5) tpy or greater, located within ½ mile of a building unit, educational facility, assembly building, hospital, nursing home, board and care facility, jail, or designated outside activity area shall utilize a control device capable of achieving 95% control efficiency and hold a valid permit from the Colorado Department of Public Health and Environment Air Pollution Control Division for the tank and control device.
- C. Glycol dehydrators.** All glycol dehydrators with a potential to emit VOC of five (5) tpy or greater, located in the Piceance and San Juan geologic basins, located within ½ mile of a building unit, educational facility, assembly building, hospital, nursing home, board and care facility, jail, or designated outside activity area shall utilize a control device capable of achieving 90% control efficiency and hold a valid permit from the Colorado Department of Public Health and Environment Air Pollution Control Division for the tank and control device.
- D. Pits.** Pits with a potential to emit more than two (2) TPY of VOCs shall not be located within ½ mile of a building unit, educational facility, assembly building, hospital, nursing home, board and care facility, jail, or designated outside activity area. For the purposes of this section, compliance with Rule 902.c shall be considered a required practice.
- E. Production Operations.** Condensate, water, and gas released from a well during purging or maintenance operations or from production equipment or flowlines

during maintenance operations shall be directed to a closed top tank with a vapor gathering and combustion system capable of 95% destruction efficiency when practicable.

F. **Pneumatic Devices.** In instances when new, replaced, or repaired pneumatic devices are installed, low/no bleed valves must be used, where technically feasible.

(3) **Well completions.**

A. Green completion practices are required on gas and oil wells where reservoir pressure, formation productivity, and wellbore conditions enable the well to be capable of naturally flowing hydrocarbon gas in flammable or greater concentrations at a stabilized rate in excess of five hundred (500) MCFD to the surface against an induced surface backpressure of five hundred (500) psig or greater or under other circumstances where green completion practices are otherwise technically and economically feasible.

B. Green completion practices shall include, but not be limited to, the following emission reduction measures:

i. The operator shall employ sand traps, surge vessels, separators, and closed top tanks as soon as practicable during flowback and cleanout operations to safely maximize resource recovery and minimize releases to the environment.

ii. Well effluent during flowback and cleanout operations prior to encountering hydrocarbon gas of salable quality or significant volumes of condensate may be directed to open top tanks or pits (where permitted) such that oil or condensate volumes shall not be allowed to accumulate in excess of ten (10) barrels and must be removed within twenty-four (24) hours. The gaseous phase of inflammable effluent may be directed to a flare pit for safety purposes until flammable gas is encountered.

iii. Well effluent containing more than ten (10) barrels per day of condensate or within two hours after first encountering hydrocarbon gas of salable quality shall be directed to a combination of sand traps, separators, surge vessels, and closed top tanks or other equipment as needed to ensure safe separation of sand, hydrocarbon liquids, water, and gas and to ensure salable products are efficiently recovered for sale or conserved and that non-salable products are disposed of in a safe and environmentally responsible manner.

iv. All liquids coming from the separator(s) shall be dumped to closed top tanks with a vapor gathering system. Flammable vapors and gas evolving from well effluent directed to closed top tanks shall be gathered and directed to a combustion device capable of 95% destruction efficiency.

v. Closed top tanks shall utilize backpressure systems that exert a minimum of four (4) ounces of back pressure and a maximum that does not exceed the pressure rating of the tank to facilitate gathering and combustion of tank vapors. Vent/backpressure valves, the combustor, lines to the combustor, and knock-outs shall be sized and maintained so as to safely accommodate any surges the system may encounter.

vi. All salable quality gas shall be directed to the sales line as soon as practicable or shut in and conserved. Temporary flaring shall be permitted as a safety measure during upset conditions and in accordance with all other applicable laws, rules, and regulations.

C. Operators may request a variance from the Director if they believe that employing green completion practices is not feasible because of well conditions or that following them in a specific instance would endanger the safety of wellsite personnel or the public.

D. In instances where green completions are not technically feasible or are not required, operators shall employ Best Management Practices to reduce emissions. Such BMPs may include measures or actions, considering safety, to minimize the time period during which gases are emitted directly to the atmosphere, or monitoring and recording the volume and time period of such emissions. Such examples could include the flaring of gas.

c. Fugitive dust.

Operators shall employ practices for control of fugitive dust. Such practices shall include but are not limited to the use of speed restrictions, regular road maintenance, and restriction of construction activity during high-wind days. Additional management practices such as road surfacing, wind breaks and barriers, or automation of wells to reduce truck traffic may also be implemented.

Any oil and gas operator engaged in clearing or leveling of land or owner or operator of land that has been cleared that is greater than five (5) acres in attainment areas or one (1) acre in non-attainment areas from which fugitive dust will be emitted shall be required to use all available and practical methods which are technologically feasible and economically reasonable to minimize such fugitive dust emissions.

900-SERIES E&P WASTE MANAGEMENT

901. INTRODUCTION

- a. **General.** The rules and regulations of this series establish the permitting, construction, operating and closure requirements for pits, methods of E&P waste management, procedures for spill/release response and reporting, and sampling and analysis for remediation activities. The 900 Series rules are applicable only to E&P waste, as defined in § 34-60-103(4.5), C.R.S., or other solid waste where the Colorado Department Of Public Health And Environment (“~~CDPHE~~”) has allowed remediation and oversight by the Commission.
- b. **COGCC reporting forms.** The reporting required by the rules and regulations of this series shall be made on forms provided by the Director. Alternate forms may be used where equivalent information is supplied and the format has been approved by the Director.
- c. **Additional requirements.** Whenever the Director has reasonable cause to believe that an operator, in the conduct of any oil or gas operation, is performing any act or practice which threatens to cause or causes a violation of Table 910-1 and with consideration of water quality standards or classifications established by the Water Quality Control Commission (“WQCC”) for waters of the state, the Director may impose additional requirements, including but not limited to, sensitive area determination, sampling and analysis, remediation, monitoring, permitting and the establishment of points of compliance. Any action taken pursuant to this Rule shall comply with the provisions of Rules 324A. through D. and the 500 Series rules.

- d. **Alternative compliance methods.** Operators may propose for prior approval by the Director alternative methods for determining the extent of contamination, sampling and analysis, or alternative cleanup goals using points of compliance ~~or risk-based approaches.~~
- e. **Sensitive area determination.** Operators shall make a sensitive area determination using appropriate geologic and hydrogeologic data ~~the Sensitive Area Determination Decision Tree, Figure 901-1~~ to evaluate the potential for impact to ground water and surface water, including appropriate percolation tests that demonstrate that seepage will not reach underlying ground water or waters of the State and impact current or future uses of these waters. ~~Operators shall~~ and submit data evaluated and analysis used in the determination to the Director for the following operations or remediation activities:
- (1) Construction of drilling pits; ~~designed for use with fluids containing hydrocarbon concentrations exceeding 20,000 parts per million ("ppm") total petroleum hydrocarbon ("TPH") or chloride concentrations at total well depth exceeding 15,000 ppm.~~
 - (2) Construction of production and special purpose pits;
 - (3) Construction of centralized E&P waste management facilities;
 - (4) Management and remediation of spills/releases exceeding twenty (20) barrels net loss of E&P waste; or
 - (5) When the operator or Director has data that indicate an impact or threat of impact to ground water.
- f. **Sensitive area operations.** Operations in sensitive areas shall incorporate adequate measures and controls to prevent ~~significant~~ adverse environmental impacts and ensure compliance with the allowable concentrations and levels in Table 910-1, with consideration to WQCC standards and classifications. ~~Unlined production and special purpose pits in sensitive areas are generally not approved.~~

902. PITS - GENERAL AND SPECIAL RULES

- a. Pits used for exploration and production of oil and gas shall be constructed and operated to protect public health, safety, and welfare and the environment, including soil, the waters of the state, and wildlife, from ~~significant~~ adverse ~~environmental~~ impacts from E&P waste, except as permitted by applicable laws and regulations.
- ~~b. Topsoil and subsoil removed in the construction of the pit shall be segregated and stockpiled in a manner described in Rule 1002, and used for reclamation of the site.~~
- ~~eb.~~ Pits shall be constructed, monitored, and operated to provide for a minimum of two (2) feet of freeboard at all times between the top of the pit wall at its point of lowest elevation and the fluid level of the pit. A method of monitoring, such as a pit-level indicator, and maintaining freeboard shall be employed.
- ~~cd.~~ Any accumulation of oil in a pit shall be removed within twenty-four (24) hours of discovery. Operators shall use skimming, steam cleaning of exposed liners, or other safe and legal methods as necessary to maintain pits in clean condition and to control hydrocarbon odors. Only de-minimis amounts of hydrocarbons may be present unless the pit is specifically permitted for oil or condensate recovery or disposal use. A Form 15 pit permit may be revoked by the Director and the Director may require that the pit be closed if an operator repeatedly allows more than de-minimis amounts of condensate to accumulate in a pit. This requirement is not applicable to

properly permitted and properly fenced, lined, or and netted skim pits that are designed, constructed, and operated to prevent impacts to wildlife, including migratory birds.

ed. Where necessary to protect public health, safety and welfare or to prevent significant adverse environmental impacts resulting from access to a pit by wildlife, migratory birds, domestic animals, or members of the general public, operators shall install appropriate netting or fencing and construct escape ramps.

fe. **Multi-well pits.** Production and special purpose pits used for treatment or disposal of E&P waste generated from more than one (1) well from one (1) commonly owned or operated lease may be permitted in accordance with Rule 903. as a multi-well pit, subject to Director approval.

fg. Unlined drilling pits shall not be constructed on fill material.

g. Unlined pits shall not be constructed in areas where pathways for communication with ground water or surface water are likely to exist.

h. Produced water shall be treated in accordance with Rule 907. before being placed in a production pit.

i. Operators shall utilize bleach or other safe biocide treatments to control bacterial growth and related odors as needed.

903. PIT PERMITTING/REPORTING REQUIREMENTS

a. An Earthen Pit Construction Report/Permit, Form 15 Permit Application, shall be submitted to the Director for prior approval for the following pits~~Drilling pits, production pits, and special purpose pits shall be permitted or reported as follows:~~

(1) All production pits.

(2) Special purpose pits except those reported under Rule 903.b.(1) or Rule 903.b.(2).

Pit Construction Report/Permit, Form 15, shall be submitted for prior Director approval for the following:

A(3). Drilling pits designed for use with fluids containing hydrocarbon concentrations exceeding 210,000 ppm TPH or chloride concentrations at total well depth exceeding 15,000 ppm in sensitive areas or 50,000 ppm outside sensitive areas.

B. Production pits and unlined special purpose pits in sensitive areas.

C. Unlined production pits and special purpose pits outside sensitive areas, excluding those pits permitted in accordance with Rule 903.a.(2).B.

b.(2) An Earthen Pit Report/Permit, Form 15 Report, Pit Construction Report/Permit, Form 15, shall be submitted within thirty (30) calendar days after construction for the following:

A. Lined production pits outside sensitive areas.

B. Unlined production pits outside sensitive areas receiving produced water at an average daily rate of five (5) or less barrels per day calculated on a monthly basis for each month of operation.

C.(1) Lined sSpecial purpose pits used in the initial phase of emergency response.

~~D-(2)~~ Flare pits where there is no risk of condensate accumulation.

~~c.(3)~~ An Earthen Pit Construction Report/Permit, Form 15, shall not be required for drilling pits using water-based bentonitic drilling fluids with concentrations of TPH and chloride below those referenced in Rule 903. ~~a.(4)-A.(3)~~.

~~bd.~~ The An Earthen Pit Construction Report/Permit, Form 15, shall be completed in accordance with the instructions in Appendix I. Failure to complete the form in full may result in delay of approval or return of form.

ee. The Director shall endeavor to review any properly completed Earthen Pit Construction Report/Permit, Form 15, within thirty (30) calendar days after receipt. In order to allow adequate time for pit permit review and approval, operators ~~should shall~~ submit required Earthen Pit Report/Permit, Form 15, pit construction permit requests for approval at the same time as the with ~~an~~ Application for Permit to Drill, Form 2, is submitted. The Director may condition permit approval upon compliance with additional terms, provisions or requirements necessary to protect the waters of the state, public health, or the environment.

904. PIT LINING REQUIREMENTS AND SPECIFICATIONS

a. **Pit lining requirements.** The following pits shall be lined:

- (1) Drilling pits designed for use with fluids containing hydrocarbon concentrations exceeding 210,000 ppm TPH or chloride concentrations at total well depth exceeding 15,000 ppm ~~in sensitive areas or 50,000 ppm outside sensitive areas~~.
- (2) Production pits ~~in sensitive areas, unless the operator makes a demonstration to the Director that the quality of the produced water is equivalent to or better than that of the underlying aquifer or the operator can clearly demonstrate by substantial evidence, such as appropriate percolation tests, that seepage will not reach the underlying aquifer or waters of the state at contamination levels in excess of applicable standards~~.
- (3) Special purpose pits, except emergency pits constructed during initial emergency response to spills/releases, or flare pits where there is no risk of condensate accumulation.
- (4) All sSkim pits, regardless of date of construction.
- (5) Drilling pits designed to be used for drilling and completion of three (3) or more wells.
- (6) Water storage pits used to contain recycled or reused produced water or drilling fluids.
- (7) Pits at centralized E&P waste management facilities and UIC facilities.

b. The following specifications shall apply to pits that are required to be lined:

- (1) Materials used in lining pits shall be of a high-density polyethylene, polypropylene, poly vinyl chloride, hypalon, or other synthetic material that is impervious, weather resistant and resistant to deterioration when in contact with hydrocarbons, aqueous acids, alkali, fungi or other substances in the produced water.
- (2) All liners shall be constructed, installed, and maintained in accordance with the manufacturers' specifications. Soil liners shall have a minimum thickness of six (6) inches after compaction, shall cover the entire bottom and interior sides of the pit, and shall be constructed so that the hydraulic conductivity of the liner shall not exceed 1.0×10^{-6} cm/sec. Bentonite liners shall be constructed to provide equivalent protection. Operators

~~shall perform post construction tests either in a laboratory or in the field. All test results shall be filed with the Director.~~

- (3) ~~Synthetic or fabricated liners, except those at centralized E&P waste management facilities,~~ shall have a minimum thickness of ~~twelve (12) twenty-four (24)~~ mils and shall be resistant to deterioration by ultraviolet light, weathering, chemicals, punctures and tearing, and designed for the life of the well. The foundation for the liner shall be constructed with soil having a minimum thickness of twelve (12) inches after compaction covering the entire bottom and interior sides of the pit, and shall be constructed so that the hydraulic conductivity shall not exceed 1.0×10^{-7} cm/sec after testing and compaction~~to prevent punctures from soils or other materials beneath the liner.~~ The synthetic or fabricated liner shall cover the bottom and interior sides of the pit with the edges secured with at least a twelve (12) inch deep anchor trench around the pit perimeter. The pit lining system shall be designed, constructed, and installed following good engineering practices.
- (4) Centralized E&P waste management facilities shall be double lined and have a synthetic liner with minimum thickness of sixty (60) mils total and shall be resistant to deterioration by ultraviolet light, weathering, chemicals, punctures and tearing, and designed for the life of the facility. The foundation for the liner shall be constructed with soil having a minimum thickness of twenty-four (24) inches after compaction covering the entire bottom and interior sides of the pit, and shall be constructed so that the hydraulic conductivity shall not exceed 1.0×10^{-7} cm/sec after testing and compaction. The synthetic liner shall cover the bottom and interior sides of the pit with the edges secured with an anchored trench that is appropriately designed to secure, and prevent slippage or destruction of, the liner materials. The pit lining system shall be designed, constructed, and installed following good engineering practices.
- (54) In Sensitive Areas, the Director may require a leak detection system for the pit or other equivalent protective measures, including but not limited to, increased record-keeping requirements, monitoring systems and underlying gravel fill sumps and lateral systems. In making such determination, the Director shall consider the surface and subsurface geology, the use and quality of potentially-affected ground water, the quality of the produced water, and the hydraulic conductivity of the surrounding soils and the type of liner.

905. CLOSURE OF PITS, AND BURIED OR PARTIALLY BURIED PRODUCED WATER VESSELS.

- a. ~~Unlined Buried or partially buried produced water vessels,~~ production and special purpose pits, ~~except including emergency pits constructed during initial response to spills/releases,~~ shall be closed in accordance with an approved Site Investigation and Remediation Workplan, Form 27. The workplan shall be submitted for prior Director approval and shall include a description of the proposed investigation and remediation activities in accordance with Rule 909. Emergency pits shall be closed and remediated as soon as the initial phase of emergency response operations are complete or process upset conditions are controlled.

~~b. Lined pits and buried or partially buried produced water vessels:~~

- (1) Operators shall ensure that soils and ground water meet the allowable concentrations of Table 910-1.
- (2) **Pit evacuation.** Prior to backfilling and site reclamation, E&P waste shall be treated or disposed in accordance with Rule 907.
- (3) Liners shall be disposed as follows:

- A. Synthetic liner disposal. ~~On irrigated crop land, li~~ner material shall be removed and disposed in accordance with applicable local, state, or federal solid waste disposal regulationsrules. ~~On non-irrigated crop land and on non-crop land, liner material may be left in place with surface owner approval.~~
- B. Constructed soil liners. Constructed soil liner material may be removed for treatment or disposal, or, where left in place, the material shall be ripped and mixed with native soils in a manner to alleviate compaction and prevent an impermeable barrier to infiltration and ground water flow and shall meet soil standards listed in Table 910-1.

(4) Soil beneath the low point of the pit must be sampled to verify no leakage of the managed fluids. Soil left in place shall meet the standards listed in Table 910-1.

eb. **Discovery of a spill/release during closure.** When a spill/release is discovered during closure operations operators shall report the spill/release on the Spill/Release Report, Form 19, in accordance with Rule 906. Leaking pits and buried or partially buried produced water vessels shall be closed and remediated in accordance with Rules 909. and 910.

~~d.—Emergency pits . Emergency pits constructed during initial response to contain and mitigate spills/releases shall not be subject to lining requirements. These pits shall be closed and remediated in accordance with Rule 906.~~

ec. **Unlined drilling pits.** Unlined drilling pits shall be closed and reclaimed in accordance with the 1000 Series rules and operators shall ensure that soils and ground water meet the allowable concentrations and levels in Table 910-1.

906. SPILLS AND RELEASES

a. **General.** Spills/releases of E&P waste, including produced fluids shall be controlled and contained immediately upon discovery to protect the environment, public health, safety, and welfare, and wildlife. Impacts resulting from spills/releases shall be investigated and cleaned up as soon as practicable. The Director may require additional activities to prevent or mitigate threatened or actual significant adverse environmental impacts on any air, water, soil or biological resource, or to the extent necessary to ensure compliance with the allowable concentrations and levels in Table 910-1, with consideration to WQCC ground water standards and classifications.

b. **Reporting Reportable spills and reporting requirements for spills/releases.**

- (1) Spills/releases of E&P waste or produced fluid exceeding five (5) barrels, including those contained within lined or unlined berms, shall be reported on COGCC Spill/Release Report, Form, 19. ~~Such report shall include information relating to initial mitigation, site investigation and remediation, and shall be submitted to the Director within ten (10) days of discovery of the spill/release.~~
- (2) ~~In addition, s~~Spills/releases which exceed twenty (20) barrels of an E&P waste shall be reported on COGCC Spill/Release Report, Form 19, and shall also be verbally reported to the Director within twenty-four (24) hours of discovery.
- (3) ~~In addition, s~~Spills/releases of any size which impact or threaten to impact any waters of the state, residence or occupied structure, livestock or public byway, shall be reported on COGCC Spill/Release Report, Form 19, and shall also be verbally reported to the Director ~~as soon as practicable~~ immediately after discovery.

(4) Spills/Releases of any size which impact or threaten to impact any surface water source shall be reported to the Director and to the Environmental Release/Incident Report hotline (1-877-518-5608). Spills and releases that impact or threaten a public drinking water supply intake shall be verbally reported to the emergency contact for that facility immediately after discovery.

(5) For all reportable spills, operators shall submit a Spill/Release Report, Form 19, within ten (10) days after discovery. An 8 ½ by 11 inch topographic map showing the governmental section and location of the spill shall be included. Such report shall also include information relating to initial mitigation, site investigation, and remediation. The Director may require additional information.

c. **Surface owner notification and consultation.** The operator shall notify the affected surface owner or the surface owner's appointed tenant of reportable spills within 24 hours of discovery of the spill. The operator also shall make good faith efforts to notify and consult with the affected surface owner, or the surface owner's appointed tenant, prior to commencing operations to remediate E&P waste from a spill/release in an area not being utilized for oil and gas operations.

d. **Remediation of spills/releases.**

~~(1) Remediation workplan.~~ When threatened or actual ~~significant~~ adverse environmental impacts on any air, water, soil or ~~biological~~ other environmental resource from a spill/release exists or when necessary to ensure compliance with the allowable concentrations and levels in Table 910-1, with consideration to WQCC ground water standards and classifications, the Director may require operators to submit a Site Investigation and Remediation Workplan, Form 27. Such spills/releases shall be remediated in accordance with Rules 909. and 910.

~~(2) Remediation requirements.~~ ~~Spills/releases shall be remediated to meet the allowable concentrations in Table 910-1. Spills/releases exceeding twenty (20) barrels net loss of E&P waste shall be remediated in accordance with Rules 909. and 910.~~

e. **Spill/release prevention.**

(1) **Secondary containment.** Secondary containment shall be constructed or installed around all tanks containing ~~crude~~ oil, condensate or produced water, with greater than 10,000 milligrams per liter (mg/l) total dissolved solids (TDS), and shall be sufficient to contain the contents of the largest single tank in the bermed area plus sufficient freeboard to contain precipitation. Secondary containment structures shall be sufficiently impervious to contain discharged material. Operators are also subject to ~~crude oil~~ tank and containment requirements under Rules 603. and 604. ~~This requirement shall not apply to water tanks with a capacity of one hundred (100) barrels or less.~~

(2) Materials Management. Hazardous materials, chemicals, and other products shall be protected from stormwater and precipitation.

~~(3)~~ **Spill/release evaluation.** Operators shall determine the cause of a spill/release, and to the extent practicable, shall implement measures to prevent spills/releases due to similar causes in the future. For reportable spills, operators shall submit this information to the Director on the Spill/Release Report, Form 19 within ten (10) days after discovery of the spill/release.

907. MANAGEMENT OF E&P WASTE

a. **General requirements.**

- (1) **Operator obligations.** Operators shall ensure that E&P waste is properly stored, handled, transported, treated, recycled or disposed to prevent threatened or actual significant adverse environmental impacts to air, water, soil or biological resources or to the extent necessary to ensure compliance with the allowable concentrations and levels in Table 910-1, with consideration to WQCC ground water standards and classifications.
- (2) E&P waste management activities shall be conducted, and facilities constructed and operated, to protect the waters of the state from significant adverse environmental impacts from E&P waste, except as permitted by applicable laws and regulations.
- (3) **Reuse and recycling.** To encourage and promote waste minimization, operators may propose plans for managing E&P waste through beneficial use, reuse and recycling by submitting a written management plan to the Director for approval and a sundry notice, Form 4, if applicable. Such plans shall describe, at a minimum, the type(s) of waste, the proposed use of the waste, method of waste treatment, product quality assurance, and shall include a copy of any certification or authorization that may be required by other laws and regulations. The Director may require additional information.

b. Waste transportation.

- (1) E&P waste, when transported off-site within Colorado for treatment or disposal, shall be transported to facilities authorized by the Director or waste disposal facilities approved to receive E&P waste by the Colorado Department of Public Health and Environment. When transported to facilities outside of Colorado for treatment or disposal, E&P waste shall be transported to facilities authorized and permitted by the appropriate regulatory agency.
- (2) **Waste generator requirements.** Generators of E&P waste shall maintain, for not less than five (5) three (3) years, copies of each invoice, bill or ticket and such other records as necessary to document the following information from a transporter or disposal site, describing the disposal of E&P waste from each location:
 - A. The date of the transport;
 - B. The identity of the waste generator;
 - C. The identity of the waste transporter;
 - D. The location of the waste pickup site;
 - E. The type and volume of waste; and
 - F. The name and location of the treatment or disposal site.

Such records shall be signed by the generator, transporter, and receiving facility, made available for inspection by the Director during normal business hours and copies thereof shall be furnished to the Director upon request.

c. Produced water.

- (1) **Treatment of produced water.** Produced water shall be treated prior to placement in a production pit to prevent crude oil and condensate from entering the pit.
- (2) **Produced water disposal.** Produced water may be disposed as follows:
 - A. Injection into a Class II well, permitted in accordance with Rule 325.;

- B. Evaporation/percolation in a properly permitted ~~lined or unlined~~ pit;
- C. Disposal at permitted commercial facilities; ~~or~~
- D. Disposal by roadspreading on lease roads outside sensitive areas for produced waters with less than ~~5,000~~3,500 mg/l TDS when authorized by the surface owner. Roadspreading of produced waters shall not impact waters of the State, shall not result in pooling or runoff, ~~of produced waters~~ and the adjacent soils shall meet the allowable concentrations and levels in Table 910-1. Flowback fluids shall not be used for dust suppression.
- E. Discharging into state waters, in accordance with the Water Quality Control Act and the rules and regulations promulgated thereunder. ~~Produced water discharged pursuant to this subsection (2)E. may be put to beneficial use in accordance with applicable state statutes and regulations governing the use and administration of water.~~
 - i. Operators shall provide the Colorado discharge permit number, latitude and longitude coordinates, in accordance with Rule 215.f., of the discharge outfall, and sources of produced water on a Source of Produced Water for Disposal, Form 26, and shall include a U.S.G.S. topographic map showing the location of the discharge outfall.
 - ii. Produced water discharged pursuant to this subsection (2)E. may be put to beneficial use in accordance with applicable state statutes and regulations governing the use and administration of water.
- F. Evaporation in a properly lined pit at a centralized E&P waste management facility permitted in accordance with Rule 908.

- (3) **Produced water reuse and recycling.** Produced water may be reused for enhanced recovery, drilling, and other approved uses in a manner consistent with existing water rights and in consideration of water quality standards and classifications established by the WQCC for waters of the state, or any point of compliance established by the Director pursuant to Rule 324D.
- (4) **Mitigation.** Water produced during operation of an oil or gas well may be used to provide an alternate domestic water supply to surface owners within the oil or gas field, in accordance with all applicable laws, including, but not limited to, obtaining the necessary approvals from the WQCD for constructing a new “waterworks,” as defined by Section 25-1-107(1)(X)(ii)(A), C.R.S. Any produced water not so used shall be disposed of in accordance with subsection (2) or (3). ~~Provision of Providing~~ produced water for domestic use within the meaning of this subsection (4) shall not constitute an admission by the operator that the well is dewatering or impacting any existing water well. The water produced shall be to the benefit of the surface owner within the oil and gas field and may not be sold for profit or traded.

d. **Drilling fluids.**

- (1) **Drilling pit fluid recycling.** Drilling pit contents may be recycled to another drilling pit consistent with Rule 903.
- (2) **Drilling fluids treatment and disposal.** Drilling fluids may be treated or disposed as follows:
 - A. Injection into a Class II well permitted in accordance with Rule 325;

- B. Disposal at a commercial solid waste disposal facility; or
- C. Land treatment or land application at a centralized E&P waste management facility permitted in accordance with Rule 908

(3) **Additional authorized disposal of water-based bentonitic drilling fluids.** Water-based bentonitic drilling fluids may be disposed as follows:

A. Drying and burial in drilling pits on non-crop land. The resulting concentrations shall not exceed the allowable concentrations and levels in Table 910-1, below; or

B. Land application as follows:

- i. **Applicability.** Acceptable methods of land application include, but are not limited to, production facility construction and maintenance, and lease and farm road maintenance, or lining of stock ponds and irrigation ditches.
- ii. **Land application requirements.** The average thickness of water-based bentonitic drilling fluid waste applied shall be no more than three (3) inches prior to incorporation. The waste shall be applied to prevent ponding or erosion and shall be incorporated as a beneficial amendment into the native soils within ten (10) days of application as soon as practicable. The resulting concentrations shall not exceed those in Table 910-1.
- iii. **Surface owner approval.** Operators shall obtain written authorization from the surface owner prior to land application of water-based bentonitic drilling fluids.
- iv. **Operator obligations.** Operators shall maintain a record of the source, the volume, and the location where the land application of the water-based bentonitic drilling fluid occurred. Upon the Director's written request, this information shall be provided within five (5) business days, in a format readily-reviewable by the Director. Operators with control and authority over the wells from which the water-based bentonitic drilling fluid wastes are obtained retain responsibility for the land application operation, and shall diligently cooperate with the Director in responding to complaints regarding land application of water-based bentonitic drilling fluids.
- v. **Approval.** Prior Director approval is not required for reuse of water-based bentonitic drilling fluids for land application as a soil amendment or lining material.

e. **Oily waste.** Oily waste includes those materials containing crude oil, condensate or other hydrocarbon-containing E&P waste, such as soil, frac sand, drilling fluids, drill cuttings, and workover fluids, pit sludge, tank bottoms, pipeline pigging wastes, and natural gas gathering, processing and storage wastes.

(1) Oily waste may be treated or disposed as follows:

- A. Disposal at a commercial solid waste disposal facility;
- B. Land treatment onsite or with prior written surface owner approval, offsite land treatment; or

C. Land treatment at a centralized E&P waste management facility permitted in accordance with Rule 908.

(2) Land treatment requirements:

- A. Free oil shall be removed from the oily waste prior to land treatment.
- B. Oily waste shall be spread evenly to prevent pooling, ponding or runoff.
- C. Contamination of stormwater runoff, ground water, or surface water shall be prevented.
- D. Biodegradation shall be enhanced by disking, tilling, aerating, addition of nutrients, microbes, water or other amendments, as appropriate.
- E. Land-treated oily waste incorporated in place or beneficially reused shall not exceed the allowable concentrations in Table 910-1.
- F. When a threatened or significant adverse environmental impact from onsite land treatment exists, ~~operators shall the Director may require operators to~~ submit a Site Investigation And Remediation Workplan, Form 27, for approval by the Director. Treatment shall thereafter be completed in accordance with the workplan and Rules 909. and 910.
- G. When land treatment occurs in an area not being utilized for oil and gas operations, operators shall obtain prior written surface owner approval.

f. Other E&P Waste. Other E&P waste such as workover fluids, tank bottoms, pigging wastes from gathering and flow lines, and natural gas gathering, processing, and storage wastes may be treated or disposed of as follows:

- (1) Disposal at a commercial solid waste disposal facility; or
- (2) Treatment at a centralized E&P waste management facility permitted in accordance with Rule 908.

907A. MANAGEMENT OF NON-E&P WASTE

- a. Certain wastes generated by oil and gas-related activities are non-E&P wastes and are not exempt from regulation as solid or hazardous wastes. These wastes need to be properly identified and disposed of in accordance with state and federal regulations.
- b. Certain wastes generated by oil and gas-related activities can either be E&P wastes or non-E&P wastes depending on the circumstances of their generation.
- c. The hazardous waste regulations require that a hazardous waste determination be made for any non-E&P solid waste. Hazardous wastes require storage, treatment, and disposal practices in accordance with 6 C.C.R. 1007-3. All non-hazardous/non-E&P wastes are considered solid waste which require storage, treatment, and disposal in accordance with 6 C.C.R. 1007-2.

908. CENTRALIZED E&P WASTE MANAGEMENT FACILITIES

- a. **Applicability.** ~~Operators may establish n~~Non-commercial, centralized E&P waste management facilities may be established by an operator for the treatment, disposal, recycling or beneficial reuse of E&P waste that is generated exclusively by that operator. This rule applies only to non-

commercial facilities, which means the operator does not represent itself as providing E&P waste management services to third parties and does not accept E&P waste from oil and gas operations other than its own, except as part of a unitized area or joint operating agreement or in response to an emergency. Centralized facilities may include components such as land treatment or land application sites, pits and recycling equipment.

b. **Permit requirements.** Before any person shall commence construction of a centralized E&P waste management facility, such person shall file with the Director an application on Form 28 and pay a filing and service fee established by the Commission (see Appendix III), and obtain the Director's approval. An application for permit including the following information shall be submitted to the Director for prior approval along with a filing and service fee established by the Commission (Appendix III). The application shall contain the following:

- (1) The name, address, phone and fax number of the operator, and a designated contact person.
- (2) The name, address and phone number of the surface owner of the site, if not the operator, and the written authorization of such surface owner.
- (3) The legal description of the site.
- (4) A general topographic, geologic and hydrologic description of the site, including immediately adjacent land uses, a topographic map of a scale no less than 1:24,000 showing the location, and the average annual precipitation and evaporation rates at the site.

(5) **Centralized facility siting requirements.**

- A. A site plan showing drainage patterns and any diversion or containment structures, and facilities such as roads, fencing, tanks, pits, buildings, and other construction details.
- B. Scaled drawings of entire sections containing the proposed facility. The field measured distances from the nearer north or south and nearer east or west section lines shall be measured at ninety (90) degrees from said section lines to facility boundaries and referenced on the drawing. A survey shall be provided including a complete description of established monuments or collateral evidence found and all aliquot corners.
- C. The facility shall be designed to control public access, prevent unauthorized vehicular traffic, provide for site security both during and after operating hours, and prevent illegal dumping of wastes. Appropriate measures shall also be implemented to limit-prevent access to the centralized facility by wildlife, or domestic animals, and members of the general public shall be implemented.
- D. Centralized facilities shall have a fire lane of at least ten (10) feet in width around the active treatment areas and within the perimeter fence. In addition, a buffer zone of at least ten (10) feet shall be maintained within the perimeter fire lane.
- E. Surface water diversion structures, including, but not limited to, berms and ditches, shall be constructed to accommodate a one hundred (100) year, twenty four (24) hour event. The facility shall be designed and constructed with a run-on control system to prevent flow onto the facility during peak discharge and a run-off control system to collect the water volume from a twenty-five (25) year, twenty-four (24) hour storm.

(6) **Waste profile.** For each type of waste, the amounts to be received and managed by the facility shall be estimated on a monthly average basis. For each waste type to be treated, a characteristic waste profile shall be completed.

(7) **Facility design and engineering.** Facility design and engineering data, including plans and elevations, design basis, calculations, and process description.

A. Geologic data, including, but not limited to:

- i. Type and thickness of unconsolidated soils;
- ii. Type and thickness of consolidated bedrock, if applicable;
- iii. Local and regional geologic structures; and
- iv. any geologic hazards that may affect the design and operation of the facility.

B. Hydrologic data, including, but not limited to:

- i. Surface water features within two (2) miles;
- ii. Depth to shallow ground water and major aquifers;
- iii. Water wells within one (1) mile of the site boundary and well depth, depth to water, screened intervals, yields, and aquifer name;
- iv. Hydrologic properties of shallow ground water and major aquifers including flow direction, flow rate, and potentiometric surface;
- v. Site location in relation to the floodplain of nearby surface water features;
- vi. Existing quality of shallow ground water; and
- vii. An evaluation of the potential for impacts to nearby surface water and ground water.

C. Engineering data, including, but not limited to:

- i. Type and quantity of material required for use as a liner, including design components;
- ii. Location and depth of cut for liners;
- iii. Location, dimensions, and grades of all surface water diversion structures;
- iv. Location and dimensions of all surface water containment structures; and
- v. Location of all proposed facility structures and access roads.

(8) **Operating plan.** An operating plan, including, but not limited to:

A. A detailed description of the method of treatment, loading rates, and application of nutrients and soil amendments;

B. Dust and moisture control;

C. ~~S~~-sampling;

D. ~~I~~-inspection and maintenance;

E. ~~E~~-emergency response;

F. ~~,+R~~Record-keeping;

G. ~~S~~-site security;

H. ~~,+H~~Hours of operation;

I. ~~Noise and odor mitigation; and~~

J. ~~,+and +F~~Final disposition of waste. Where treated waste will be beneficially reused, a description of reuse and method of product quality assurance shall be included.

(9) Ground water monitoring.

A. Water wells.

Water samples shall be collected from water wells within a 1-mile radius of the proposed facility and shall be analyzed to establish baseline water quality. Analytical parameters shall be selected based upon the proposed waste stream and shall include, at a minimum, all major cations and anions, total dissolved solids, iron and manganese, nutrients (nitrates, nitrites, selenium), benzene, toluene, ethylbenzene, xylenes, pH, and specific conductance.

Copies of all test results described above shall be provided to the Director and the water well owner within three (3) months of collecting the samples. Laboratory results shall also be submitted to the Director in an electronic data deliverable format.

B. Site-specific monitoring wells.

i. The Director ~~may~~ shall require ground water monitoring ~~for the purpose of preventing and mitigating threatened or actual significant adverse environmental impact or~~ to ensure compliance with the allowable concentrations and levels in Table 910-1 ~~and, with consideration to~~ WQCC standards and classifications by establishing points of compliance. All monitoring well construction must be completed in accordance with the State Engineer's regulations on well construction, 'Water Well Construction Rules' (2 CCR 402-2).

Bii. ~~Where monitoring is required, +~~The direction of flow, ground water gradient and quality of water shall be established by the installation of a minimum of three (3) monitor wells, including an up-gradient well and two (2) down-gradient wells that will serve as points of compliance, or other methods authorized by the Director.

(10) Surface water monitoring. Where applicable, the Director shall require baseline and periodic surface water monitoring to ensure compliance with WQCC surface water standards and classifications.

c. **Permit approval.** The Director shall endeavor to approve or deny the properly completed permit within thirty (30) days after receipt and may condition permit approval as necessary to prevent any

threatened or actual significant adverse environmental impact on air, water, soil or biological resources or to the extent necessary to ensure compliance with the allowable concentrations and levels in Table 910-1, with consideration to WQCC ground water standards and classifications.

- d. **Financial assurance.** The operator of a centralized E&P waste management ~~land treatment~~ facility shall submit for the Director's approval such financial assurance as required by Rule 704. prior to issuance of the operating permit.
- e. **Facility modifications.** Throughout the life of the facility the operator shall submit proposed modifications to the facility design, operating plan, permit data, or permit conditions to the Director for prior approval.
- f. **Annual permit review.** To ensure compliance with permit conditions and the 900 Series rules, the facility permit shall be subject to an annual review by the Director. To facilitate this review, the operator shall submit an annual report summarizing operations, including the types and volumes of waste actually handled at the facility. The Director may require additional information.
- g. **Closure.** ~~A preliminary plan for closure shall be submitted with the centralized facility permit. A Site Investigation and Remediation Workplan, Form 27 shall be submitted sixty (60) days prior to closure for approval by the Director. The workplan shall describe the final closure plan.~~
 - (1) Preliminary closure plan. A preliminary plan for closure shall be submitted with the centralized E&P waste management facility permit, Form 28. The preliminary closure plan shall include, but not be limited to:
 - A. A detailed plan for closure and reclamation of the entire facility, including a description of the activities required to decommission and remove all equipment, close and reclaim pits, dispose of or treat residual waste, collect samples to verify compliance with soil and ground water standards, implement post-closure monitoring, and complete other remediation, as required.
 - B. A detailed estimate of the cost for hiring third-party contractor(s) to close and reclaim the entire facility and conduct post-closure monitoring. The third party shall not be directly related to a parent company or a subsidiary of the operator. Cost estimates shall be revised every five (5) years, unless otherwise requested by the Director, and shall be in current dollars. Cost estimates shall be subject to review by the Director.
 - (2) Final closure plan. A Site Investigation and Remediation Workplan, Form 27, shall be submitted at least sixty (60) days prior to closure for approval by the Director. The workplan shall include, but not be limited to, a description of the activities required to decommission and remove all equipment, close and reclaim pits, dispose of or treat residual waste, collect samples to verify compliance with soil and ground water standards, implement post-closure monitoring, and complete other remediation, as required.
- h. Operators may be subject to local requirements for zoning and construction of facilities and shall provide copies of notifications to local governments or other agencies to the Director any approval notices, permits, or other similar types of notifications for the facility from local governments or other agencies to the Director for review prior to issuance of the operating permit.

909. SITE INVESTIGATION, REMEDIATION AND CLOSURE

- a. **Applicability.** This section applies to the closure and remediation of pits other than drilling pits constructed pursuant to Rule 903.a.(3); ~~Investigation, reporting and remediation of~~

spills/releases; permitted waste management facilities including treatment facilities; plugged and abandoned wellsites; sites impacted by E&P waste management practices; or other sites as designated by the Director.

b. General site investigation and remediation requirements.

- (1) **Sensitive Area Determination.** Operators shall complete a sensitive area determination in accordance with Rule 901.e.
- (2) **Sampling and analyses.** Samplings and analysis of soil and ground water shall be conducted in accordance with Rule 910. to determine the horizontal and vertical extent of any contamination in excess of the allowable concentrations in Table 910-1.
- (3) **Management of E&P waste.** E&P waste shall be managed in accordance with Rule 907.
- (4) **Pit evacuation.** Prior to backfilling and site reclamation, E&P waste shall be treated or disposed in accordance with Rule 907. and the 1000 Series rules.
- (5) **Remediation.** Remediation shall be performed in a manner to mitigate, remove or reduce contamination that exceeds the allowable concentrations in Table 910-1 in order to ensure protection of public health, safety and welfare, and to prevent and mitigate ~~significant~~ adverse environmental impacts. Soil that does not meet allowable concentrations in Table 910-1 shall be remediated. Ground water that does not meet allowable concentrations in Table 910-1 shall be remediated in accordance with a Site Investigation and Remediation Workplan, Form 27.
- (6) **Reclamation.** Remediation sites shall be reclaimed in accordance with the 1000 Series rules for reclamation.

c. Site Investigation And Remediation Workplan, Form 27. Operators shall prepare and submit for prior Director approval a Site Investigation and Remediation Workplan, Form 27 for the following operations and remediation activities:

- (1) Unlined pit closure when required by Rule 905.
- (2) Remediation of spills/releases in accordance with Rule 906.
- (3) Land treatment of oily waste in accordance with Rule 907.e.(2).F.
- (4) Closure of centralized E&P waste management facilities in accordance with Rule 908.g.
- (5) Remediation of impacted ground water in accordance with Rule 910.b.(4).

d. Multiple sites. Remediation of multiple sites may be submitted on a single workplan with prior Director approval.

e. Closure.

- (1) Remediation and reclamation shall be complete upon compliance with the allowable concentrations in Table 910-1, or upon compliance with an approved workplan.
- (2) **Notification of completion.** Within thirty (30) days after conclusion of site remediation and reclamation activities operators shall provide the following notification of completion:

- A. Operators conducting remediation operations in accordance with Rule 909.b. shall submit to the Director a Site Investigation and Remediation Workplan, Form 27, containing information sufficient to demonstrate compliance with these rules.
- B. Operators conducting remediation under an approved workplan shall submit to the Director, by adding or attaching to the original workplan, information sufficient to demonstrate compliance with the workplan.

f. **Release of financial assurance.** Financial assurance required by Rule 706. may be held by the Director until the required remediation of soil and/or ground water impacts is completed in accordance with the approved workplan, or until cleanup goals are met.

910. ALLOWABLE CONCENTRATIONS AND SAMPLING FOR SOIL AND GROUND WATER

a. **Soil and groundwater allowable concentrations.** The allowable concentrations for soil and ground water are in Table 910-1. Ground water standards and analytical methods are derived from the ground water standards and classifications established by WQCC.

b. Sampling and analysis.

(1) **Existing workplans.** Sampling and analysis for sites subject to an approved workplan shall be conducted in accordance with the workplan and the sampling and analysis requirements described in this rule.

(2) **Methods for sampling and analysis.** Sampling and analysis for site investigation or confirmation of successful remediation shall be conducted to determine the nature and extent of impact and confirm compliance with appropriate allowable concentrations.

A. Field analysis. Field measurements and field tests shall be conducted using appropriate equipment, calibrated and operated according to manufacturer specifications, by personnel trained and familiar with the equipment.

B. Sample collection. Samples shall be collected, preserved, documented, and shipped using standard environmental sampling procedures in a manner to ensure accurate representation of site conditions.

C. Laboratory analytical methods. Laboratories shall analyze samples using standard methods (such as EPA SW-846 or API RP-45) appropriate for detecting the target analyte. The method selected shall have detection limits less than or equal to the allowable concentrations in Table 910-1.

D. Background sampling. Samples of comparable, nearby, non-impacted, native soil, ground water or other medium may be required by the Director for establishing background conditions.

(3) Soil sampling and analysis.

A. Applicability. If soil contamination is suspected or known to exist as a result of spills/releases or E&P waste management, representative samples of soil shall be collected and analyzed in accordance with this rule.

B. Sample collection. Samples shall be collected from areas most likely to have been impacted, and the horizontal and vertical extent of contamination shall be determined. The number and location of samples shall be appropriate to the impact.

- C. Sample analysis. Soil samples shall be analyzed for contaminants listed in Table 910-1 as appropriate to assess the impact or confirm remediation.
- D. Reporting. Soil Analysis Report, Form 24 shall be used when the Director requires results of soil analyses.
- E. Soil impacted by produced water. For impacts to soil due to produced water, samples from comparable, nearby non-impacted, native soil shall be collected and analyzed for purposes of establishing background soil conditions including pH and electrical conductivity (EC). Where EC of the impacted soil exceeds the allowable level in Table 910-1, the sodium adsorption ratio (SAR) shall also be determined.
- F. Soil impacted by hydrocarbons. For impacts to soil due to hydrocarbons, samples shall be analyzed for TPH.

(4) Ground water sampling and analysis.

- A. Applicability. Operators shall collect and analyze representative samples of ground water in accordance with these rules under the following circumstances:
 - (i) Where ground water contamination is suspected or known to exceed the allowable concentrations in Table 910-1;
 - (ii) Where impacted soils are in contact with ground water; or
 - (iii) Where impacts to soils extend down to the high water table.
- B. Sample collection. Samples shall be collected from areas most likely to have been impacted, downgradient or in the middle of excavated areas. The number and location of samples shall be appropriate to determine the horizontal and vertical extent of the impact. If the concentrations in Table 910-1 are exceeded, the direction of flow and a ground water gradient shall be established, unless the extent of the contamination and migration can otherwise be adequately determined.
- C. Sample analysis. Ground water samples shall be analyzed for benzene, toluene, ethylbenzene, xylene, and API RP-45 constituents, or other parameters appropriate for evaluating the impact.
- D. Reporting. Water Analysis Report, Form 25 shall be used when the Director requires results of water analyses.
- E. Impacted ground water. Where ground water contaminants exceed the allowable concentrations listed in Table 910-1, operators shall notify the Director, and submit to the Director for prior approval a Site Investigation and Remediation Workplan, Form 27, for the investigation, remediation, or monitoring of ground water to meet the required allowable concentrations.

911. PIT, BURIED OR PARTIALLY BURIED PRODUCED WATER VESSEL, BLOWDOWN PIT, AND BASIC SEDIMENT/TANK BOTTOM PIT MANAGEMENT REQUIREMENTS PRIOR TO DECEMBER 30, 1997.

- a. **Applicability.** This rule applies to the management, operation, closure and remediation of drilling, production and special purpose pits, buried or partially buried produced water vessels, blowdown

pits, and basic sediment/tank bottom pits put into service prior to December 30, 1997 and unlined skim pits put into service prior to July 1, 1995. For pits constructed after December 30, 1997 and skim pits constructed after July 1, 1995, operators shall comply with the requirements contained in Rules 901. through 910.

b. **Inventory.** Operators were required to submit to the Director no later than December 31, 1995, an inventory identifying production pits, buried or partially buried produced water vessels, blowdown pits, and basic sediment/tank bottom pits that existed on June 30, 1995. The inventory required operators to provide the facility name, a description of the location, type, capacity and use of pit/vessel, whether netted or fenced, lined or unlined, and where available, water quality data. Operators who have failed to submit the required inventory are in continuing violation of this rule.

c. **Sensitive area determination.**

(1) For unlined production and special purpose pits constructed prior to July 1, 1995 and not closed by December 30, 1997, operators were required to determine whether the pit was located within a sensitive area in accordance with the Sensitive Area Determination Decision Tree, Figure 901-1~~7~~ (now Rule 901.e.)~~7~~ and submit data evaluated and analysis used in the determination to the Director on a Sundry Notice, Form 4. On July 16, 2008, Figure 901-1 was deleted from the 900 Series rules.

(2) For steel, fiberglass, concrete, or other similar produced water vessels that were buried or partially buried and located in sensitive areas prior to December 30, 1997, operators were required to test such vessels for integrity, unless a monitoring or leak detection system was put in place.

d. The following permitting/reporting requirements applied to pits constructed prior to December 30, 1997:

(1) A Sundry Notice, Form 4, including the name, address, and phone number of the primary contact person operating the production pit for the operator, the facility name, a description of the location, type, capacity and use of pit, engineering design, installation features and water quality data, if available, was required for the following:

A. Lined production pits and lined special purpose pits constructed after July 1, 1995.

B. Unlined production pits constructed prior to July 1, 1995 which are lined in accordance with Rule 905. by December 30, 1997.

(2) An Application For Permit For Unlined Pit, Form 15 was required for the following:

A. Unlined production pits and special purpose pits in sensitive areas constructed prior to July 1, 1995, and not closed by December 30, 1997.

B. Unlined production pits outside sensitive areas constructed after July 1, 1995 and not closed by December 30, 1997.

(3) An Application For Permit For Unlined Pit, Form 15 and a variance under Rule 904.e.(1). (repealed, now Rule 502.b.) was required for unlined production pits and unlined special purpose pits in sensitive areas constructed after July 1, 1995.

(4) A Sundry Notice, Form 4 was required for unlined production pits outside sensitive areas receiving produced water at an average daily rate of five (5) or less barrels per day calculated on a monthly basis for each month of operation constructed prior to December 30, 1997.

e. The Director may have established points of compliance for unlined production pits and special purpose pits and for lined production pits in sensitive areas constructed after July 1, 1995.

f. Closure requirements.

- (1) Operators of production or special purpose pits existing on July 1, 1995 which were closed before December 30, 1997, were required to submit a Sundry Notice, Form 4, within thirty (30) days of December 30, 1997. The Sundry Notice, Form 4 shall include a copy of the existing pit permit, if a permit was obtained and a description of the closure process.
- (2) Pits closed prior to December 30, 1997 were required to be reclaimed in accordance with the 1000 Series rules. Pits closed after December 30, 1997 shall be closed in accordance with the 900 Series rules and reclaimed in accordance with the 1000 Series rules.
- (3) Operators of steel, fiberglass, concrete or other similar produced water vessels buried or partially buried and located in sensitive areas were required to repair or replace vessels and tanks found to be leaking. Operators shall repair or replace vessels and tanks found to be leaking. Operators shall submit to the Director a Sundry Notice, Form 4, describing the integrity testing results and action taken within thirty (30) days of December 30, 1997.
- (4) Closure of pits and steel, fiberglass, concrete or other similar produced water vessels, and associated remediation operations conducted prior to December 30, 1997 are not subject to Rules 905., 906., 907., 909. and 910.

912. VENTING OR FLARING NATURAL GAS

- a. The unnecessary or excessive venting or flaring of natural gas produced from a well is prohibited.
- b. Except for gas flared or vented during an upset condition, well maintenance, well stimulation flowback, purging operations, or a productivity test, gas from a well shall be flared or vented only after notice has been given and approval obtained from the Director on a Sundry Notice, Form 4, stating the estimated volume and content of the gas. The notice shall indicate whether the gas contains more than one (1) ppm of hydrogen sulfide. If necessary to protect the public health, safety or welfare, the Director may require the flaring of gas.
- c. Gas flared, vented or used on the lease shall be estimated based on a gas-oil ratio test or other equivalent test approved by the Director, and reported on Operator's Monthly Production Report, Form 7.
- d. ~~Flared gas shall be directed to a controlled flare in accordance with Rule 903.b.(2) or other combustion device capable of ninety-five (95) percent control efficiency. Prior to flaring of any gas, operators shall construct a special purpose pit in compliance with Rule 903.~~
- e. Operators shall notify the local emergency dispatch or the local governmental designee of any natural gas flaring. Notice shall be given prior to flaring when flaring can be reasonably anticipated, or as soon as possible but in no event more than two (2) hours after the flaring occurs.

~~Table 910-1 ALLOWABLE CONCENTRATIONS AND LEVELS
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**Table 910-1
ALLOWABLE CONCENTRATIONS AND LEVELS**

Contaminant of Concern	Allowable Concentrations
Organic Compound s in Soil: EPA Method 8015 (modified)	
TPH Non-Sensitive Area	40,000 mg/kg

<u>TPH (total volatile and extractable petroleum hydrocarbons)-Sensitive Area</u>	4,000-500 mg/kg
<u>Benzene</u>	0.17 mg/kg ¹
<u>Toluene</u>	85 mg/kg ¹
<u>Ethylbenzene</u>	100 mg/kg ¹
<u>Xylenes (total)</u>	175 mg/kg ¹
<u>Acenaphthene</u>	1,000 mg/kg ¹
<u>Anthracene</u>	1,000 mg/kg ¹
<u>Benzo(A)anthracene</u>	0.22 mg/kg ¹
<u>Benzo(B)fluoranthene</u>	0.22 mg/kg ¹
<u>Benzo(K)fluoranthene</u>	0.22 mg/kg ¹
<u>Benzo(A)pyrene</u>	0.022 mg/kg ¹
<u>Chrysene</u>	22 mg/kg ¹
<u>Dibenzo(A,H)anthracene</u>	0.022 mg/kg ¹
<u>Fluoranthene</u>	1,000 mg/kg ¹
<u>Fluorene</u>	1,000 mg/kg ¹
<u>Indeno(1,2,3,C,D)pyrene</u>	0.22 mg/kg ¹
<u>Naphthalene</u>	23 mg/kg ¹
<u>Pyrene</u>	1,000 mg/kg ¹
<u>Organic Compounds in Ground Water: EPA Method 8020⁻⁴</u>	
<u>Benzene</u>	—5 µg/l ²⁴
<u>Toluene</u>	560 to —1,000 µg/l ⁻²⁴
<u>Ethylbenzene</u>	—700 µg/l ⁻²⁴
<u>Xylenes (Total)</u>	1,400 to 10,000 µg/l ^{2,35}
<u>Inorganics in Soils⁴</u>	
<u>Electrical Conductivity (EC)</u>	<4 mmhos/cm or 2x background
<u>Sodium Adsorption Ratio (SAR)</u>	<12
<u>pH</u>	6-9
<u>Inorganics in Ground Water</u>	
<u>Total Dissolved Solids (TDS)</u>	<1.25 x background ²⁴
<u>Chlorides</u>	<1.25 x background ²⁴
<u>Sulfates</u>	<1.25 x background ²⁴
<u>Total Metals in Soils: EPA Method 3050⁻⁴</u>	
<u>Arsenic</u>	41-0.39 mg/kg ¹²
<u>Barium (LDNR True Total Barium)</u>	180,000-15,000 mg/kg ⁻²¹
<u>Boron (Hot Water Soluble)</u>	2 mg/l ²
<u>Cadmium</u>	26-70 mg/kg ^{2,8}
<u>Chromium (III)</u>	4,500-120,000 mg/kg ¹²
<u>Chromium (IV)</u>	23 mg/kg ^{1,6}
<u>Copper</u>	750-3,100 mg/kg ¹²
<u>Lead (inorganic)</u>	300-400 mg/kg ⁻¹²
<u>Mercury</u>	47-23 mg/kg ⁻²¹
<u>Molybdenum</u>	— ³
<u>Nickel (soluble salts)</u>	240-1,600 mg/kg ^{-21,6}
<u>Selenium</u>	—390 mg/kg ^{1,63}
<u>Silver</u>	400-390 mg/kg ⁻¹²
<u>Zinc</u>	4,400-23,000 mg/kg ^{-21,6}
<u>Liquid Hydrocarbons in Soils and Ground Water</u>	
<u>Liquid hydrocarbons including condensate and oil</u>	None

COGCC recommends that the latest version of EPA SW 846 analytical methods be used where possible and that analyses of samples be performed by laboratories that maintain state or national accreditation programs.

¹Concentrations taken from CDPHE-HMWMD Table 1 Colorado Soil Evaluation Values (December 2007).

²~~o~~ Concentrations taken from CDPHE-WQCC Regulation 41 - The Basic Standards for Ground Water.

³For this range of standards, the first number in the range is a strictly health-based value, based on the WQCC's established methodology for human health-based standards. The second number in the range is a maximum contaminant level (MCL), established under the Federal Safe Drinking Water Act which has been determined to be an acceptable level of this chemical in public water supplies, taking treatability and laboratory detection limits into account. The WQCC intends that control requirements for this chemical be implemented to attain a level of ambient water quality that is at least equal to the first number in the range except as follows: 1) where ground water quality exceeds the first number in the range due to a release of contaminants that occurred prior to September 14, 2004 (regardless of the date of discovery or subsequent migration of such contaminants) clean-up levels for the entire contaminant plume shall be no more restrictive than the second number in the range or the ground water quality resulting from such release, whichever is more protective, and 2) whenever the WQCC has adopted alternative, site-specific standards for the chemical, the site-specific standards shall apply instead of these statewide standards.

²~~Concentrations taken from API Metals Guidance: Maximum Soil Concentrations~~

³~~Concentrations are dependent on site-specific conditions~~

⁴Consideration shall be given to background levels in native soils.

⁵Analysis by USDA Agricultural Handbook 60 method (20B) with soluble cations determined by method (2). Method (20B) = estimation of exchangeable sodium percentage and exchangeable potassium percentage from soluble cations. Method (2) = saturated paste method (note: each analysis requires a unique sample of at least 500 grams). If soils are saturated, USDA Agricultural Handbook 60 with soluble cations determined by method (3A) saturation extraction method.

⁶The table value for these inorganic constituents is taken from the CDPHE-HMWMD Table 1 Colorado Soil Evaluation Values (December 2007). However, because these values are high, it is possible that site-specific geochemical conditions may exist that could allow these constituents to migrate into ground water at levels exceeding ground water standards even though the concentrations are below the table values. Therefore, when these constituents are present as contaminants, a secondary evaluation of their leachability must be performed to ensure ground water protection.

⁵For this range of standards, the first number in the range is a strictly health-based value, based on the WQCC's established methodology for human health-based standards. The second number in the range is a maximum contaminant level (MCL), established under the Federal Safe Drinking Water Act which has been determined to be an acceptable level of this chemical in public water supplies, taking treatability and laboratory detection limits into account. The WQCC intends that control requirements for this chemical be implemented to attain a level of ambient water quality that is at least equal to the first number in the range except as follows: 1) where ground water quality exceeds the first number in the range due to a release of contaminants that occurred prior to September 14, 2004 (regardless of the date of discovery or subsequent migration of such contaminants) clean-up levels for the entire contaminant plume shall be no more restrictive than the second number in the range or the ground water quality resulting from such release, whichever is more protective, and 2) whenever the WQCC has adopted alternative, site-specific standards for the chemical, the site-specific standards shall apply instead of these statewide standards.

Figure 901-1 SENSITIVE AREA DETERMINATION Decision Tree
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1000-SERIES RECLAMATION REGULATIONS

1001. INTRODUCTION

- a. **General.** The rules and regulations of this series establish the proper reclamation of the land and soil affected by oil and gas operations and ensure the protection of the topsoil of said land during such operations. The surface of the land shall be restored as nearly as practicable to its condition at the commencement of drilling operations.
- b. **Additional requirements.** Notwithstanding the provisions of the 1000 series rules, when the Director has reasonable cause to believe that a proposed oil and gas operation could result in a significant adverse environmental impact on any air, water, soil, or biological resource, the Director shall conduct an onsite inspection and may request an emergency meeting of the Commission to address the issue.

~~1001. RECLAMATION VARIANCES~~

- c. **Surface owner waiver of 1000 Series Rules.** The Commission shall not require compliance with Rules 1002., 1003., 1004. a. b. or c.(1), (2), Or (3), if the operator can demonstrate to the Director's or the Commission's satisfaction that compliance with such rules is not necessary to protect the public health, safety and welfare, including prevention of significant adverse environmental impacts and adverse impacts to wildlife resources, and that the operator has entered into an agreement with the surface owner regarding topsoil protection and reclamation of the land. Absent bad faith conduct by the operator, penalties may only be imposed for non-compliance with a Commission order issued after a determination that, notwithstanding such agreement, compliance is necessary to protect public health, safety and welfare. Prior to final reclamation approval as to a specific well, the operator shall either comply with the rules or obtain a variance under Rule 502.(b). This rule shall not have the effect of relieving an operator from compliance with the 900 Series Rules.

1002. SITE PREPARATION AND STABILIZATION

a. Effective June 1, 1996:

- (1) **Fencing of drill sites and access roads on crop lands.** During drilling operations on crop lands, when requested by the surface owner, the operator shall delineate each drillsite and access road on crop lands constructed after such date by berms, single strand fence or other equivalent method in order to discourage unnecessary surface disturbances.
- (2) **Fencing of reserve pit when livestock is present.** During drilling operations where livestock is in the immediate area and is not fenced out by existing fences, the operator, at the request of the surface owner, will install a fence around the reserve pit.
- (3) **Fencing of well sites.** Subsequent to drilling operations, where livestock is in the immediate area and is not fenced out by existing fences, the operator, at the request of the surface owner, will install a fence around the wellhead, pit and production equipment to prevent livestock entry.

b. **Soil removal and segregation.**

- (1) **Soil removal and segregation on crop land.** As to all excavation operations undertaken after June 1, 1996 on crop land, the operator shall separate and store ~~the various A, B, and C~~ soil horizons separately from one another and mark or document stockpile locations to facilitate subsequent reclamation. When separating soil horizons, the operator shall segregate horizons based upon noted changes in physical characteristics such as organic content, color, texture, density or consistency. ~~On crop land below the C horizon, the soil horizons shall also be segregated based on the above noted physical characteristics.~~ Segregation will be performed to the extent practicable to a depth of six (6) feet or bedrock, whichever is shallower.
- (2) **Soil removal and segregation on non crop land.** As to all excavation operations undertaken after July 1, 1997 on non crop land, the operator shall separate and store the ~~A-top~~ soil horizon or the top six (6) inches, whichever is deeper, and mark or document stockpile locations to facilitate subsequent reclamation. When separating the ~~A~~ soil horizons, the operator shall segregate the horizon based upon noted changes in physical characteristics such as organic content, color, texture, density or consistency.
- (3) **Horizons too rocky or too thin.** When the soil horizons are too rocky or too thin for the operator to practicably segregate, then the topsoil shall be segregated to the extent possible and stored. Too rocky shall mean that the soil horizon consists of greater than thirty five percent (35%) by volume rock fragments larger than ten (10) inches in diameter. Too thin shall mean soil horizons that are less than six (6) inches in thickness.

The operator shall segregate remaining soils on crop land to the extent practicable to a depth of three (3) feet below the ground surface or bedrock, whichever is shallower, based upon noted changes in physical characteristics such as color, texture, density or consistency and such soils shall be stockpiled to avoid loss and mixing with other soils.

- c. **Protection of soils.** All stockpiled soils shall be protected from degradation due to contamination, compaction and, to the extent practicable, from wind and water erosion during drilling and production operations. Best management practices to prevent weed establishment and to maintain soil microbial activity minimize erosion and offsite sedimentation by controlling stormwater runoff shall be implemented.
- d. **Drill pad location.** The drilling location shall be designed and constructed to provide a safe working area while reasonably minimizing the total surface area disturbed. Consistent with applicable spacing orders and well location orders and regulations, in locating drill pads, steep slopes shall be avoided when reasonably possible. The drill pad site shall be located on the most level location obtainable that will accommodate the intended use. ~~If not avoidable, deep vertical cuts and steep long fill slopes shall be constructed to the least percent slope practical. Where feasible, operators shall use directional drilling to reduce cumulative impacts and adverse impacts on wildlife resources. Best management practices to minimize erosion and offsite sedimentation by controlling stormwater runoff shall be implemented.~~
- e. **Surface disturbance minimization; ~~stormwater management.~~**
- (1) In order to reasonably minimize land disturbances and facilitate future reclamation, well sites, production facilities, gathering pipelines and access roads shall be located, adequately sized, constructed, and maintained so as to reasonably control dust, minimize erosion, alteration of natural features and removal of surface materials and degradation due to contamination. Best management practices to minimize erosion and offsite sedimentation by controlling stormwater runoff shall be implemented. These practices will vary with site specific conditions, such as slope, vegetative cover and proximity to water bodies, and may include silt fencing, straw bales, plant buffers, rock filter dikes, slope roughening, mulch and other measures designed to reduce erosion and minimize the transport of soil from disturbed areas.
- (2) Operators shall avoid or minimize impacts to wetlands and riparian habitats to the degree practicable.
- (3) Where practicable, operators shall consolidate facilities and pipeline rights-of-way in order to minimize adverse impacts to wildlife resources, including fragmentation of wildlife habitat, as well as cumulative impacts.
- (4)f. **Access roads.** Existing roads shall be used in a safe manner and maintained in a safe condition to the greatest extent practicable to avoid erosion and minimize the land area devoted to oil and gas operations. ~~Best management practices to minimize erosion and offsite sedimentation by controlling stormwater runoff shall be implemented. Access roads shall be designed and constructed to safely accommodate the anticipated types and volumes of traffic. Roadbeds shall be engineered to prevent impacts to riparian areas or wetlands. Unavoidable impacts shall be mitigated.~~ Where feasible and practicable, operators are encouraged to share access roads in developing a field. Where feasible and practicable, roads shall be routed to complement other land usage. To the greatest extent practicable, all vehicles used by the operator, contractors, and other parties associated with the well shall not travel outside of the original access road boundary. Repeated or flagrant instance(s) of failure to restrict lease access to lease roads which result in unreasonable land damage or crop losses shall be subject to a penalty under Rule 523.

f. Stormwater management.

(1) Best Management Practices (BMPs) to control stormwater, minimize erosion and offsite sedimentation, and site degradation due to contamination shall be implemented at all oil and gas facilities, including, but not limited to, well pads, soil stock piles, access roads, tank batteries, compressor stations, pipeline rights of way, and gas processing plants.

BMPs will vary with site-specific conditions, such as slope, vegetation cover, and proximity to water bodies, and may include construction site planning and design, stormwater control, erosion and sediment control, and material management practices. The selection, design, and construction of best management practices shall be supervised by a person trained as an erosion control specialist or by a person with training specific to stormwater management.

BMPs shall be selected, installed, implemented, and maintained in accordance with good engineering practices and shall include provisions for:

A. Covering materials and activities and stormwater diversion. Minimize contact of precipitation and stormwater runoff with materials, wastes, equipment, and activities with potential to result in discharges causing pollution of surface waters.

B. Materials handling and spill prevention. Implement procedures and practices for material handling and spill prevention for materials used, stored, or disposed of that could result in discharges causing pollution of surface waters.

C. Erosion prevention. Prevent erosion from unpaved areas, including operational well pads, road surfaces and associated culverts, stream crossings, and cut/fill slopes.

D. Inspections and Preventive Maintenance. Implement a preventive maintenance program that includes inspection and maintenance of operations, facilities, and BMPs to uncover conditions that could cause breakdowns or failures of BMPs.

E. Good Housekeeping. Implement a good housekeeping program for maintenance of clean, orderly operations and facilities. The program shall address cleaning and maintenance schedules and waste disposal practices.

F. Spill Response Procedures. Implement procedures for responding to and cleaning up spills. The necessary equipment for spill cleanup shall be readily available to personnel. SPCC plans incorporated by reference must be identified in the program.

G. Vehicle Tracking Control. Implement practices to control potential sediment discharges from vehicle tracking from operational roads, well pads, and other unpaved surfaces such as road and pad design and maintenance to minimize rutting and tracking, minimizing site access, street sweeping or scraping, tracking pads, wash racks, education, or sediment control.

(2) Operators of oil and gas facilities shall develop and maintain a stormwater program in compliance with this section no later than the time of termination of stormwater permits issued by the Colorado Department of Public Health and Environment for construction of oil and gas facilities.

A. The stormwater program shall address all potential sources of pollution which may reasonably be expected to affect the quality of discharges associated with the

ongoing operation of production facilities during the post-construction and reclamation operation of the facilities. Pollutant sources that must be addressed, if present, include, but are not limited to, the following:

i. Transport of chemicals and materials, including loading and unloading operations;

ii. Vehicle/equipment fueling;

iii. Outdoor storage activities, including those for chemicals and additives;

iv. Produced water and drilling fluids storage;

v. Outdoor processing activities and machinery;

vi. Significant dust or particulate generating processes;

vii. Erosion and vehicle tracking from well pads, road surfaces, and pipelines;

viii. Waste disposal practices;

ix. Leaks and spills; and

x. Ground-disturbing maintenance activities.

B. The stormwater program shall be developed and supervised by a person trained as an erosion control specialist or by a person with training specific to stormwater management, and it shall identify Best Management Practices ("BMPs") to be implemented from the time that coverage under a Colorado Department of Public Health and Environment stormwater permit is terminated to reduce the loss of pollutants associated with activities at the production facilities and appurtenances thereto. BMPs shall include, but are not limited to, those required by Rule 1002.f.1, above, and shall be implemented to reduce the potential for pollution from the sources identified in accordance with Rule 1002.f.2.A.

C. The stormwater program shall be documented and maintained. It shall clearly describe the specifications for each BMP required by Rule 1002.f.2 to ensure proper implementation, operation and maintenance. Facility-specific maps, installation specification, and implementation criteria shall be included when general operating procedures and descriptions are not adequate to clearly describe the implementation and operation of BMPs.

D. The stormwater program shall include procedures and specific schedules for inspections of BMPs implemented pursuant to the stormwater program to ensure their performance against the requirements of Rule 1002.f.2.

1003. INTERIM RECLAMATION

- a. **General.** Debris and waste materials other than de minimis amounts, including, but not limited to, concrete, sack bentonite and other drilling mud additives, sand plastic, pipe and cable, as well as equipment associated with the drilling, re-entry or completion operations shall be removed. All E&P waste shall be handled according to the 900 Series rules. All pits, cellars, rat holes, and other bore holes unnecessary for further lease operations, excluding the drilling pit, will be backfilled as soon as possible after the drilling rig is released to conform with surrounding terrain. On crop land, if requested by the surface owner, guy line anchors shall be removed as soon as

reasonably possible after the completion rig is released. When permanent guy line anchors are installed, it shall not be mandatory to remove them. When permanent guy line anchors are installed on cropland, care shall be taken to minimize disruption or cultivation, irrigation, or harvesting operations. If requested by the surface owner or its representative, the anchors shall be specifically marked, in addition to the marking required below, so as to facilitate farming operations. All guy line anchors left buried for future use shall be identified by a marker of bright color not less than four (4) feet in height and not greater than one (1) foot east of the guy line anchor. Material may be burned or buried on the premises only with the prior written consent of the surface owner, and with prior written notice to the surface tenant. Such burning or burial may be prohibited by other applicable law. In addition, all wellsites and surface production facilities shall be maintained in accordance with Rule 603.j.

- b. **Interim reclamation of areas no longer in use.** All disturbed areas affected by drilling or subsequent operations, except areas reasonably needed for production operations, shall be reclaimed as early and as nearly as practicable to their original condition and shall be maintained to control dust and minimize prevent erosion. As to crop lands, if subsidence occurs in such areas additional topsoil shall be added to the depression and the land shall be re-leveled as close to its original contour as practicable. Interim reclamation shall occur no later than three (3) months on crop land or six (6) twelve (12) months on non-crop land after such operations unless the Director extends the time period because of conditions outside the control of the operator. Areas reasonably needed for production operations shall be compacted, covered, paved, or otherwise stabilized in such a way as to minimize dust and prevent erosion.
- c. **Compaction alleviation.** All areas compacted by drilling and subsequent oil and gas operations which are no longer needed following completion of such operations shall be cross-ripped. On crop land, such compaction alleviation operations shall be undertaken when the soil moisture at the time of ripping is below thirty-five percent (35%) of field capacity. Ripping shall be undertaken to a depth of eighteen (18) inches unless and to the extent bed rock is encountered at a shallower depth.
- d. **Drilling pit closure.** As part of interim reclamation, drilling pits shall be closed in the following manner:
- (1) **Drilling pit closure on crop land and within 100-year floodplain.** On crop land or within the 100-year floodplain, water-based bentonitic drilling fluids, except *de minimis* amounts, shall be removed from the drilling pit and disposed of in accordance with the 900 Series rules. Operators shall ensure that soils and ground water meet the allowable concentrations and levels of Table 910-1, above. Drilling pit reclamation, including the disposal of drilling fluids and cuttings, shall be performed in a manner so as to not result in the formation of an impermeable barrier. Any cuttings removed from the pit for drying shall be returned to the pit prior to backfilling, and no more than *de minimis* amounts may be incorporated into the surface materials. After the drilling pit is sufficiently dry, the pit shall be backfilled. The backfilling of the drilling pit shall be done to return the soils to their original relative positions. Closing and reclamation of drilling pits shall occur no later than three (3) months after drilling and completion activities conclude.
 - (2) **Drilling pit closure on non-crop land.** All drilling fluids shall be disposed of in accordance with the 900 Series rules. Operators shall ensure that soils and ground water meet the allowable concentrations and levels of Table 910-1, above. After the drilling pit is sufficiently dry, the pit shall be backfilled. Materials removed from the pit for drying shall be returned to the pit prior to the backfilling. No more than *de minimis* amounts may be incorporated into the surface materials. The backfilling of the drilling pit will be done to return the soils to their as of August 30, 2001. original relative positions so that the muds and associated solids will be confined to the pit and not squeezed out and incorporated in the surface materials. Closure and reclamation of drilling pits shall occur no later than six (6) months after drilling and completion activities conclude.

(3) **Minimum cover.** On crop lands, a minimum of three (3) feet of backfill cover shall be applied over any remaining drilling pit contents. As to both crop lands and non-crop lands, during the two (2) year period following drilling pit closure, if subsidence occurs over the closed drilling pit location additional topsoil shall be added to the depression and the land shall be re-leveled as close to its original contour as practicable.

e. **Restoration and revegetation.** When a well is completed for production, all disturbed areas no longer needed will be restored and revegetated as soon as practicable.

(1) **Revegetation of crop lands.** All segregated soil horizons removed from crop lands shall be replaced to their original relative positions and contour, and shall be tilled adequately to re-establish a proper seedbed. The area shall be treated if necessary and practicable to prevent invasion of undesirable species and noxious weeds, and to control erosion. Any perennial forage crops that were present before disturbance shall be re-established.

(2) **Revegetation of non-crop lands.** All segregated soil horizons removed from non-crop lands shall be replaced to their original relative positions and contour as near as practicable to achieve erosion control and longterm stability, and shall be tilled adequately in order to establish a proper seedbed. The disturbed area then shall be reseeded in the first favorable season. Reseeding with species consistent with the adjacent plant community is encouraged. In the absence of an agreement between the operator and the affected surface owner as to what seed mix should be used, the operator shall consult with a representative of the local soil conservation district to determine the proper seed mix to use in revegetating the disturbed area. In an area where an operator has drilled or plans to drill multiple wells, in the absence of an agreement between the operator and the affected surface owner, the operator may rely upon previous advice given by the local soil conservation district in determining the proper seed mixes to be used in revegetating each type of terrain upon which operations are to be conducted.

Interim reclamation of all disturbed areas no longer in use shall be considered complete when all ground surface disturbing activities at the site have been completed, and all disturbed areas have been either built on, compacted, covered, paved, or otherwise stabilized in such a way as to prevent erosion, or a uniform vegetative cover has been established with an individual plant density of at least seventy (70) percent of pre-disturbance levels or reference areas, excluding noxious weeds, or equivalent permanent, physical erosion reduction methods have been employed. Re-seeding alone is not sufficient.

(3) Interim reclamation completion notice, Form 4. The operator shall submit a Sundry Notice, Form 4, which describes the interim reclamation procedures and any associated mitigation measures performed, and at a minimum four (4) photographs taken during the growing season facing each cardinal direction which document the success of the interim reclamation and one (1) photograph which documents the total cover of live perennial vegetation of adjacent or nearby undisturbed land or the reference area. Each photograph shall be identified by date taken, well name, GPS location, and direction of view.

f. **Weed control.** During drilling, production, and reclamation operations, all disturbed areas shall be kept reasonably as free of all undesirable plant species designated to be noxious weeds and undesirable species as practicable. Weed control measures shall be conducted in compliance with the Colorado Weed Management Act, C.R.S. §35-5.5-115. It is recommended that the operator consult with the local weed control agency or other weed control authority when weed infestation occurs. It is the responsibility of the operator to monitor affected and reclaimed lands for noxious weed infestations. If applicable, the Director may require a weed control plan.

1004. FINAL RECLAMATION OF WELL SITES AND ASSOCIATED PRODUCTION FACILITIES

- a. **Well sites and associated production facilities.** Upon the plugging and abandonment of a well, all pits, mouse and rat holes and cellars shall be backfilled. All debris, abandoned gathering line risers and flowline risers, and surface equipment shall be removed within three (3) months of plugging a well. All access roads to plugged and abandoned wells and associated production facilities shall be closed, graded and recontoured. Culverts and any other obstructions that were part of the access road(s) shall be removed. Well locations, access roads and associated facilities shall be reclaimed. As applicable, compaction alleviation, restoration, and revegetation of well sites, associated production facilities, and access roads shall be performed to the same standards as established for interim reclamation under Rule 1003. All other equipment, supplies, weeds, rubbish, and other waste material shall be removed. The burning or burial of such material on the premises shall be performed in accordance with applicable local, state, or federal solid waste disposal regulations and in accordance with the 900 Series rules. In addition, material may be burned or buried on the premises only with the prior written consent of the surface owner. ~~Material may be burned or buried on the premises only with the prior written consent of the surface owner, and with prior written notice to the surface tenant. Such burning or burial shall be subject to applicable state and local law.~~ All such reclamation work shall be completed within three (3) months on crop land and twelve (12) months on non-crop land after plugging a well or final closure of associated production facilities. The Director may grant an extension where unusual circumstances are encountered, but every reasonable effort shall be made to complete reclamation before the next local growing season.
- b. **Production and special purpose pit closure.** The operator shall comply with the 900 series rules for the removal or treatment of E&P waste remaining in a production or special purpose pit before the pit may be closed for final reclamation. After any remaining E&P waste is removed or treated, all such pits must be back-filled to return the soils to their original relative positions. As to both crop lands and non-crop lands, if subsidence occurs over closed pit locations, additional topsoil shall be added to the depression and the land shall be re-leveled as close to its original contour as practicable.
- c. **Final reclamation threshold for release of financial assurance.** Successful reclamation of the well site and access road will be considered completed when:
- (1) On crop land, reclamation has been performed as per Rules 1003 and 1004, and observation by the Director over two growing seasons has indicated no significant unrestored subsidence.
 - (2) On non-crop land, reclamation has been performed as per Rules 1003 and 1004, and the total cover of live perennial vegetation, excluding noxious weeds, provides sufficient soils erosion control a uniform vegetative cover has been established with an individual plant density of at least seventy (70) percent of pre-disturbance levels, excluding noxious weeds, as determined by the Director through a visual appraisal. The Director shall consider the total cover of live perennial vegetation of adjacent or nearby undisturbed land, not including overstory or tree canopy cover, having similar soils, slope and aspect of the reclaimed area.
 - (3) Disturbances resulting from flow line installations shall be deemed adequately reclaimed when the disturbed area is reasonably capable of supporting the pre-disturbance land use.
 - (4) A Sundry Notice Form 4, has been submitted by the operator which describes the final reclamation procedures and any mitigation measures associated with final reclamation performed by the operator, and
 - (5) A final reclamation inspection has been completed by the Director, there are no outstanding compliance issues relating to Commission rules, regulations, orders, permit conditions or

the act, and the Director has notified the operator that final reclamation has been approved.

d. **Surface owner waiver of 1000-Series Rules.** Pursuant to Rule 502.b, an operator may request a variance from the provisions of Rule 1004 prior to final reclamation approval as to a specific oil and gas location. When considering such a variance request, the Commission or Director shall consider whether compliance with Rule 1004 is necessary to protect the public health, safety, and welfare, including protection of the environment and wildlife resources, as well as whether the operator has entered into an agreement with the surface owner regarding topsoil protection and reclamation of the land. This rule shall not have the effect of relieving an operator from compliance with the 900-Series rules.

e. Final reclamation of all disturbed areas shall be considered complete when all activities disturbing the ground have been completed, and all disturbed areas have been either built upon, compacted, covered, paved, or otherwise stabilized in such a way as to prevent erosion, or a uniform vegetative cover has been established with an individual plant density of at least seventy (70) percent of pre-disturbance levels, excluding noxious weeds, or equivalent permanent, physical erosion reduction methods have been employed. Re-seeding alone is not sufficient.

1100-SERIES PIPELINE REGULATIONS

1101. INSTALLATION AND RECLAMATION

~~a. **Notice.** As of June 1, 2006, an operator of a gathering line which has segments subject to safety regulation by the Office of Pipeline Safety, U.S. Department of Transportation, shall notify the Commission thirty (30) days in advance of construction by filing a plan of construction in a format acceptable to the Director. Such plan shall also be provided to each local governmental designee or local government jurisdiction traversed by such gathering line. The plan shall include the general design, construction schedule and route, including a map showing all crossings of public by ways and natural and manmade watercourses.~~

ba. Material.

(1) Materials for pipe and other components of pipelines shall be:

- A. Able to maintain the structural integrity of the pipeline under temperature, pressure, and other conditions that may be anticipated;
- B. Compatible with the substances to be transported.
- C. Locatable by a tracer line or location device placed adjacent to or in the trench of all buried nonmetallic pipelines to facilitate the location of such pipelines.

eb. Design. Each component of a pipeline shall be designed and installed to prevent failure from corrosion and to withstand anticipated operating pressures and other loadings without impairment of its serviceability. The pipe shall have sufficient wall thickness or be installed with adequate protection to withstand anticipated external pressures and loads that will be imposed on the pipe after installation.

dc. Cover.

(1) All installed pipelines shall have cover sufficient to protect them from damage. On crop land, all pipelines shall have a minimum cover of three (3) feet.

- (2) Where an underground structure, geologic, economic or other uncontrollable condition prevent pipelines from being installed with minimum cover, or when there is a written agreement between the surface owner and the operator, the line may be installed with less than minimum cover or above ground.

ed. Excavation, backfill and reclamation.

- (1) When pipelines cross crop lands, unless waived by the surface owner, the operator shall segregate topsoil while trenching, and trenches shall be backfilled so that the soils shall be returned to their original relative positions and contour. This requirement to segregate and backfill topsoil shall not apply to trenches which are twelve (12) inches or less in width. Reasonable efforts shall be made to run pipelines parallel to crop irrigation rows on flood irrigated land.
- (2) On crop lands and non-crop lands, pipeline trenches shall be maintained in order to correct subsidence and reasonably minimize erosion. Interim and final reclamation, including revegetation, shall be performed in accordance with the applicable 1000 Series rules.

fe. Pressure testing of flowlines.

- (1) Before operating a segment of flowline it shall be tested to maximum anticipated operating pressure. In conducting tests, each operator shall ensure that reasonable precautions are taken to protect its employees and the general public. The testing may be conducted using well head pressure sources and well bore fluids, including natural gas. Such pressure tests shall be repeated once each calendar year to maximum anticipated operating pressure, and operators shall maintain records of such testing for Commission inspection for at least three (3) years.
- (2) Flowline segments operating at less than fifteen (15) psig are excepted from pressure testing requirements.

1102. OPERATIONS, MAINTENANCE, AND REPAIR

a. Maintenance.

- (1) Each operator shall take reasonable precautions to prevent failures, leakage and corrosion of pipelines.
- (2) Whenever an operator discovers any condition that could adversely affect the safe and proper operation of its pipeline, it shall correct it within a reasonable time. However, if the condition is of such a nature that it presents an immediate hazard to persons or property, the operator shall not operate the affected part of the system until it has corrected the unsafe condition.

b. Repair.

- (1) Each operator shall, in repairing its pipelines, ensure that the repairs are made in a safe manner and are made so as to prevent injury to persons and damage to property.
- (2) No operator shall use any pipe, valve, or fitting in repairing pipeline facilities unless the components meet the installation requirements of this section.

c. Marking.

- (1) In designated high density areas, and where crossing public rights-of-way or utility easement, a marker shall be installed and maintained to identify the location of pipelines.
- (2) The following shall be written legibly on a background of sharply contrasting color on each line marker:

"Warning", "Caution" or "Danger" followed by the words "gas (or name of natural gas or petroleum transported) pipeline" in letters at least one (1) inch high with one-quarter (¼) inch stroke and the name of the operator and the telephone number where the operator can be reached at all times.

- d. **One Call participation.** As to any pipelines over which the Commission has jurisdiction, each operator shall become a member of the Utility Notification Center of Colorado and participate in Colorado's One Call notification system, the requirements of which are established by §9-1.5-101., C.R.S. et seq.
- e. **Emergency response.** As to gathering lines with segments subject to safety regulation by the Office of Pipeline Safety, U.S. Department of Transportation, the operator shall prepare and submit an emergency response plan to the Commission and to the county sheriff and each local government jurisdiction traversed by such pipeline segment.

1103. ABANDONMENT

Each pipeline abandoned in place shall be disconnected from all sources and supplies of natural gas and petroleum, purged of liquid hydrocarbons, depleted to atmospheric pressure, and cut off three (3) feet below ground surface, or the depth of the pipeline, whichever is less and sealed at the ends. This requirement shall also apply to compressor or gas plant feeder pipelines upon decommissioning or closure of a portion or all of a compressor station or gas plant. Notice of such abandonment shall be filed with the Commission and with the local governmental designee or local government jurisdiction.

1200-SERIES PROTECTION OF WILDLIFE RESOURCES

1201. PURPOSE

The standards and procedures in this series are designed to minimize adverse impacts of oil and gas operations on wildlife resources. In particular, they are intended to (a) develop a timely and efficient process for consultation with the Colorado Division of Wildlife on oil and gas permitting decisions; (b) avoid adverse impacts from oil and gas operations on wildlife resources; (c) minimize the extent and severity of those impacts that cannot be avoided; (d) mitigate the effects of unavoidable remaining impacts; and (e) take into consideration the cost-effectiveness and technical feasibility of measures for the minimization of surface disturbance and fragmentation of wildlife habitat.

1202. IDENTIFICATION OF WILDLIFE SPECIES

a. **Identification of wildlife species.** Operators shall review wildlife occurrence data from the Colorado Division of Wildlife, including the Natural Diversity Information Source (NDIS) database, found on the Colorado Division of Wildlife website, to identify wildlife species in the vicinity of the proposed oil and gas location.

b. **Wildlife mapping.**

- (1) Using scientifically acceptable survey techniques coinciding with the season and activity periods for the specific species noted below and based on its review of wildlife occurrence data from the Colorado Division of Wildlife, an operator planning an oil and gas facility shall survey, map, and report the occurrence of all identified wildlife species,

including a survey of lands within a ½ mile radius of a proposed oil and gas facility, on lands legally accessible by the operator, for the following species:

A. Raptor nests, including owls; and

B. Amphibians, including boreal toads.

(2) Using scientifically acceptable survey techniques coinciding with the season and activity periods for the specific species noted below and based on its review of wildlife occurrence data from the Colorado Division of Wildlife, an operator planning an oil and gas facility shall survey, map, and report the occurrence of all identified wildlife species, including a survey of lands within a ¼ mile radius of a proposed oil and gas facility, on lands legally accessible by the operator, for the following species:

A. Active black-tailed prairie dog colonies (NE, SE Colorado);

B. Active white-tailed prairie dog colonies (NW, SW Colorado);

C. Active Gunnison's prairie dog colonies (SW, SE Colorado);

D. Mountain plover nests if impacts will occur during the nesting season (NE, SE Colorado, including South Park);

E. Preble's meadow jumping mouse (NE, SE Colorado, including along the northern Front Range from the border with Wyoming through northern El Paso County);

F. Active swift fox den sites (NE, SE Colorado);

G. Southwest willow flycatcher (SW Colorado); and

H. Wetlands (statewide).

(3) Information collected pursuant to this section is intended for use only by the Colorado Division of Wildlife and may be released only with written approval from the surface owner or upon order by a court, and then only after notice to the surface owner.

1203. TRANSPORTATION PLANNING

Operators shall plan transportation networks to minimize the number and length of oil and gas roads, consistent with any requirements imposed by federal and state land management agencies, local government plans, and surface use agreements in order to minimize adverse impacts to wildlife resources.

Operators are encouraged to utilize common roads and access points to the maximum extent practicable.

1204. MOSQUITO CONTROL

Operators shall treat waste water pits and any associated pit containing water that provides a medium for breeding mosquitos with Bti (*Bacillus thuringiensis v. israelensis*) or take other effective action to control mosquito larvae that may spread West Nile Virus to wildlife, especially grouse, in order to minimize adverse impacts to wildlife resources.

1205. BEAR CONTROL MEASURES

Operators shall install and utilize bear-proof dumpsters and trash receptacles at all facilities located in black bear habitat west of Interstate 25 and on Raton Mesa east of Interstate 25.

1206. DISINFECTING EQUIPMENT

Operators shall disinfect heavy equipment, hand tools, boots, and any other equipment used previously in another river, lake, pond, or wetland within the past 30 days in order to minimize adverse impacts to wildlife resources.

a. An operator may disinfect heavy equipment, hand tools, boots, or any other equipment pursuant to this section by removing mud and debris and then implementing one of the following practices:

(1) Keep the equipment dry for 10 days;

(2) Spray/soak equipment with a 1:15 solution of disinfectant solution containing the following ingredients

A. Dialkyl dimethyl ammonium chloride, 5-10% by weight;

B. Alkyl dimethyl benzyl ammonium chloride, 5-10% by weight;

C. Nonyl phenol ethoxylate, 5-10% by weight;

D. Sodium sesquicarbonate, 1-5%;

E. Ethyl alcohol, 1-5%; and

F. Tetrasodium ethylene diaminetetraacetate, 1-5%

and water, keeping the equipment moist for at least 10 minutes and managing rinsate as a solid waste in accordance with local, county, state, or federal regulations; or

(3) Spray/soak equipment with water greater than 140 degrees Fahrenheit for at least 10 minutes.

b. Using the methods described above, operators shall disinfect water suction hoses and water transportation tanks withdrawing from or discharging into surface waters (other than contained pits) and discard rinse water in an approved disposal facility.

c. The above disinfection practices shall be repeated after completing work or before moving to the next water body.

1207. WILDLIFE MOVEMENT DURING PIPELINE CONSTRUCTION

During pipeline construction for trenches that are left open for more than 5 days and that are greater than 5 feet in width, operators shall install wildlife crossovers and escape ramps at well defined game trails and at a minimum of ¼ mile intervals, in order to minimize adverse impacts to wildlife resources.

1208. TIMING LIMITATION AREAS

a. Timing Limitation Areas described herein shall be applied to oil and gas operations in the following areas of Colorado, as delineated on the Colorado Division of Wildlife Species Activity Mapping (SAM) systems, found on the Colorado Division of Wildlife website, except gathering lines, using the best available technology to minimize adverse impacts to wildlife resources and to plan and

manage oil and gas operations in a manner that balances development with wildlife conservation, unless an operator demonstrates that the identified species is not in fact present:

(1) Mule deer critical winter range (West of Interstate 25, except in Las Animas County).

Development activity shall be restricted between January 1 and March 31.

(2) Elk winter concentration areas (West of Interstate 25, except in Las Animas County).

Development activity shall be restricted between January 1 and March 31.

(3) Pronghorn antelope winter concentration areas (West of Interstate 25).

Development activity shall be restricted between January 1 and March 31.

(4) Bighorn sheep winter range.

Development activity shall be restricted between December 1 and February 28.

(5) Elk production areas.

Development activity shall be restricted between May 15 and June 15.

(6) Columbian sharp-tailed grouse, plains sharp-tailed Grouse production areas.

Development activity shall be restricted in areas within 1.25 miles of active lek sites between March 15 and June 15.

(7) Greater sage-grouse and Gunnison sage-grouse production areas.

Development activity shall be restricted in areas within 4 miles of active lek sites between March 15 and June 15.

(8) Lesser prairie chicken production areas.

Development activity shall be restricted in areas within 2.2 miles of active lek sites between March 15 and June 15.

(9) Mountain plover nest sites.

Development activity shall be restricted in areas within 300 feet of active nest sites between May 1 and June 30.

(10) Swift fox den sites.

Development activity shall be restricted in areas within ¼ mile of den sites between April 1 and June 15.

(11) Prairie dog (Black-tailed, White-tailed, Gunnison's).

Development activity shall be restricted in active colonies between March 15 and June 15, except those colonies within 1 mile of urban development areas.

(12) Black-footed ferret release areas.

Development activity shall be restricted between April 15 and June 14 in Prairie Dog colonies where Black-Footed Ferrets have been released or documented since 2001.

(13) Raptors.

Development activity shall be restricted within nest buffers or roost sites during the defined nesting or roosting dates for each species, as set out below:

A. Bald eagle nest sites. Development activity shall be restricted in areas within ½ mile of active bald eagle nest sites between March 1 and May 31.

B. Bald eagle winter night roost sites. Development activity shall be restricted in areas within ½ mile of a bald eagle winter night roost site where there is a direct line of sight to the roost or in areas within ¼ mile where there is no direct line of sight to the roost between December 1 and February 28. Notwithstanding the foregoing, operators may conduct periodic visits for activities such as oil maintenance and

monitoring work within the buffer zone after development, however such activities should be restricted to the period between 10:00 a.m. and 2:00 p.m.

C. **Burrowing owl nest sites.** Development activity shall be restricted in areas within 150 feet of active nest sites between April 1 and June 30.

D. **Golden eagle nest sites.** Development activity shall be restricted in areas within ½ mile of active nest sites between March 1 to May 31.

- b. In lieu of compliance with the Timing Limitation Areas set out in Rule 1208.a above, an operator may elect to enter into consultation with the Colorado Division of Wildlife pursuant to Rule 306.c. on conditions of approval that may be applied to a proposed oil and gas location.
- c. An exemption from the Timing Limitation Areas set out in Rule 1208.a will be granted if an operator submits a lease addendum(s) for all leases in the section with the county recordation identification data stipulating that there will not be more than two (2) well sites per section, except in sage grouse areas where the limitation shall be one (1) well site per section.
- d. Where these limitations would restrict drilling to a period of less than nine (9) months a year, then the operator shall consult with the Colorado Division of Wildlife, pursuant to Rule 306. As a result of this consultation, a window for drilling shall be provided that is in all instances nine (9) months or more, unless otherwise agreed to by all parties to the consultation.

1209. RESTRICTED SURFACE OCCUPANCY AREAS

- a. Restricted Surface Occupancy Areas described below shall be applied to oil and gas operations in Colorado using the best available development technology in order to minimize adverse impacts to wildlife resources and to plan and manage oil and gas operations in a manner that balances development with wildlife conservation.
- b. Operators shall avoid the following areas to the maximum extent possible when planning and conducting oil and gas development operations, except when authorized as described in 306.c.(3), upon demonstration that the identified species is not in fact present, when specifically exempted by the Colorado Division of Wildlife, or in the event of situations posing a risk to human or environmental health or safety.
 - (1) Rocky mountain bighorn sheep production areas;
 - (2) Desert bighorn sheep production areas;
 - (3) Areas within 0.6 miles of any greater sage-grouse, Gunnison sage-grouse, and lesser prairie chicken leks (strutting and booming grounds);
 - (4) Areas within 0.4 miles of any Columbian sharp-tailed grouse or plains sharp-tailed grouse leks (strutting grounds);
 - (5) Areas of lynx breeding habitat in spruce/fir forest south of Interstate 70, above 9,500 feet elevation, and with a slope greater than 25% in spruce/fir habitat;
 - (6) Areas within ¼ mile of active Bald Eagle nest sites;
 - (7) Areas within ½ mile of active Ferruginous Hawk nest sites;
 - (8) Areas within ¼ mile of active Golden Eagle nest sites;

(9) Areas within designated Mexican Spotted Owl Protected Activity Centers as defined by the U.S. Fish and Wildlife Service in 50 C.F.R. §17.95(b) (2008). Only 50 C.F.R. §17.95(b) (2008) applies to this rule; later amendments to 50 C.F.R. §17.95(b) do not apply. 50 C.F.R. §17.95(b) (2008) may be examined at any state publication depository library. In addition, 50 C.F.R. §17.95(b) (2008) is available for public inspection during normal business hours, and copies may be obtained at a reasonable cost from the Public Room Administrator at the office of the Commission, 1120 Lincoln Street, Suite 801, Denver, Colorado, 80203.

(10) Areas within ½ mile of active Northern Goshawk nest sites;

(11) Areas within ¼ mile of active Osprey nest sites;

(12) Areas within ½ mile of active Peregrine Falcon nest sites;

(13) Areas within ½ mile of active Prairie Falcon nest sites;

(14) Areas within ¼ mile of Townsend's Big Eared Bat, Fringed Myotis, and Mexican Free-Tailed Bat roost sites;

(15) Areas within ½ mile of identified Boreal Toad breeding sites; and

(16) Areas within 300 feet of the ordinary high water mark of any reservoir, lake, wetland, or natural perennial or seasonally flowing stream or river.

State of Colorado Oil & Gas Conservation Commission
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APPENDIX PART III FEE STRUCTURE

As of July 1, 1999 *Eff 09/30/2007*

DRILLING PERMIT	Form 2	\$0/well
RECOMPLETION PERMIT	Form 2	\$0/well
PIT PERMIT	Form 15	\$0/pit
CHANGE OF OPERATOR	Form 10	\$0/well
DISPOSAL/INJECTION PERMIT	Form 2	\$0/well
OFFSITE LAND TREATMENT	Form 28	\$0/site
HEARING APPLICATION	–	\$0
HEARING PROTEST/INTERVENTION	–	\$0
GENERAL MAILING SUBSCRIPTION	–	\$36.00/year

Eff 09/30/2007

Editor's Notes

History *Eff 09/30/2007*

Section 310 eff. 9/30/2007. Delete Section 310B eff. 9/30/2007. *Eff 09/30/2007*