I. Storm Water Discharges Associated With Industrial Activity From Oil and Gas Extraction Facilities.

1. Coverage of This Section.

a. Discharges Covered Under This Section.

1) Site Coverage. This section of the permit covers discharges of storm water associated with industrial activity to waters of the State from oil and gas facilities listed under Standard Industrial Classification (SIC) Major Group 13 which are required to be permitted under *UAC R317-8-3.8(2)(a)3.* These include oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge storm water contaminated by contact with or that has come into contact with any overburden raw material, intermediate products, finished products, by-products or waste products located on the site of such operations. Industries in SIC Major Group 13 include the extraction and production of crude oil, natural gas, oil sands and shale; the production of hydrocarbon liquids and natural gas from coal; and associated oil field service, supply and repair industries. This section also covers petroleum refineries listed under SIC code 2911. Contaminated storm water discharges form petroleum refining or drilling operations that are subject to nationally established BAT or BPT guidelines found at *40 CFR 419* and *435* respectively are not included.

Note that areas eligible for coverage at petroleum refineries will be very limited because the term "contaminated runoff," as defined under *40 CFR 419.11*, includes "… runoff which comes into contract with any raw material, intermediate product, finished product, by-product or waste product located on petroleum refinery property." Areas at petroleum refineries which may be eligible for permit coverage, provided discharges from these areas are not co-mingled with "contaminated runoff," include: vehicle and equipment storage, maintenance and refueling areas. Most areas at refineries will not be eligible for coverage including: raw material, intermediate product, by-product, waste material, chemical, and material storage areas; loading and unloading areas; transmission pipelines, and processing areas.

2) Limitations. Storm water discharges associated with industrial activity fron inactive oil and gas operations occurring on Federal lands where an operator cannot be identified are not covered by this permit.

3) Co-Located Industrial Activity. When an industrial facility, described by the above coverage provisions of this section, has industrial activities being conducted onsite that meet the description(s) of industrial activities in another section(s), that industrial facility shall comply with any and all applicable monitoring and pollution prevention plan requirements of the other sections(s) in addition to all applicable requirements in this section. The monitoring and pollution prevention plan terms and conditions of this multi-sector permit are additive for industrial activities being conducted at the same industrial facility. The operator of the facility shall determine which other monitoring and pollution prevention plan section(s) of this permit (if any) are applicable to the facility.

2. Special Conditions. There are no additional requirements beyond those listed in *Part II.* Of

this permit.

3. Storm Water Pollution Prevention Plan Requirements.

a. Contents of Plan. The plan shall include, at a minimum, the following items:

1) Pollution Prevention Team. Each plan shall identify a specific individual or individuals within the facility organization as members of a storm water Pollution Prevention Team that are responsible for developing the storm water pollution prevention plan and assisting the facility or plant manager in its implementation, maintenance, and revision. The plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the facility's storm water pollution prevention plan.

2) Description of Potential Pollutant Sources. Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharges of pollutants during dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources. Each plan shall include, at a minimum:

a) Drainage.

(1) A site map indicating an outline of the portions of the drainage area of each storm water outfall that are within the facility boundaries, each existing structural control measure to reduce pollutants in storm water runoff, surface water bodies, locations where significant materials are exposed to precipitation, locations where major spills or leaks identified under paragraph *3.a.2).a).(2).c)* (Spills and Leaks) of this section have occurred, location of any areas were reportable quantity (RQ) releases have occurred; and the locations of the following activities where such activities are exposed to precipitation: fueling stations, vehicle and equipment maintenance and/or cleaning areas, loading/unloading areas, locations used for the treatment, storage or disposal of wastes, liquid storage tanks, processing areas and storage areas, chemical mixing areas, construction and drilling areas. The site map will indicate all areas subject to the effluent guidelines requirement of "No Discharge" in accordance with *40CFR435.32* and the existing structural controls to achieve compliance with the "No Discharge" requirement. The map must indicate the outfall locations and the types of discharges contained in the drainage areas of the outfalls.

(2) For each area of the facility that generates storm water discharges associated with industrial activity with a reasonable potential for containing significant amounts of pollutants, a prediction of the direction of flow, and an identification of the types of pollutants which are likely to be present in storm water discharges associated with industrial activity. Factors to consider include the toxicity of chemicals; quantity of chemicals used, produced or discharged; the likelihood of contact with storm water; and history of significant leaks

or spills of toxic hazardous pollutants. The permittee should consider the cause of RQ release, the materials used to contain and remediate releases and any other aspect of releases or clean-up which could potentially contribute pollutants to a storm water discharge. Flows with a significant potential for causing erosion shall be identified.

b) Inventory of Exposed Materials. An inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a narrative description of significant materials that have been handled, treated, stored or disposed in a manner to allow exposure to storm water between the time of 3 years prior to the date of the submission of a *Notice of Intent (NOI)* to be covered under this permit and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with storm water runoff between the time of 3 years prior to the date of the submission of a *Notice of Intent (NOI)* to be covered under this permit and the present; the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of any treatment the storm water receives.

c) Spills and Leaks. A list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas that are exposed to precipitation or that otherwise drain to a storm water conveyance at the facility after the date of 3 years prior to the date of the submission of a *Notice of Intent (NOI)* to be covered under this permit. Such list shall be updated as appropriate during the term of the permit.

d) Sampling Data. A summary of existing discharge sampling data describing pollutants in storm water discharges from the facility, including a summary of sampling data collected during the term of this permit.

e) Risk Identification and Summary of Potential Pollutant Sources. A narrative description of the potential pollutant sources from the following activities: loading and unlading operations; outdoor storage activities; chemical, cement, mud or gel mixing activities; outdoor manufacturing or processing activities; drilling or mining activities; significant dust or particulate generating processes; and onsite waste disposal practices, equipment cleaning and rehabilitation activities. List any significant potential source of pollutants at the site and for each potential source, any pollutant or pollutant parameter (e.g., biochemical oxygen demand, etc.) of concern shall be identified.

In its description of potential pollutant sources, a facility must include information about the reportable quantity (RQ) release which triggered the permit application requirement. Such information must include: the nature of the release (e.g., spill of oil from a drum storage area; The amount of oil or hazardous substance released amount of substance recovered; date of the release; cause of the release (e.g., poor handling techniques as well as lack of containment in area); area affected by release, including land and water; procedure to cleanup release; actions or procedures implemented to prevent or better respond to a release; and remaining potential contamination of

storm water from release. The analysis shall take into account human health risks, the control of drinking water intakes, and the designated uses of the receiving stream.

3) Measures and Controls. Each facility covered by this permit shall develop and implement storm water management controls appropriate for the facility. The controls in a plan shall reflect identified potential sources of pollutants at the facility. The description of storm water management controls shall address the following minimum components, including a schedule for implementing such measures:

a) Good Housekeeping. Good housekeeping requires the maintenance of areas which may contribute pollutants to storm water discharges in a clean, orderly manner.

b) Preventive Maintenance. A preventive maintenance program shall involve timely inspection and maintenance of storm water management devices (e.g., cleaning oil/water separators, catch basins) as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensuring appropriate maintenance of such equipment and systems. The preventative maintenance program shall also include the inspection of all on site and off site mixing tanks and equipment, and all vehicles which carry supplies and chemicals to oil field activities.

c) Spill Prevention and Response Procedures. Areas where potential spills which can contribute pollutants to storm water discharges can occur, and their accompanying drainage points shall be identified clearly in the storm water pollution prevention plan. Materials shall be stored indoors where possible and drainage systems designed to discharge downstream from drinking water intakes. Where appropriate, specifying material handling procedures, storage requirements, and use of equipment such as diversion valves in the plan should be considered. Procedures for cleaning up spills shall be identified in the plan and made available to the appropriate personnel. The necessary equipment to implement a clean up should be available to personnel.

d) Inspections. In addition to or as part of the comprehensive site evaluation required under paragraph *3.a.3).i)* of this section, qualified facility or plant personnel shall be identified to inspect designated equipment and areas of the facility at appropriate intervals specified in the plan. All equipment and areas addressed in the pollution prevention plan shall be inspected at a minimum of 6-month intervals. Equipment and vehicles which store, mix or transport hazardous materials will be inspected routinely, but not less than quarterly. A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained.

e) Employee Training. Employee training programs shall inform personnel responsible for implementing activities identified in the storm water pollution prevention plan or otherwise responsible for storm water management at all

levels of responsibility of the components and goals of the storm water pollution prevention plan. Training should address topics such as spill response, good housekeeping and material management practices. The pollution prevention plan shall identify periodic dates for such training.

f) Recordkeeping and Internal Reporting Procedures. A description of incidents (such as spills, or other discharges), along with other information describing the quality and quantity of storm water discharges shall be included in the plan required under this part. Inspections and maintenance activities shall be documented and records of such activities shall be incorporated into the plan. All records shall be kept for a period of not less than 3 years.

g) Non-storm Water Discharges.

(1) Certification. The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharges. The certification shall include the identification of potential significant sources of non-storm water at the site, a description of the results of any test and/or evaluation for the presence of non-storm water discharges, the evaluation, and the onsite drainage points that were directly observed during the test. Certifications shall be signed in accordance with *Part VI.G.* of this permit. Such certification may not be feasible if the facility operating storm water discharge associated with industrial activity does not have access to an outfall, manhole, or other point of access to the ultimate conduit which receives the discharge. In such cases, the source identification section of the storm water pollution prevention plan shall indicate why the certification required by this part was not feasible, along with the identification of potential significant sources of non-storm water at the site. A discharger that is unable to provide the certification required by this paragraph must notify the *Executive Secretary* in accordance with paragraph *3.a.3)g).(3)* (below).

(2) Exceptions. Except for flows from fire fighting activities, sources of non-storm water listed in *Part II.A.2.* (Prohibition of Non-storm Water Discharges) of this permit that are combined with storm water discharges associated with industrial activity must be identified in the plan. The plan shall identify and ensure the implementation of appropriate pollution prevention measures for the non-storm water component(s) of the discharge.

(3) Failure to Certify. Any facility that is unable to provide the certification required (testing for non-storm water discharges), must notify the *Executive Secretary* by October 1, 1998, or, for facilities which begin to discharge storm water associated with industrial activity after January 1, 1998, 180 days after submitting an *NOI* to be covered by this permit. If the failure to certify is caused by the inability to perform adequate tests or evaluations, such notification shall describe: the procedure of any test conducted for the presence of non-storm water discharges; the results of such test or other relevant observations;

potential sources of non-storm water discharges to the storm sewer; and why adequate tests for such storm sewers were not feasible. Non-storm water discharges to waters of the State which are not authorized by a *UPDES* permit are unlawful, and must be terminated.

h) Sediment and Erosion Control. The plan shall identify areas which, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion. Unless covered by the general Permit for Construction Activity (Permit No.: *UTR300000*), the additional erosion control requirement for well drillings oil, sand, and shale mining areas are as follows:

(1) Site Description. Each plan shall provide a description of the following:

(a) a description of the nature of the exploration activity;

(b) estimates of the total area of the site and the area of the site that is expected to be disturbed due to the exploration activity;

(c) an estimate of the runoff coefficient of the site;

(d) a site map indicating drainage patterns and approximate slopes, the location of major control structures identified in the plan, and surface waters; and

(e) the name of the receiving water(s) and the ultimate receiving water(s) of the runoff.

(2) Controls. The pollution prevention plan shall include a description of controls appropriate for the activity and implement such controls. The description of controls shall address the following minimum components:

(a) A description of vegetative practices designed to preserve existing vegetation where attainable and revegetate open areas as soon as practicable after grade drilling. Such practices may include: temporary seeding, permanent seeding, mulching, sod stabilization, vegetative buffer strips, protection of trees, or other equivalent measures. The operator shall initiate appropriate vegetative practices on all disturbed areas within 14 calendar days of the last activity at that area.

(b) A description of structural practices that, to the degree attainable, divert flows from exposed soils, store flows or otherwise limit runoff from exposed areas of the site. Such practices may include straw bale dikes, silt fences, earth dikes, brush barriers, drainage swales, check dams, subsurface drain, pipe slope drain, level spreaders storm drain inlet protection, rock outlet protection, sediment traps temporary sediment basins, or other equivalent

measures.

(c) Offsite vehicle tracking of sediments shall be minimized.

(d) Procedures in a plan shall provide that all erosion controls on the site are inspected at least once every 7 calendar days. Weekly inspections are necessary to ensure erosion controls continue to effectively reduce the amount of sediment carried offsite (a silt fence or silt trap is no longer effective when filled with silt).

(3) Management of Runoff. The plan shall contain a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those which control the generation or sources(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage storm water runoff in a manner that reduces pollutants in storm water discharges from the site. The plan shall provide the measures that the permittee determines to be reasonable and appropriate which shall be implemented and maintained. The potential of various sources at the facility to contribute pollutants to storm water discharges associated with industrial activity shall be considered when determining reasonable and appropriate measures. Appropriate measures may include vegetative swales and practices, reuse of collected storm water (such as for a process or as an irrigation source), inlet controls (such as oil/water separators). Snow management activities, infiltration devices, wet detention/retention devices, or other equivalent measures.

(4) Reportable Quantity (RQ) Release. The permittee must describe the measures taken to clean up RQ releases or related spills of materials, as well as measures proposed to avoid future releases of RQs. Such measures may include among others: improved handling or storage techniques; containment around handling areas of liquid materials; and use of improved spill cleanup materials and techniques.

(5) Vehicle and Equipment Storage Areas. The storage of vehicles and equipment awaiting or having completed maintenance must be confined to designated areas (delineated on the site map). The plan must describe measures that prevent or minimize contamination of the storm water runoff from these areas. The facility may consider the use of drip pans under vehicles and equipment indoor storage of the vehicles and equipment, installation of berming and diking of this area, or other equivalent measures.

(6) Vehicle and Equipment Cleaning and Maintenance Areas. The plan must describe measures that prevent or minimize contamination of the storm water runoff from all areas used for vehicle and equipment cleaning. The facility may consider performing all cleaning operations indoors, covering the cleaning operation, ensuring that all wash waters drain to a sanitary sewer, and/or collecting the storm water runoff from the cleaning area and providing treatment or recycling. The discharge of vehicle and equipment wash waters, including tank cleaning

operations, are not authorized by this permit and must be authorized under a separate *UPDES* permit or discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements.

The plan must describe measures that prevent or minimize contamination of the storm water runoff from all areas used for vehicle and equipment maintenance and rehabilitation. The facility may consider performing all maintenance activities indoors, using drip pans, maintaining an organized inventory of materials used in the shop, draining all parts of fluids prior to disposal, prohibiting the practice of hosing down the shop floor where the practice would result in the exposure of pollutants to storm water, using dry cleanup methods, collecting the storm water runoff from the maintenance area and providing treatment or recycling, or other equivalent measures.

(7) Materials and Chemical Storage Areas. Storage units of all chemicals and materials (e.g., fuels, oils, used filters, spent solvents, paint wastes, radiator fluids, transmission fluids, hydraulic fluids, detergents drilling mud components, acids organic additives) must be maintained in good condition so as to prevent contamination of storm water. Hazardous materials must be plainly labeled. The plan must describe measures that prevent or minimize contamination of the storm water runoff from such storage areas. The facility may consider indoor storage of the materials and/or installation of berming and diking at the area.

(8) Chemical Mixing Areas. The plan must describe measures that prevent or minimize contamination of the storm water runoff from chemical mixing areas. The facility may consider covering the mixing area, using spill and overflow protection, minimizing runon of storm water to the mixing area, using dry cleanup methods, and/or collecting the storm water runoff and providing treatment or recycling. The facility may consider installation of berming and diking of the area.

i) Comprehensive Site Compliance Evaluation. Qualified Personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but in no case less than once a year. Such evaluations shall provide:

(1) Areas contributing to a storm water discharge associated with industrial activity (e.g., materials and chemical storage areas, vehicle and equipment cleaning and maintenance areas, vehicle and equipment storage areas, chemical mixing areas, and areas of materials handling at the drill site areas) shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. Measures to reduce pollutant loadings shall be evaluate to determine whether they are adequate and properly implemented in accordance with the terms of the permit or whether additional control measures are needed. Structural storm water management measures, sediment and erosion control measures, and other structural pollution prevention measures identified in the plan shall be observed to ensure that they are operating correctly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made.

(2) Based on the results of the evaluation , the description of potential pollutant sources identified in the plan in accordance with paragraph *3.a.2)* of this section (Description of Potential Pollutant Sources) and pollution prevention measures and controls identified in the plan in accordance with paragraph *3.a.3)* of this section (Measures and controls) shall be revised as appropriate within 2 weeks of such evaluation and shall provide for implementation of any changes to the plan in a timely manner, but in no case more than 12 weeks after the evaluation.

(3) A report summarizing the scope of the evaluation, personnel making the evaluation, the date(s) of the evaluation, and major observations relating to the implementation of the storm water pollution prevention plan the permit shall be made and retained as part of the storm water pollution prevention plan for at least 3 years after the date of the evaluation. The report shall identify any incidents of noncompliance. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the storm water pollution prevention plan and this permit. The report shall be signed in accordance with *Part VI.G.* (Signatory Requirements) of this permit.

(4) Where compliance evaluation schedules overlap with inspections required under *3.a.3).d)*, the compliance evaluation may be conducted in place of one such inspection.

4. Numeric Effluent Limitations. There are no additional requirements beyond those listed in *Part IV.B.* of this permit.

5. Monitoring and reporting Requirements.

a. Monitoring Requirements:

1) Quarterly Visual Examination of Storm Water Quality. Facilities shall perform and document a visual examination of a storm water discharge associated with industrial activity from each outfall, except discharges exempted below. The examination(s) must be made at least once in each designated period [described in *a)* below] during daylight hours unless there is insufficient rainfall or snow melt to produce a runoff event.

a) Visual Monitoring Periods. Examinations shall be conducted in each of the following periods for the purposes of visually inspecting storm water quality associated with storm water runoff or snow melt: January through March; April through June; July through September; and October through December.

b) Sample and Data Collection. Examinations shall be made of samples collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed one hour) of when the runoff or snowmelt begins discharging. The examinations shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other

obvious indicators of storm water pollution. The examination must be conducted in a well lit area. No analytical tests are required to be performed on the samples. All such samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where practicable, the same individual will carry out the collection and examination of discharges for the life of the permit.

c) Visual Storm Water Discharge Examination Reports. Visual examination reports must be maintained onsite in the pollution prevention plan. The report shall include the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

d) Representative Discharge. When a facility has two or more outfalls that, based on a consideration of industrial activity, significant materials, and management practices and activities within the area drained by the outfall, the permittee reasonably believes discharge substantially identical effluents, the permittee may collect a sample of effluent of one of such outfalls and report that the examination data also applies to the substantially identical outfalls provided that the permittee includes in the storm water pollution prevention plan a description of the location of the outfalls and explaining in detail why the outfalls are expected to discharge substantially identical effluents. In addition, for each outfall that the permittee believes is representative, an estimate of the size of the drainage area (in square feet) and an estimate of the runoff coefficient of the drainage area [e.g., low (under 40 percent), medium (40 to 65 percent), or high (above 65 percent)] shall be provided in the plan.

e) Adverse Conditions. When a discharger is unable to collect samples over the course of the visual examination period as a result of adverse climatic condition, the discharger must document the reason for not performing the visual examination and retain this documentation onsite with the records of the visual examination. Adverse weather conditions which may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

f) Inactive and Unstaffed Site. When a discharger is unable to conduct visual storm water examinations at an inactive and unstaffed site, the operator of the facility may exercise a waiver of the monitoring requirement as long as the facility remains inactive and unstaffed. The facility must maintain a certification with the pollution prevention plan stating that the site is inactive and unstaffed so that performing visual examinations during a qualifying event is not feasible.