Louisiana Environmental Results Program

Field Guide to Environmental Compliance for Oil and Gas Exploration and Production Operations

Site Inspection Checklists

The following pages are designed to step a facility operator through questions to ensure an understanding of the environmental requirements of a particular site. These checklists will also be made available on the DEQ website for use in an electronic format at the following web site:
http://www.deq.louisiana.gov/portal/PROGRAMS/EnvironmentalResultsProgram.aspx

Oil and Gas Production Facility Solid Waste Compliance Checklist

Company Name:
Facility Name:
Current Permit Number:
AI Number:

1	Nonhazardous Industrial Solid Waste	Yes	No	N/A	Comments
1.a	Does the facility generate nonhazardous industrial solid waste?				
1.b	Is the facility submitting required annual waste disposal reports?				
1.c	Is the nonhazardous industrial solid waste properly segregated and stored?				
1.d	Is the solid waste stored such that no nuisance, health hazard, or detriment to the environment has occurred or is occurring?				
1.e	Do the containers used for solid waste storage prevent access by rodents and insects; minimize the escape of odors to the maximum extent possible; and keep out water and prevent leakage?				
1.f	If solid waste is stored in tanks, are the tanks designed, constructed, and operated to prevent release of their solid waste contents into the surrounding environment?				
2	**Nonhazardous Industrial Solid Waste Corrective Actions**	**Yes**	**No**	**N/A**	**Comments**
2.a	Are there any corrective actions needed to comply with nonhazardous industrial solid waste regulations? Use separate sheet if necessary to document corrective actions needed.				
3	**Naturally Occurring Radioactive Material (NORM)**	**Yes**	**No**	**N/A**	**Comments**
3.a	Has a NORM confirmatory survey been conducted for the facility?				
3.b	Does the facility contain any NORM?				
3.c	Is any process operating equipment contaminated with NORM?				
3.d	Is any land or ground area contaminated with NORM?				
3.e	Are NORM contaminated equipment or land properly surveyed?				
3.f	Is a General NORM license required for the facility?				
3.g	Does the facility have a General NORM license?				Permit No.
3.h	Are there any containers storing NORM waste on location?				
3.i	If NORM containers on location, what is the date of generation of the oldest container?				

3.j	Any NORM waste in a container being stored for more than 90 days from the date of generation?				
3.k	If any NORM waste stored for more than 90 days from generation, has licensee submitted a written NORM waste management plan and received authorization from DEQ to store waste longer?				
3.l	Any NORM waste in a container being stored for more than 365 days from the date of generation?				
3.m	Any NORM contaminated surface equipment removed from service and not used for its designated function (excluding wellheads)?				
3.n	If have NORM contaminated equipment in 3.m, was the equipment decontaminated of NORM within 1 year of being removed from service?				
4	**NORM Corrective Actions**	**Yes**	**No**	**N/A**	**Comments**
4.a	Are there any corrective actions needed to comply with NORM regulations? Use separate sheet if necessary to document corrective actions needed.				
5	**Hazardous Waste**	**Yes**	**No**	**N/A**	**Comments**
5.a	Does the facility generate hazardous waste?				
5.b	Does the facility have an EPA Hazardous Waste Generator Identification Number?				
5.c	Is the facility considered a Conditionally Exempt Small Quantity Generator, Small Quantity Generator or Large Quantity Generator?				
5.d	What types of hazardous waste generated at the facility?				
5.e	If hazardous waste on location, what is the date of generation of the oldest container?				
5.f	If the facility is a Large Quantity Generator, are wastes stored for less than or equal to 90 days?				
5.g	If the facility is a Small Quantity Generator, are wastes stored for less than or equal to 180 days or less than or equal to 270 days (if greater than 200 miles)?				
5.h	Are containers of hazardous waste properly marked as Hazardous Waste and the start accumulation date clearly visible?				
5.i	Is there adequate containment for storage area for hazardous waste? (Containment must have capacity to contain 10 percent of the volume of containers or the volume of the largest container, whichever is greater. Containers that do not contain free liquids need not be considered in this determination.)				
5.j	Are there any leaking containers storing hazardous waste?				
5.k	Are weekly inspections of hazardous waste storage areas conducted and documented?				

5.l	Are containers holding hazardous waste closed during storage, except when it is necessary to add or remove waste?				
5.m	Are containers of hazardous waste stacked in such a manner that each container identification label can be read from the access aisle?				
5.n	Are copies of completed Hazardous Waste Manifests for past three years available for inspection?				
5.o	Are copies of Land Disposal Restriction notifications available for inspection?				
5.p	Are records available of any test results, waste analyses, or other determinations for at least three years from the date that the waste was last sent to an on-site or off-site treatment, storage, or disposal facility?				
5.q	Is a copy of each Annual Report and Exception Report for a period of at least three years from the due date of the report available for inspection?				
5.r	If the facility is a LQG, does the facility have a Waste Minimization Plan certified by a LA registered PE?				
5.s	Does the facility have a Contingency Plan or written Emergency Procedures which describe actions facility will take if hazardous waste is spilled, catches fire, or explodes?				
5.t	Does the facility have hazardous waste management training program for its employees who handle hazardous waste? If so, are the records available for inspection?				
6	**Hazardous Waste Corrective Actions**	**Yes**	**No**	**N/A**	**Comments**
6.a	Are there any corrective actions needed to comply with hazardous waste regulations? Use separate sheet if necessary to document corrective actions needed.				
7	**Universal Waste**	**Yes**	**No**	**N/A**	**Comments**
7.a	Does the facility generate any of the following universal waste: fluorescent lamps, batteries, electronics, or antifreeze?				
7.b	Are the universal waste stored in an environmental sound manner (closed structurally sound containers, etc)?				
7.c	Are the containers labeled to describe the universal waste (Used fluorescent bulb, used batteries, etc.)?				
7.d	Do the universal waste containers have an accumulation date of less than one year?				
7.e	Does the facility have copies of universal waste shipping documents and are these documents available for review?				

Oil and Gas Production Facility Air Quality Compliance Checklist

Company Name:	
Facility Name:	
Current Permit Number:	
AI Number:	

1	General	Yes	No	N/A	Comments
1.a	Does the facility have an air permit?				
1.b	Is the air permit current (not expired)?				Expiration date:
1.c	List type of permit. (SOGA, Minor Source, Minor Source General, Title V, Other)				
1.d	Does the facility have a hard copy of the current air permit on-site?				
1.e	Does the process description match the permit (or application)? If no, list differences or changes.				
1.f	Are all the emission sources located onsite listed in the air permit?				
1.g	List any emission sources at the facility that are not listed in the permit.				
1.h	Have there been any unauthorized emissions from the facility in the past twelve months?				
1.i	If yes to question 1.i., is there a copy of documentation proving that the unauthorized emissions were reported to the Department of Public Safety (DPS)?				
1.j	Are oil and natural gas throughput rates and equipment runtime hours below the limits listed in the permit?				
1.k	If no to any of the questions above, has a modification or notification been submitted to LDEQ? List date of submittal in comment section.				
1.l	Is the facility required to submit annual emissions inventory reports (ERIC reports)? If yes, list most recent submittal date.				
1.m	Is the facility required to submit Title V Annual Certifications and Semiannual Monitoring Reports? If yes, list most recent submittal date.				
1.n	Is there any smoke being emitted from fuel burning equipment at the facility?				
1.o	Does the facility process sweet or sour gas (sour gas has a concentration greater than 24 ppmv of H2S)?				
1.p	Does the facility have a written housekeeping plan that addresses all the elements of LAC 33.III.2113?				
1.q	Is facility complying with the housekeeping plan?				
2	**Engines**	**Yes**	**No**	**N/A**	**Comments**
2.a	Are there any engines at the facility over 500 HP?				

2.b	Is stack testing (initial and semiannual) being performed for engines over 500 HP as required by LDEQ policy?				
2.c	Are any engines equipped with catalytic converter control devices? If yes, list these engines in the comment section.				
2.d	Is stack testing (initial and annual) being performed for engines over 500 HP equipped with catalytic converters as required by LDEQ policy? Review current stack test report.				
2.e	If stack test results are not within permit limits as per LDEQ policy, has a modification or notification been submitted to LDEQ?				
2.f	Are any natural gas engines located at the facility applicable to 40 CFR Part 60 Subpart JJJJ?				
2.g	If yes to question 2.f., are sources applicable to 40 CFR Part 60 Subpart JJJJ certified engines operating in a certified manner?				
2.h	If no to question 2.g., is testing being performed on applicable engines?				
2.i	Are any diesel-fired engines located at the facility applicable to 40 CFR Part 60 Subpart IIII?				
2.j	If yes to question 2.i., are sources applicable to 40 CFR Part 60 Subpart IIII certified engines operating in a certified manner?				
2.k	If no to question 2.j., is testing being performed on applicable engines?				
2.l	Are engines compliant with requirements of 40 CFR Part 63 Subpart ZZZZ, if applicable?				
	For engines applicable to 40 CFR Part 63 Subpart ZZZZ, are appropriate emission controls in place?				
2.m	For engines applicable to 40 CFR Part 63 Subpart ZZZZ, is the appropriate testing being performed?				
2.n	Are the stack test results (whether state or federal testing is required) within permitted limits?				
2.o	Is the testing company LELAP accredited?				
3	**Glycol Dehydration Units**	**Yes**	**No**	**N/A**	**Comments**
3.a	Are there any glycol dehydrators located at the facility? If yes, specify type. (TEG, DEG, EG)				
3.b	If yes to 3.a., are uncontrolled emissions from each still column vent(s) less than 9 tons per year (tpy)?				
3.c	If uncontrolled emissions are greater than 9 tpy, is a condenser control device being used on the unit?				
3.d	Does the control efficiency of the condenser meet the requirements of LAC 33.III.2116? (70% or greater for units constructed before October 20, 1994 and 85% or greater for units constructed on or after October 20, 1994)				

3.e	If the glycol dehydrator was constructed prior to October 20, 1994, are records of condenser exit temperatures being kept?				
3.f	Does the type of emission control installed and operating correspond to how it is listed in the permit? (controlled by a condenser or uncontrolled, emissions from the unit piped to burner/reboiler or flare, etc.)				
3.g	Does the design capacity (MMBTU/HR) of the burner/reboiler for the unit correspond to what is listed in the permit?				
3.h	Are records of the daily gas processing rate and glycol circulation rate being kept?				
3.i	Are the actual gas processing rates and glycol circulation rates below the permitted rates used in a GLYCalc or other simulation program?				
3.j	If the amount of gas processed by the unit is greater than 3 MMSCFD, are benzene emissions from the unit below 1 TPY as per 40 CFR Part 63 Subpart HH?				
3.k	Is the dehydrator compliant with all of the requirements of 40 CFR Part 63 Subpart HH?				
4	**Storage Tanks**	**Yes**	**No**		**Comments**
4.a	Are there any crude oil/condensate and/or water storage tanks located at the facility?				
4.b	Does the capacity of each storage tank correspond to its permitted capacity?				
4.c	Are records of the oil and/or water throughputs being processed being kept?				
4.d	Are the actual oil and/or water throughput rates below the limits listed in the permit?				
4.e	If the storage tanks are permitted with emission controls, are the control devices in operation? List type of control device used.				
4.f	Are records of control device downtime being kept? List reasons for downtime.				
4.g	Are the storage tanks store crude oil/condensate considered to be "prior to custody lease transfer" as referenced in LAC 33.III.2103?				
4.h	Are the storage tanks equipped with a submerged fill pipe if required by LAC 33.III.2103?				
4.i	Are the sizes of the storage tanks less than 10,000 BBLs?				
4.j	Are all storage tanks exempt from 40 CFR Part 60 Subparts K, Ka and Kb? If no, list applicable tanks.				
4.k	If storage tanks are required to meet 40 CFR Part 60, Subparts K, Ka or Kb, what method is used for compliance?				

4.l	Does flash gas from the storage tanks exceed the VOC limits of LAC 33.III.2104 causing the storage tanks to require controls?				
5	**Crude Oil/Condensate Loading Operations**	**Yes**	**No**	**N/A**	**Comments**
5.a	Specify the type of volatile organic compounds (VOCs) are loaded (crude oil, condensate, diesel, methanol, other - specify).				
5.b	What is the vapor pressure in psia of the product loaded?				
5.c	For crude oil/condensate loading operations used by the facility specify the method used: (pipeline, tank truck, barge, ship, other - specify)				
5.d	Is the type of loading listed in the air permit the actual type of loading used for the facility?				
5.e	Is the amount of crude oil/condensate loaded annually below the limits listed in the air permit?				
5.f	If required by the air permit, are annual crude oil/condensate loadout reports being prepared and submitted?				
5.g	Does the facility load volatile organic compounds (VOCs) that are not exempt from VOC loading rules in LAC 33:2107.				
5.h	Are loading operations for nonexempt VOCs in compliance with LAC33:2107?				
5.i	Are there any marine loading operations on location?				
5.j	If yes to Item 5.c is the facility required to comply with control requirements in LAC 33:III.2108.Marine Vapor Recovery?				
5.k	If yes to Item 5.d, is the facility complying with control requirements in LAC 33:III.2108.Marine Vapor Recovery?				
5.l	Are any emission control methods being used for loading operations? Specify methods used. (flare, vapor balance, other - specify)				
6	**Flares**	**Yes**	**No**	**N/A**	**Comments**
6.a	Is there a flare operating at the facility that is designed to combust natural gas from the facility?				
6.b	Is the flare being used for emergency upsets or is it routinely combusting gas? List emission sources routed to the flare.				
6.c	Is the amount of gas that is routed to the flare being metered?				
6.d	Are the sources that are permitted as being routed to the flare actually piped to the flare? List sources piped to flare.				
6.e	Is the flare being monitored for the presence of a flame? Specify method used to detect the presence of a flame. (automatic re-ignition device, heat sensing device or visual check)				

6.f	Has a corrective action plan for re-lighting the flare been developed and is it ready for immediate implementation in the event the flare needs to be re-lit?				
6.g	Is smoke being emitted from the flare?				
	Is the flare required to meet the New Source Performance Standard (NSPS) requirements in 40 CFR 60.18?				
6.h	Has an annual gas analysis been performed to ensure that the heat content of the flare is greater than 300 BTU/scf?				
7	**Gas Sweetening Units**	**Yes**	**No**	**N/A**	**Comments**
7.a	Are there any gas sweetening units located at the facility?				
7.b	Is the facility located an onshore at a gas processing plant?				
7.c	Is the gas sweetening unit located at an onshore gas processing plant with a design capacity of the unit less than 2 long tons per day (1016 kgs per day) of H2S expressed as sulfur as per 40 CFR Part 60 Subpart LLL?				
7.d	Does the gas sweetenting unit qualify as a new source under 40 CFR Part 60 Subpart LLL?				
7.e	Does the design of the unit correspond to how it is permitted? (e.g., inlet gas H2S content, emission controls, operating parameters)				
7.f	Describe the type of emission control (if any) used to reduce emissions from the gas sweetening unit regenerator. (sulfur recovery unit, flare, thermal oxidizer, other - specify)				
8	**Natural Gas Processing Plants**	**Yes**	**No**	**N/A**	**Comments**
8.a	Is the facility considered a gas processing plant (SIC Code = 1321; NAICS Code = 211112)?				
8.b	Are there any Joule-Thomson (JT units) or refrigeration units used for natural gas liquids extraction operating at the facility?				
8.c	Does 40 CFR Part 60 Subpart KKK apply to the facility?				
8.d	If yes to 8.c, is facility compliant with monitoring requirements in 40 CFR Part 60 Subpart KKK?				
8.e	Does LAC 33:III.2121 Fugitive Emission Control apply to the facility?				
8.f	If yes to 8.e, is facility compliant with monitoring requirements in LAC 33:III.2121?				
9	**Turbines**	**Yes**	**No**	**N/A**	**Comments**
9.a	Are there any turbines operating at the facility?				
9.b	What type of fuel is being used by each turbine operating at the facility? (natural gas, diesel, dual-fuel)				
9.c	Has an initial stack test been performed on the turbine(s) according to LDEQ policy?				

9.d	If yes, does the turbine have a heat input at peak load greater than or equal to 10 MMBTU/HR?				
9.e	Was the turbine constructed, modified or reconstructed after October 3, 1977, which would make it subject to the requirements of 40 CFR Part 60 Subpart GG?				
9.f	If applicable to the requirements of 40 CFR Part 60 Subpart GG, are the turbines compliant with the operational standards, emissions testing and fuel gas monitoring of this subpart?				
9.g	Was the turbine constructed, modified or reconstructed after February 18, 2005, which would make it subject to the requirements of 40 CFR Part 60 Subpart KKKK?				
9.h	If applicable to the requirements of 40 CFR Part 60 Subpart KKKK, are the turbines compliant with the operational standards, emissions testing and fuel gas monitoring of this subpart?				
10	**Flash Gas Sources**	**Yes**	**No**	**N/A**	**Comments**
10.a	List all flash gas sources at the facility that are venting to atmosphere. (heater treaters, separators, tanks, other - specify)				
10.b	Do any flash gas sources require controls according to LAC 33.III.2104.Crude Oil and Condensate?				
10.c	Are all flash gas sources that are permitted as controlled operating with permitted controls?				
11	**Fugitive Emissions**	**Yes**	**No**	**N/A**	**Comments**
11.a	For facilities applicable to 40 CFR Part 60 Subparts VV or KKK, are pumps, compressors, pressure relief devices, valves and sampling systems being monitored for leaks as specified in 40 CFR 60.882-2?				
11.b	Are there any visible signs or sounds of leaks of oil and/or gas at the facility? If yes, specify the source(s) of the leak(s).				
12	**Compressor Seals**	**Yes**	**No**	**N/A**	**Comments**
12.a	Are there compressors located at the facility? If yes, specify type. (centrifugal or reciprocating)				
12.b	For reciprocating engines, are the rod packing systems being replaced after every 26,000 hours of operation?				
12.c	Are any centrifugal compressors equipped with dry seal systems?				
13	**Pneumatic Devices**	**Yes**	**No**	**N/A**	**Comments**
13.a	Are there any pneumatic pumps or controllers that use natural gas on site?				
13.b	Are these pneumatic devices accounted for in the permit as fugitive emissions or as specific sources?				

14	Atmospheric Vents	Yes	No	N/A	Comments
14.a	Are there any atmospheric vents located at the facility that release directly to atmosphere? If yes, specify whether the vents are used for emergency or routine releases.				
14.b	List equipment routed to the atmospheric vent.				
14.c	Are vent volumes released being tracked? If so, specify tracking method. (meter, calculation based on throughput, other - specify)				
15	**Line Heaters, Heater Treaters, Reboilers**	**Yes**	**No**	**N/A**	**Comments**
15.a	Is there any smoke or visual soot emitted from onsite line heaters, heater treaters or reboilers?				
15.b	Is heater treater flash gas vented to atmosphere, burned in flare or routed back to system? Specify.				
15.c	If heater treater flash gas is vented to atmosphere or flare, is this reflected in the air permit?				
16	**Corrective Actions**	**Yes**	**No**	**N/A**	**Comments**
16.a	Are there any corrective actions needed to comply with air quality regulations? Use separate sheet if necessary to document corrective actions needed.				

Oil and Gas Production Facility Water Quality and Spill Prevention Compliance Checklist

Company Name:	
Facility Name:	
Current Permit Number:	
AI Number:	

1	Water Permitting	Yes	No	N/A	Comments
1.a	Is the facility required to have a water discharge permit?				
1.b	Does the facility have a current water discharge permit?				Expiration date:
1.c	Is a facility representative familiar with provisions of its wastewater discharge permit, including any other conditions or limitations, available either by phone or in person at the facility during all hours of operation?				
1.d	Are there any outfalls or discharges at the facility that are not authorized by the permit?				
1.e	Has the facility had a discharge of storm water (or via a storm water outfall) resulting in a discharge of a reportable quantity under 40 CFR 117.21 or 40 CFR 302.6 since November 16, 1987?				
1.f	Has the facility had a discharge of storm water (or via a storm water outfall) resulting in a discharge of a reportable quantity under 40 CFR 110.6 since November 16, 1987?				
1.g	If yes to question 1.e or 1.f and the facility is not covered by LAG330000 or LAG260000, has operator applied for and/or obtained a LPDES Multi-Sector General Permit (MSGP) for the facility?				
1.h	If yes to 1.e or 1.f, has the facility prepared and implemented a Storm Water Pollution Prevention Plan?				
1.i	Is the permittee monitoring all discharges as required by the water permit?				
1.j	Is all sampling and sample analysis conducted according to EPA approved methods (40 CFR 136)?				
1.k	Are all records required by the permit maintained for a period of at least 3 years?				
1.l	Is the permittee properly operating and maintaining all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of the permit?				
1.m	Is there a visible sheen or residual oil deposits or stains in the drainage area downstream of any discharge point?				

1.n	Is there oil on soil, equipment or decking that could cause a sheen on receiving water during next rain event?				
1.o	Does stormwater runoff or deck drainage exceed 100 mg/L chemical oxygen demand, 50 mg/L total organic carbon, or 15 mg/L oil and grease?				
1.p	Does the maximum chloride concentration of any stormwater discharge exceed two times the ambient concentration of the receiving water in brackish marsh areas or 500 mg/L in freshwater or intermediate marsh areas and upland areas?				
1.q	Have any of the discharges from the facility exceeded the limits specifed by the permit?				
1.r	Has the facility submitted the required Discharge Monitoring Reports (DMRs) to the LDEQ?				
1.s	Has the facility notified the LDEQ Regional Office prior to hydrostatic test discharges, drilling a well, or moving a drilling rig to a new location?				
1.t	Is the facility in compliance with the water permit?				
2	**Spill Prevention**	**Yes**	**No**	**N/A**	**Comments**
2.a	Is a Spill Prevention and Control (SPC) Plan required to be prepared and implemented in accordance with requirements in LAC 33 :IX.901-907?				
2.b	Is a copy of the SPC Plan available for inspection?				
2.c	Has the operator of the facility reviewed the plan within the last five years?				
2.d	Has there been a modification in facility design, construction, storage capacity, operation or maintenance which renders the existing SPC Plan inadequate?				
2.e	Does the SPC Plan establish a program for regular inspection of all storage tanks, separators, and related production and transfer equipment?				
2.f	Does the SPC Plan include provisions for, at a minimum, annual monitoring of flow line integrity through a combination of visual inspection and pressure testing or through the use of an approved alternate methodology?				
2.g	Does the SPC plan have written procedures for inspections developed for the facility by the operator?				
2.h	Does the SPC plan have written procedures for flow line integrity tests?				

2.i	Are required inspections, integrity tests, and training conducted?				
2.j	Are inspection, test, and training records maintained for a minimum of three years?				
2.k	Are inspection and test records signed or initialed by the inspector, appropriate supervisor or facility designee?				
2.l	Are visible leaks from tanks and appurtenances promptly corrected?				
2.m	Does the SPC Plan establish provisions for ready access to, and rapid deployment of, containment booms and ancillary spill containment and cleanup equipment?				
2.n	Are all workover and drilling barges, and production facilities equipped with pollution containment devices that under normal operating conditions prevent unauthorized discharges?				
2.o	Are all storage tanks, separators, and related production and transfer equipment located in open water or wetland areas, where building dikes is impossible or impracticable, installed on impervious decking provided with a system of curbs, gutters, and/or sumps capable of retaining spills of oil, produced water, or any other product or waste material?				
2.p	Are all drains from diked areas equipped with valves that are kept in the closed position except during periods of supervised discharge?				
2.q	Do all earthen pits have at least 2 feet of freeboard?				
2.r	Are pipe supports properly designed to minimize abrasion and corrosion; to allow for expansion and contraction, and to adequately support thrust loadings at bends?				
2.s	Does all tank car and tank truck loading/unloading area drainage flow into a catchment basin, treatment system or other containment system designed to hold at least the maximum capacity of any single compartment of a tank car or truck loaded or unloaded at the facility?				
2.t	Does the facility have an interlocked warning light, physical barrier system, or warning signs in loading/unloading areas to prevent vehicular departure before complete disconnect of flexible or fixed transfer lines?				
3	**Corrective Actions**	**Yes**	**No**	**N/A**	**Comments**
3a.	Are there any corrective actions needed to comply with water quality regulations? Use separate sheet if necessary to document corrective actions needed.				