



*Ensuring a safe and secure homeland for all North Dakotans*

# Oil and Gas Industry Guide

January 2014



## I. INTRODUCTION

This guide to compliance reporting has been prepared to assist the Oil and Gas Production Industry of North Dakota in completing required reporting under the Emergency Planning and Community Right-To-Know Act (EPCRA) Superfund Amendment Reauthorization Act (SARA Title III) and the North Dakota Hazardous Chemical Preparedness and Response Program.

The North Dakota Hazardous Chemical Preparedness and Response Program requires written notification to the ND Division of Emergency Services (NDDDES), of all **SARA** Title III (Section 302, 304, 311, and 312) reports or notification concerning hazardous chemicals meeting specific reporting criteria.

Confusion concerning the definition of a facility (and consequent reporting of a facility) has surfaced between NDDDES and owners/operators of facilities for the Oil and Gas Production Industry.

For purposes of the North Dakota Chemical Preparedness and Response Program, we "initially" restricted the facility site to a single well with tank(s) on site or a tank battery for two or more wells, or other stationary item(s) on site. The Industry utilized the Environmental Protection Agency (EPA) expanded definition whereas an entire lease or a group of contiguous leases could be considered a single facility site. See Appendix A for further information.

Effective January 1, 2014 a "facility site" will be the "gathering point" where storage tank(s) are located and "product" is stored. Also, a lone/single well site with a tank(s) on site used for storage, will be considered a facility site. (Example, if a single well pumps "product" to a gathering/storage location it is "one" facility. If there are three wells pumping product to a gathering/storage location, that gathering point is considered the facility site and will be charged the appropriate hazardous chemical fee.

A major factor affecting the interpretation of each of these definitions has been our questions concerning **“contiguous and adjacent sites”** as part of the location element within the federal definition of a facility.

The majority of the problems have been resolved after discussions with industry representatives and EPA personnel.

This guide should help all concerned (industry, state and local governmental staff) with reporting, information management, etc. The guide will concentrate on some common questions and the inventory reporting system/Section 312/Tier II submissions.

## **II. SECTION 311 AND 312 REPORTING**

### **A. Section 311 Reports**

North Dakota does not require Section 311 reporting.

The State Emergency Response Commission (SERC)/NDDES does not want MSDS's submitted with Section 311 notification, unless MSDS's are specifically requested. A generic Section 311 report (*if it requested by the SERC or the LEPC*) can be submitted for chemicals that **“could be”** utilized throughout the service area.

### **B. Section 312 Reports**

To start our discussion on Section 312 reporting, the definition of a facility (Federal Register/Vol 55, No. 144/Thursday, July 26, 1990, Page 30645) is necessary. The definition is as follows:

**“A facility means all buildings, equipment, structure, and other stationary items that are located on a single site or contiguous or adjacent sites and which are owned or operated by the same person (or by any**

**person which controls, is controlled by, or under common control with, such person).**

The facility shall include man-made structures in which chemicals are purposefully placed or removed through human means such that it functions as a containment structure for human use.

The definition of a “facility” contains three elements: **a stationary item element** (all buildings, equipment, structures, and other stationary items), **a location element** (that are located on a single site or contiguous or adjacent sites), and **a control element** (which are owned or operated by the same person).

All three elements of the above definition are relevant in determining appropriate facility reporting in general, and in clarifying reporting obligations to the oil and gas production areas in particular.

EPA in conjunction with American Petroleum Institute has determined that **each lease** is a separate site, which may or may not meet criteria to become identified as a facility. Leases must be contiguous or adjacent in order to be considered collectively as one facility. Therefore, a report under Title III for a single facility may represent, geographically, a **number of adjacent or contiguous leases** that must have **“stationary structures”** and are **“owned or operated by the same person”**.

The industry must apply the federal definition to their field operations and determine the number of facilities they will report under Section 312.

The NDDDES, to assure effective management of the facility information, has requested the Oil and Gas Production companies to provide, with their Title III submissions, supporting documentation sufficient to establish the three criteria (stationary surface structures, location and control).

Documentation to support these three elements should include **maps or plats and legal descriptions** of all surface stationary structures and their **locations** (Section, Townships and Range) relative to each individual lease, which is agglomerated as part of a single facility submission. We would also like to have the latitude and longitude of each location well.

Once a company makes a decision regarding the facility definition, the same definition will be applied to all Title III submissions (Section 302, 304, 311, and 312). After initially reporting, a company wishing to change its report (caused by the facility definition) should submit a letter identifying that change. The letter should also include either the increased number of reportable facilities or a decrease in the number of reportable facilities.

**Special Note:** The method which a company uses to report or has used to report can affect the hazardous chemical reporting fee, because our fee system is based on the facility definition and the number of chemicals at the facility. *Be advised that Section 312 Inventory Forms and appropriate fees and fees are due annually each March 1<sup>st</sup>.*

It will be your responsibility to review your facility reporting records to determine current status for any delinquent notifications and/or fees to avoid pursuit of regulatory action fines.

### **III. OTHER REPORTING QUESTIONS**

Several other reporting questions and concerns have been expressed at training sessions and in our discussions with the Industry representatives. Responses to those concerns and questions are discussed below:

- A. **Transportation** – Some transported chemicals do not require a special report or a State Fee. Section 327 of SARA Title III exempts from Title III reporting requirement, other than Section 304 notification obligation, substances or

chemical being transported under active shipping papers as defined in the Hazardous Materials Department of Transportation (DOT) Act. This includes the transportation of natural gas.

Industry, the regulated community, is required to know what aspect(s) of their operations DOT regulates. For this reason, it is expected that industry will know what aspects of their operations fall under the transportation exemption of SARA Title III.

It is the responsibility of the facility owner/operator to know the reporting requirements, become familiar with the exemptions and then differentiate between transportation equipment, storage containers, etc., which are covered by DOT and those aspects of storage that are not inherently considered to be transportation.

Clearly, the presence of equipment utilized in the transportation of hazardous chemicals **does not** automatically mean the entire site or facility is a transportation facility and therefore exempt. There may also be containers, tanks and other structures that are used solely for storage. In these cases, it must be determined whether or not these containers, tanks, etc. are regulated by DOT. At that point, SARA Title III coverage can be applied to the facility.

B. “Household products” are exempt if the substances present are in the same concentration and packaging form as utilized by the general public.

C. Computerized Tier II Forms – These reporting aids are authorized provided: they contain all of the required information, include all of the proper dates and a certification statement, and have original signatures of the owner/operator or authorized representative.

D. Multiple Facility 312 Reporting – A multiple facility report may be submitted for “similar” facilities. To be considered similar, the facilities must

have the **“same”** reportable chemicals within the **“same”** range codes and have the **“same”** owner/operator.

The report consists of the notification form and a listing of the similar facilities. The listing should indicate each facility name, county, and physical location (Section, Township and Range) as well as latitude and longitude. An aggregate 312 Report may contain several facilities. An aggregate report will not increase or decrease the state fee as the fee system is based on the number of facilities and the number of reportable chemicals at each facility. The aggregate report is designed only to reduce the number of forms.

E. Reporting of Chemical Below the TPQ – The reporting of chemicals on the Tier II Form below the Threshold Planning Quantity (TPQ) **“is not”** required, but if it is reported you will not be charged for those chemicals.

F. Generic 312 Forms – Reporting chemicals that **“may be”** utilized (on Generic 312 Forms) in production, drilling, completion or work over operations **“is not”** an acceptable reporting practice. Report only those chemicals that were actually on site and equal to or above the listed TPQ during the reporting period.

G. Section 304 Reports – All hazardous chemical releases/Section 304 notices/reports, at or above, the Reporting Quantity (RQ) can be reported to the NDDDES State Emergency Operations Center (SEOC), by contacting ND State Radio can be made by calling (701) 328-9921 (Out-of-State) or 1-800-472-2121 (In-State) and asking for the NDDDES Duty Officer. The NDDDES Duty Officer will return the call and obtain all information pertinent to the spill or release. The Duty Officer will inform the responsible party if a written follow-up report is necessary. For the purpose of emergency release notification, the section includes pipelines, motor vehicles, rolling stock and aircraft, etc.

H. Salt Water Reporting - Salt solution that is made up and injected into a production or exploration site “**is**” subject to Section 312/Tier II reporting with a (TPQ) of 10,000 pounds, because, as a manufactured solution, it would have a (MSDS). North Dakota law defines a hazardous chemical for SARA Title III reporting purposes as one that has an MSDS. Produced salt water “**is not**” subject to Tier II reporting since it does not have an MSDS. Should an MSDS become available for produced salt water, it then becomes reportable with a TPQ of 10,000 pounds.



## **North Dakota Oil & Gas Industry Guide Definitions**

**Adjacent:** Having a common ENDPOINT or border <adjacent lots> <adjacent sides of a triangle> Immediately preceding or following. (Taken from Merriam-Webster Dictionary)

**Contiguous:** Being in actual contact; touching along a boundary or at a point; next or near in time or sequence; touching or connected throughout in an unbroken sequence. <Example: *contiguous* row houses> (Taken from Merriam-Webster Dictionary)

**Crude Oil:** A naturally occurring, unrefined petroleum product composed of hydrocarbon deposits. Crude oil can be refined to produce usable products such as gasoline, diesel and various forms of petrochemicals. (Taken from U.S. Energy Information Administration Glossary of Terms)

**Crude oil production:** The volume of crude oil produced from oil reservoirs during given periods of time. The amount of such production for a given period is measured as volumes delivered from lease storage tanks (i.e., the point of custody transfer) to pipelines, trucks, or other media for transport to refineries or terminals with adjustments for (1) net differences between opening and closing lease inventories, and (2) basic sediment and water (BSw). (Taken from U.S. Energy Information Administration Glossary of Terms)

**Facility:** A facility means all buildings, equipment, structure, and other stationary items that are located on a single site or contiguous or adjacent sites and which are owned or operated by the same person (or by any person which controls, is controlled by, or under common control with, such person). The facility shall include man-made structures in which chemicals are purposefully placed or removed through human means such that it functions as a containment structure for human use. (40 CFR Parts 355 & 370, page 30645)

The definition of a “facility” contains three elements: **a stationary item element** (all buildings, equipment, structures, and other stationary items), **a location element** (that

are located on a single site or contiguous or adjacent sites), and **a control element** (which are owned or operated by the same person).

All three elements of the above definition are relevant in determining appropriate facility reporting in general, and in clarifying reporting obligations to the oil and gas production areas in particular.

**Facility:** Facility means any mobile or fixed, onshore or offshore building, property, parcel, lease, structure, installation, equipment, pipe, or pipeline (other than a vessel or a public vessel) used in oil well drilling operations, oil production, oil refining, oil storage, oil gathering, oil processing, oil transfer, oil distribution, and oil waste treatment, or in which oil is used, as described in appendix A to this part. The boundaries of a facility depend on several site-specific factors, including but not limited to, the ownership or operation of buildings, structures, and equipment on the same site and types of activity at the site. Contiguous or non-contiguous buildings, properties, parcels, leases, structures, installations, pipes, or pipelines under the ownership or operation of the same person may be considered separate facilities. Only this definition governs whether a facility is subject to this part. (EPA Definition 40 112.2)

**Facility Pipeline:** Authority is in 40 CFR Parts 112.8(d), Facility transfer operations, pumping, and facility process (all other onshore facilities) and 112.9(d), Facility transfer operations, oil production facility.

The definition of “**facility**” at 40 CFR Part 112.2 includes piping. “Facility means any mobile or fixed, onshore or offshore building, structure, installation, equipment, pipe, or pipeline (other than a vessel or a public vessel) used in oil well drilling operations, oil production, oil refining, oil storage, oil gathering, oil processing, oil transfer, oil distribution, and waste treatment, or in which oil is used, as described in Appendix A to this part. The boundaries of a facility depend on several site-specific factors, including, but not limited to, the ownership or operation of buildings, structures, and equipment on the same site and the types of activity at the site.

**Field:** An area consisting of a single reservoir or multiple reservoirs all grouped on, or related to, the same individual geological structural feature and/or stratigraphic condition. There may be two or more reservoirs in a field that are separated vertically by intervening impervious strata or laterally by local geologic barriers, or by both.

(Taken from U.S. Energy Information Administration Glossary of Terms)

**Gathering System:** A field station at the end of the main truck line or along a spur line built to tap a particular district. In either case, it serves as a feeder which, with a number of similar stations, usually obtains a quantity of oil equal to the capacity of the truck lines. The gathering stations are connected to the trunk lines by discharge lines which usually range from four to eight inches in diameter. In some field the topography permits the location of a station so that it can receive oil through gravity lines from lease tanks, thereby avoiding the expense of operating small field pumps on the leases.

Many fields, particularly the larger ones, require the combined use of both gravity and lease-pumping methods. (Taken from Oilfield Dictionary Online)

**Gas Processing Plant:** Natural gas is produced from the ground through a system of one or more wells in a gas field.

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. (Taken from Schlumberger Oil Glossary of Terms)

**Lease:** Any well, lease, or field operations related to the exploration for or production of natural gas prior to delivery for processing or transportation out of the field. Gas used in lease operations includes usage such as for drilling operations, heaters, dehydrators, field compressors, and net used for gas lift. (Taken from U.S. Energy Information Administration Glossary of Terms)

**Manufacturing:** Manufacturing activities would be those that are similar to petrochemical plant operations, such as the cracking and reforming of the molecular structures of the various gas fractions and the addition of odorants or other substances.

**Oil Field:** An accumulation, pool or group of pools of oil in the subsurface. An oil field consists of a reservoir in a shape that will trap hydrocarbons and that is covered by an impermeable or sealing rock. Typically, industry professionals use the term with an implied assumption of economic size. (Taken from U.S. Energy Information Administration Glossary of Terms)

**Production Facility:** Means all structures (including but not limited to wells, platforms, or storage facilities), piping (including but not limited to flow lines or intra-facility gathering lines), or equipment (including but not limited to work over equipment, separation equipment, or auxiliary non-transportation-related equipment) used in the production, extraction, recovery, lifting, stabilization, separation or treating of oil (including condensate), or associated storage or measurement, and is located in an oil or gas field, at a facility. This definition governs whether such structures, piping, or equipment are subject to a specific section of this part.

Note that a “production facility” is not limited to the production of oil, but includes stabilization, separation or treating of oil, including condensate. Condensate continues to be produced in gathering lines. (Taken from U.S. Energy Information Administration Glossary of Terms)

**Production Facility:** Production facility means all structures (including but not limited to wells, platforms, or storage facilities), piping (including but not limited to flowlines or gathering lines), or equipment (including but not limited to workover equipment, separation equipment, or auxiliary non-transportation-related equipment) used in the production, extraction, recovery, lifting, stabilization, separation or treating of oil, or associated storage or measurement, and located in a single geographical oil or gas field operated by a single operator. (EPA Definition 40 CFR Part 112.2)

**Service Companies:** Oil and gas service companies are those companies hired by the principal operating company to, among other things, supply materials for use at a drilling or production site or provide a service to be performed. Some of the activities of service companies take place on-site while others may take place off-site. Examples of the types of activities that may take place off-site are product formulation, transport of materials, laboratory analysis, and waste handling and disposal. (Taken from U.S. Energy Information Administration Glossary of Terms)

## **Storage**

**Oil Storage Tank:** An artificial reservoir for the storage of oil or petroleum products. Oil storage tanks may be on the surface, semi-subterranean, or subterranean types and may be made of metal or reinforced concrete, or they may be built underground, within rock salt deposits. In the USSR, metal surface tanks and semi subterranean reinforced-concrete reservoirs are most commonly used. Surface oil storage tanks are usually of welded metal construction. They may be cylindrical (horizontal or vertical), spherical, or teardrop-shaped.

## **Structure**

**Tank Battery:** A group of tanks that are connected to receive crude oil production from a well or a producing lease. A tank battery is also called a battery. In the tank battery, the oil volume is measured and tested before pumping the oil into the pipeline system. (Taken form Schlumberger Oil Glossary of Terms)

**Transportation:** Transportation of oil and gas can be for short or long distances.

- **For crude oil:** "Transportation" is defined as beginning after transfer of legal custody of the oil from the producer to a carrier (i.e., pipeline or trucking concern) for transport to a refinery or, in the absence of custody transfer, after the initial separation of the oil and water at the primary field site.
- **For natural gas:** "Transportation" is defined as beginning after dehydration and purification at a gas plant, but prior to transport to market.

- **For crude oil pipelines:** Crude oil is produced from the ground through a system of one or more wells in an oilfield. The oil and any related produced water typically is directed to a series of tanks known as a tank battery where the water and oil separate naturally due to gravity; sometimes, separation is enhanced by the use of heat. Most water is separated from the oil at the tank battery. The volume of oil produced is then metered prior to a change in custody or ownership of the oil and/or its transportation off-site.

In the case of crude oil, all production-related activities occur as part of primary field operations at or near the wellhead. Wastes generated as part of the process of transporting products away from primary field operations are not exempt.

Generally, for crude oil production, a custody transfer of the oil (i.e., the product) or, in the absence of custody transfer, the end point of initial product separation of the oil and water, will define the end point of primary field operations and the beginning of transportation. Only wastes generated before the end point of primary field operations are exempt. In this context, the term end point of initial product separation means the point at which crude oil leaves the last vessel, including the stock tank, in the tank battery associated with the well or wells. The purpose of the tank battery is to separate the crude oil from the produced water and/or gas. The movement of crude oil by pipeline or other means after the point of custody transfer or initial product separation is not part of primary field operations.

**For Transloading Facilities** – Rail cars that are filled and sit for 24 hours before being shipped out are exempt from Tier II reporting. Storage tanks at the loading site ARE NOT exempt from Tier II reporting. The reason for this is that the rail cars are considered to be rolling stock and is not subject to Tier II reporting.

# Appendix A



Reported as one facility.



Reported as one facility.

If a well head pad has pumps belonging to more than one company, each company must report as a separate facility.

Reported as an additional facility.





If a well site, with on-site storage is pumping overflow to a tank battery, that is considered a second facility.

