

§ 250.411

30 CFR Ch. II (7-1-11 Edition)

(c) Meet the oil spill financial responsibility requirements for offshore facilities as required by 30 CFR part 253; and

(d) Submit the following to the District Manager:

(1) An original and two complete copies of Form MMS-123, Application for Permit to Drill (APD), and Form MMS-123S, Supplemental APD Information Sheet;

(2) A separate public information copy of forms MMS-123 and MMS-123S that meets the requirements of § 250.186; and

(3) Payment of the service fee listed in § 250.125.

[68 FR 8423, Feb. 20, 2003, as amended at 71 FR 40911, July 19, 2006; 72 FR 25201, May 4, 2007]

§ 250.411 What information must I submit with my application?

In addition to forms MMS-123 and MMS-123S, you must include the information described in the following table.

Information that you must include with an APD	Where to find a description
(a) Plat that shows locations of the proposed well.	§ 250.412
(b) Design criteria used for the proposed well.	§ 250.413
(c) Drilling prognosis	§ 250.414
(d) Casing and cementing programs	§ 250.415
(e) Diverter and BOP systems descriptions ..	§ 250.416
(f) Requirements for using an MODU	§ 250.417
(g) Additional information	§ 250.418

[68 FR 8423, Feb. 20, 2003]

§ 250.412 What requirements must the location plat meet?

The location plat must:

(a) Have a scale of 1:24,000 (1 inch = 2,000 feet);

(b) Show the surface and subsurface locations of the proposed well and all the wells in the vicinity;

(c) Show the surface and subsurface locations of the proposed well in feet or meters from the block line;

(d) Contain the longitude and latitude coordinates, and either Universal Transverse Mercator grid-system coordinates or state plane coordinates in the Lambert or Transverse Mercator Projection system for the surface and

subsurface locations of the proposed well; and

(e) State the units and geodetic datum (including whether the datum is North American Datum 27 or 83) for these coordinates. If the datum was converted, you must state the method used for this conversion, since the various methods may produce different values.

[68 FR 8423, Feb. 20, 2003]

§ 250.413 What must my description of well drilling design criteria address?

Your description of well drilling design criteria must address:

(a) Pore pressures;

(b) Formation fracture gradients, adjusted for water depth;

(c) Potential lost circulation zones;

(d) Drilling fluid weights;

(e) Casing setting depths;

(f) Maximum anticipated surface pressures. For this section, maximum anticipated surface pressures are the pressures that you reasonably expect to be exerted upon a casing string and its related wellhead equipment. In calculating maximum anticipated surface pressures, you must consider: drilling, completion, and producing conditions; drilling fluid densities to be used below various casing strings; fracture gradients of the exposed formations; casing setting depths; total well depth; formation fluid types; safety margins; and other pertinent conditions. You must include the calculations used to determine the pressures for the drilling and the completion phases, including the anticipated surface pressure used for designing the production string;

(g) A single plot containing estimated pore pressures, formation fracture gradients, proposed drilling fluid weights, and casing setting depths in true vertical measurements;

(h) A summary report of the shallow hazards site survey that describes the geological and manmade conditions if not previously submitted; and

(i) Permafrost zones, if applicable.

[68 FR 8423, Feb. 20, 2003]

§ 250.414 What must my drilling prognosis include?

Your drilling prognosis must include a brief description of the procedures

you will follow in drilling the well. This prognosis includes but is not limited to the following:

- (a) Projected plans for coring at specified depths;
- (b) Projected plans for logging;
- (c) Planned safe drilling margin between proposed drilling fluid weights and estimated pore pressures. This safe drilling margin may be shown on the plot required by §250.413(g);
- (d) Estimated depths to the top of significant marker formations;
- (e) Estimated depths to significant porous and permeable zones containing fresh water, oil, gas, or abnormally pressured formation fluids;
- (f) Estimated depths to major faults;
- (g) Estimated depths of permafrost, if applicable;
- (h) A list and description of all requests for using alternative procedures or departures from the requirements of this subpart in one place in the APD. You must explain how the alternative procedures afford an equal or greater degree of protection, safety, or performance, or why you need the departures; and
- (i) Projected plans for well testing (refer to §250.460 for safety requirements).

[68 FR 8423, Feb. 20, 2003]

§ 250.415 What must my casing and cementing programs include?

Your casing and cementing programs must include:

- (a) Hole sizes and casing sizes, including: weights; grades; collapse, and burst values; types of connection; and setting depths (measured and true vertical depth (TVD));
- (b) Casing design safety factors for tension, collapse, and burst with the assumptions made to arrive at these values;
- (c) Type and amount of cement (in cubic feet) planned for each casing string;
- (d) In areas containing permafrost, setting depths for conductor and surface casing based on the anticipated depth of the permafrost. Your program must provide protection from thaw subsidence and freezeback effect, proper anchorage, and well control;
- (e) A statement of how you evaluated the best practices included in API RP

65, Recommended Practice for Cementing Shallow Water Flow Zones in Deep Water Wells (incorporated by reference as specified in §250.198), if you drill a well in water depths greater than 500 feet and are in either of the following two areas:

- (1) An “area with an unknown shallow water flow potential” is a zone or geologic formation where neither the presence nor absence of potential for a shallow water flow has been confirmed.
- (2) An “area known to contain a shallow water flow hazard” is a zone or geologic formation for which drilling has confirmed the presence of shallow water flow; and

(f) A written description of how you evaluated the best practices included in API RP 65–Part 2, Isolating Potential Flow Zones During Well Construction (incorporated by reference as specified in §250.198). Your written description must identify the mechanical barriers and cementing practices you will use for each casing string (reference API RP 65–Part 2, Sections 3 and 4).

[68 FR 8423, Feb. 20, 2003, as amended at 72 FR 8903, Feb. 28, 2007; 75 FR 63372, Oct. 14, 2010; 75 FR 76632, Dec. 9, 2010]

§ 250.416 What must I include in the diverter and BOP descriptions?

You must include in the diverter and BOP descriptions:

- (a) A description of the diverter system and its operating procedures;
- (b) A schematic drawing of the diverter system (plan and elevation views) that shows:
 - (1) The size of the annular BOP installed in the diverter housing;
 - (2) Spool outlet internal diameter(s);
 - (3) Diverter-line lengths and diameters; burst strengths and radius of curvature at each turn; and
 - (4) Valve type, size, working pressure rating, and location;
- (c) A description of the BOP system and system components, including pressure ratings of BOP equipment and proposed BOP test pressures;
- (d) A schematic drawing of the BOP system that shows the inside diameter of the BOP stack, number and type of preventers, all control systems and pods, location of choke and kill lines, and associated valves;