

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; and
- (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.

[68 FR 8423, Feb. 20, 2003, as amended at 72 FR 8903, Feb. 28, 2007]

**§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, location of choke and kill lines, and associated valves; and
- (e) Information that shows the blind-shear rams installed in the BOP stack (both surface and subsea stacks) are capable of shearing the drill pipe in the hole under maximum anticipated surface pressures.

[68 FR 8423, Feb. 20, 2003]

**§250.417 What must I provide if I plan to use a mobile offshore drilling unit (MODU)?**

If you plan to use a MODU, you must provide:

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