

## Operator Guidance Summary and Structure

### Federal/Indian Land Lease Application for Permit to Drill (APD)

The Oil Conservation Division (“OCD”) Operator guidance is designed to outline the base line of which documents, file types, and parameters are needed for the submission type listed in the header of this document. This guidance is written to be a high-level guide and is not intended to be all inclusive as there are times when variables occur outside the scope covered herein and may require additional information or steps. The structure of these documents utilizes a bulleted system and is formatted as follows:

Introduction summary of the form and applicable rules.

- Prerequisite submissions
  - Submission A
  - Submission B
- Main application/sundry name (links will be included if applicable)
  - List of required attachments
    - File A
    - File B
    - File C
  - List of additional attachments (information helpful but not required in most cases)
    - File D
    - File E
- Information needed on each file listed above (required and optional files)
  - File A
    - [Information here] I.E. API #
      - ❖  [Parameter here] I.E. Must not be duplicate API #
  - Continued as needed.
    - [Information here] I.E. API #
      - ❖  [Parameter here] I.E. Must not be duplicate API #

\*\*\*\*\* End of Structure \*\*\*\*\*

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### Federal/Indian Land Lease Application for Permit to Drill (APD)

A Federal/Indian Land Lease Application for Permit to Drill (APD) is a required submission for operators seeking to drill a well on Federal or Tribal managed lands within New Mexico. This application ensures that all drilling activities adhere to state regulations while addressing environmental, safety, and operational standards. The APD submission process is designed to confirm compliance with OCD and Bureau of Land Management (BLM) requirements before any drilling activity commences.

Below are some of the applicable NMAC rules associated with the APD process, an Operator should be familiar with the rules below as well as any rules that may not be listed.

- 19.15.7.9 FORM REQUIREMENTS ON FEDERAL OR TRIBAL LANDS OR MINERALS:
- 19.15.14.8 PERMIT TO DRILL, DEEPEN OR PLUG BACK:
- 19.15.14.9 APPLICATIONS
- 19.15.14.10 APPROVAL OR DENIAL OF A PERMIT TO DRILL, DEEPEN OR PLUG BACK:
- 19.15.14.11 APPROVED FORM C-101 AT WELL SITE
- 19.15.16.8 SIGN ON WELLS
- 19.15.16.9 SEALING OFF STRATA
- 19.15.16.10 CASING AND TUBING REQUIREMENTS
- 19.15.16.11 DEFECTIVE CASING OR CEMENTING
- 19.15.16.12 BLOWOUT PREVENTION
- 19.15.16.13 PULLING OUTSIDE STRINGS OF CASING
- 19.15.16.14 DEVIATION TESTS AND WELLBORE SURVEYS; VERTICAL, DEVIATED AND DIRECTIONAL WELLS
- 19.15.16.15 HORIZONTAL WELLS
- 19.15.16.16 MULTIPLE COMPLETIONS; BRADENHEAD GAS WELLS
- 19.15.5.11 ENFORCEABILITY OF PERMITS AND ADMINISTRATIVE ORDERS
- 19.15.7.12 APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK (Form C-101)
- 19.15.7.9 FORM REQUIREMENTS ON FEDERAL OR TRIBAL LANDS OR MINERALS

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### Federal/Indian Land Lease Application for Permit to Drill (APD)

- **Prerequisite Submissions:**
    - Approved APD from the Bureau of Land Management (BLM) (Form 3160-3)
    - Compliance with 19.15.5.9 NMAC
    - City notification, if applicable, confirming municipal approval when drilling within city limits
    - Compliance with 19.15.27 NMAC
  
  - **Main application/sundry name (links will be included if applicable)**
    - List of required attachments:
      - BLM – approved Form 3160-3 – Must display BLM approval date (required for all submission types)
      - C-102 – Completed and Signed (required for all submission types)
      - Natural Gas Management Plan (NGMP). (Introduced by NMCA 19.15.27.9 D; required if applicable.)
      - Drilling Plan – Must include:
        - ❖ Mud program details
      - Casing and Cementing Program – To ensure aquifer and zonal isolation as per OCD regulations
      - Blowout Preventer (BOP) and Well Control Equipment Details – As required OCD well control Standards
      - H2S Contingency Plan – If applicable
      - Directional Survey Plan (required for directional or horizontal wells)
      - Deviation Survey (vertical wells)
      - Wellbore Diagram
      - Closed Loop plan or schematic
      - List of Federal COAs (Conditions of Approval/Guidelines)
- Note:** If the Operator has a BLM approved change of plans sundry that was submitted due to a revision in the APD the Operator must supply the change of plans with the APD submission to OCD as an attachment in order to expediate OCD's review.
- **Information needed on each file listed above:**
    - **Form 3160-3 – In its entirety, completed and signed**
      - Must include BLM approval date and signature
      - Must list correct well type: Oil, Gas, Injection, or SWD
      - Operator Name, and contact Information
      - Well name, number, API # (if assigned)
      - Lease type and mineral owner
      - Surface hole Location
        - ❖ Lat/long to 5 decimal places
      - Signature of authorized operator representative
  
    - **C-102 [Link](#)**

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The C-102 is critical in ensuring completions meet the OCD requirements for spacing and setbacks. An example of a C-102 is below for reference on what OCD would like to receive as far as quality.

Note: If the well is completed in more than one pool, provide a C-102 for each pool.

- General Proposed C-102 guidance
  - ❖ **All boxes MUST be populated**
  - ❖ Submittal type
  - ❖ Well Location Information
    - API
      - If the API number for a well exists prior to the submittal of the C-102 it must be reported.
      - Leave blank if API number needs to be generated and assigned by the OCD.
    - Pool Code/ Pool name
      - If a pool name and code have been permitted for the subject well, they must be reported on the C-102.
      - If the pool is unknown prior to submittal of the C-102, at minimum please report the target formation of the well.
    - Property Code
      - If the property code for a corresponding property name exists prior to the submittal of the C-102 it must be reported.
      - Leave blank if property code needs to be generated and assigned by the OCD.
    - Property name
      - Must comply with well naming convention [link](#)
    - Well number
    - Ogrid
    - Operator name
    - Ground level elevation
      - Ground level
    - Surface owner / Mineral Owner
      - Surface and mineral owner must always be marked
  - ❖ Surface location
    - ULSTR
  - ❖ Bottom Hole Location
    - ULSTR
  - ❖ Dedicated acres (Acreage assigned within a specified pool)
  - ❖ Infill or defining well
    - Infill or Defining well must always be reported.
      - Should a well be reported as “Infill” the API number of the defining well **must** be reported.
      - Should the defining well currently be pending processing and is without an API at the time of submitting any infill wells then please report the well name and number of the defining well.

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- ❖ Overlapping spacing unit
  - Overlapping spacing unit as well as setbacks under common ownership must always be answered either yes or no.
- ❖ Consolidation code
  - The consolidated code should be filled out appropriately for each well
    - If more than one lease of different ownership has been dedicated to the well, show the consolidation code from the following:
      - C Communitization
      - U Unitization
      - F Forced pooling
      - O Other
      - P Consolidation pending
  - Order Numbers
    - Order numbers must but reported if available.
    - If no order number is available, please report either “N/A” or “pending” depending on the circumstance.
  - Well setbacks under common ownership
    - If your well's setbacks qualify for common ownership, then you must attach a document on company letter head which is signed by an petroleum landman and contains the following information: (A) certification that the encroached upon tract(s) has identical ownership as the HSU; (B) provide a legal description of the HSU and encroached upon tract(s); and (C) an area map of the encroached upon tract(s). This information should be adjacent to the C-102 of the Application to permit to drill, C-101.
- ❖ Kick of point ULSTR
- ❖ First take point ULSTR
- ❖ Last take point ULSTR
- ❖ Unitized Area or Area of Uniform Interest
  - Enter Unit or Com identification code. If pending, enter “pending”
- ❖ Spacing Unit Type
- ❖ Ground floor Elevation
  - KB or DF Elevation (only big rig)
    - Notate: KB or DF
- ❖ Operator certifications
  - Must be signed and dated by operator
- ❖ Surveyor Certifications
  - Must be signed and stamped by certified surveyor
- ❖ Plat area instructions – Figure 1
  - *“This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators*

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*must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract. Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.”*

- **Natural Gas Management Plan (NGMP)**
  - See NGMP Operator Guidance
  
- **Drilling Plan**
  - Drilling plan must contain the following
    - ❖ All Formation tops and anticipated fluid types
    - ❖ Hole and casing information
    - ❖ Cementing information
    - ❖ Mud types
    - ❖ Description of contingency options if applicable
  
- **Casing and Cementing Program**

Must contain the following

  - Casing type
  - Fluid type
    - ❖ What fluid type to be used when drilling?
    - ❖ Oil based mud cannot be used in freshwater zones
      - Prior approval from OCD is required to use oil-based muds above protected aquifers.
      - Note: For surface casing – can only select Air or Fresh water
  - Hole size
    - ❖ Must meet minimum annular clearance (.422”)
  - Casing size
    - ❖ Must be smaller than hole size
  - Casing grade
    - ❖ Must be adequate for zonal protection and pass casing integrity requirements
  - Casing weight
  - Top MD (measured depth)
  - Setting Depth
  - Sacks of cement
  - Estimated top of cement
    - ❖ Ensure cement is circulated to surface on the first two casing strings, whether this is surface and intermediate, or surface and production
      - Top down/Bradenhead squeeze are not considered circulated.

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- ❖ For strings other than the first two, must have at minimum a 200ft tieback.
  
- Special considerations
  - Northwest casing program:
    - For wells 0' - 2,000' vertical depth, surface casing  $\geq$  120' deep.
    - For wells 2,001' - 5,000,' vertical depth, surface casing  $\geq$  200' deep.
    - For wells 5,001'-8,000,' surface casing  $\geq$  320' deep.
    - For wells  $>8,000'$ , surface casing depth is at district discretion.
  - Southeast (Eddy, Lea, Chaves, Roosevelt, Curry, and De Baca) casing program:
    - Surface casing must be set at least
      - Minimum 25' into the Rustler Anhydrite (formation top should be listed on APD) where present or competent layer.
        - i. If salt is encountered while drilling casing shall be set and cemented above any salt
      - 50' below fresh water in the Roswell Artesian Aquifer Basin
        - a. Defined limits – in rule 19.15.39.11
      - Assuming no identified aquifer is present; the surface casing shall be set to be protective of surface waters and above the first occurrence of salt and/or hydrocarbons.
    - Special casing requirements if well falls into Potash areas
      - OCC Order R-111Q –[link](#)
    - Pilot holes -Note: All logs ran will need to be submitted
      - Ensure proper plugging plan for pilot holes are submitted (form section)
        - Ensure the bottom of the hole is plugged with 100' plus 100% excess or 25 sxs of cement, whichever is greater.
        - If the Pilot hole penetrates any formation tops deeper than the proposed producing formation, ensure tops are plugged according to OCD P&A COAs - [link](#).
        - Top plug will be the kickoff plug.
  
- **Blowout Preventer (BOP) and Well Control Equipment**
  - Include type, size, and rating of BOP
    - ❖ BOP must meet minimum requirements for formation depth
  - Include testing schedule and certification
  
- **H2S Plan (If applicable)**
  
- **Directional Survey Plan**
  - Required for all directional or horizontal wells

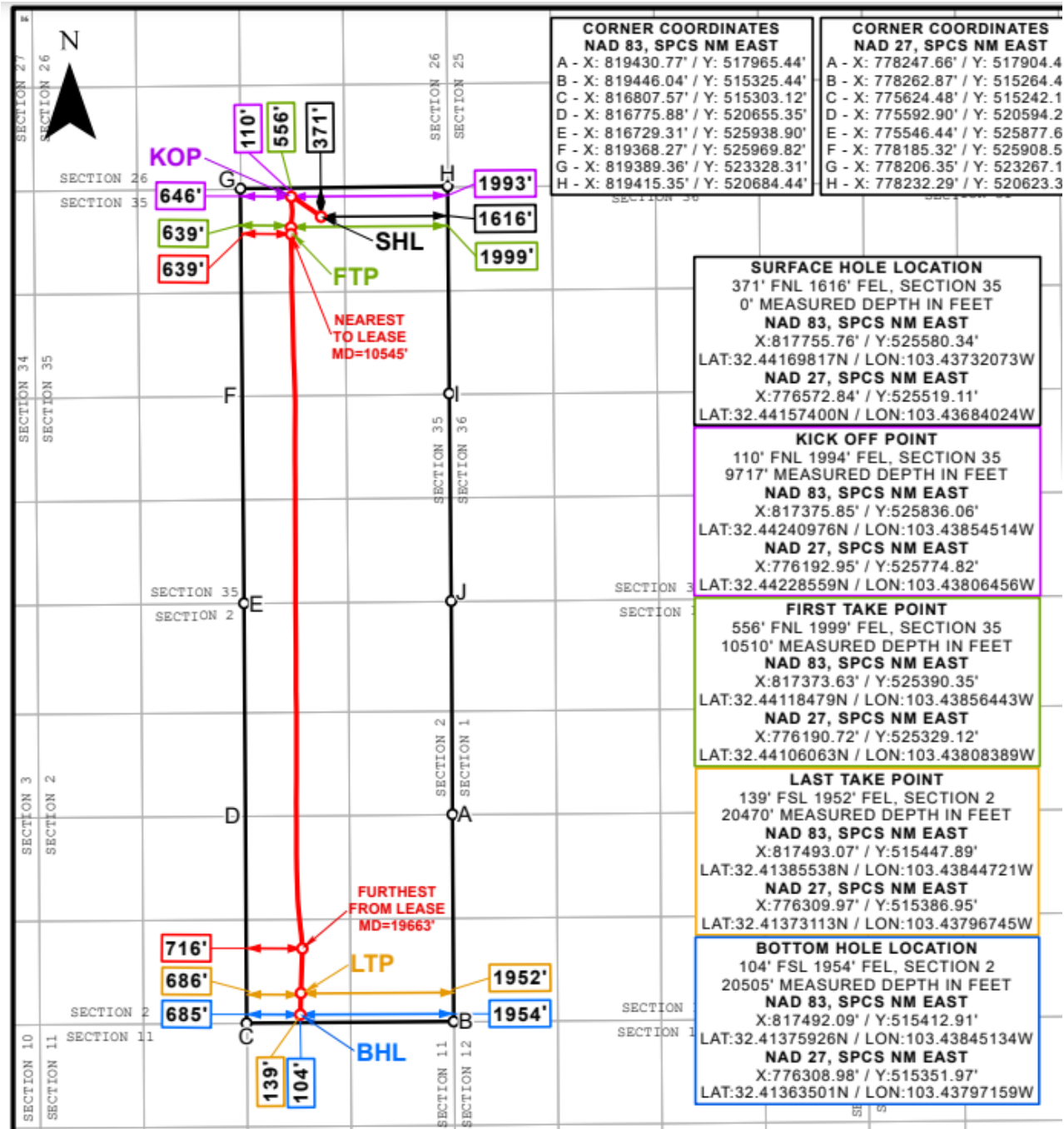
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- Ensure the proposed production depth is within the correct formation.
- N/S, E/W offsets must match setbacks on C-102 (uploaded in completions section)
- **Deviation Survey (vertical wells)**
- **Wellbore schematic**
  - showing casing depths and intervals
  - Tools, packers, etc
- **Closed Loop plan or schematic**
  - If using Pit you must submit a C-144 [link](#)
- **Federal COA/Guidelines**

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Distances/areas relative to NAD 83 Combined Scale Factor: 0.99989656 Convergence Angle: 0.48093056°

Figure 1, Example C-102 As Drilled Plat