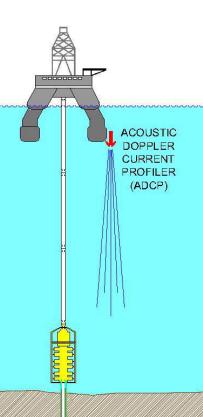
The following presentation covers the <u>draft</u> NTL, which was covered at the Deepwater Current Monitoring Workshop on September 30, 2004, in Houston, TX.



September 30, 2004
Sheraton North Houston Hotel
Houston, Texas

MODUs

Water Depths >400m to ~1,000m



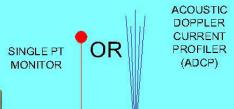
- •ADCP (or comparable equipment) monitoring realtime from near-surface (~30m) to ~1000m*
- •Report data to Internet at least once every 12 hours

Equipment type, lat/long, area/block, water temp, & time series of 20-minute averaged speed and direction (taken every 16 meters through full range of monitoring equipment)

MODUs

Water Depths >1,100m

- •ADCP (or comparable equipment) monitoring realtime from near-surface (~30m) to ~1000m*
- •Report data to Internet at least once every 12 hours equipment type, lat/long, area/block, water temp & time series of 20-minute averaged speed and direction (taken every 16 meters through full range of monitoring equipment)



ACOUSTIC

CURRENT

PROFILER (ADCP)

- •ADCP or single-point measurement near bottom (~100m from seafloor)
- •Record one data measurement every 20 minutes
- Report data to Internet within 30 days of retrieval

MODUs

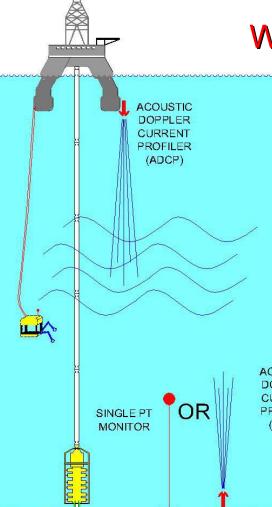
Water Depths >400m

- •ADCP (or comparable equipment) monitoring real-time from near-surface (~30m) to ~1000m water depth*
- •Report data to internet at least once every 12 hours
- •If currents greater than 0.75 knots are measured at maximum range of ADCP for more than 24 continuous hours, gather current data during ROV operations until well is completed
- •Report data to Internet within 30 days of retrieval



- •ADCP or single-point measurement near bottom (~100m from seafloor)
- •Record one data measurement every 20 minutes
- •Report data to internet within 30 days of retrieval

75 k-Hz systems already in place will be granulatheres



Planned Floating Production Facilities



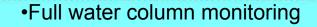
ACOUSTIC DOPPLE

(ADCPS)

OR

MULTIPLE PT

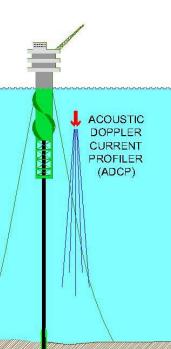
MONITORS



- At least 1 year of site specific data
- •Measure from near surface (~30m) to near bottom (~100m from seafloor)
 - Point current meters (every 500m)
 - ADCP array or combination
- •Report data to internet within 30 days of retrieval
- Data collected during exploration or delineation drilling can be used for some or all of data requirements

Existing Floating Production Facilities

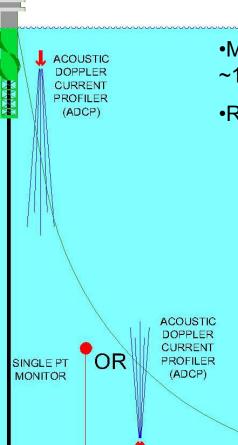
Water Depths >400m to ~1,000m



- Monitoring real-time from near-surface (~30m) to
- ~1000m water depth*
- •Report data to Internet at least once every 12 hours
 - •Equipment type, lat/long, area/block, water temp, & time series of 20-minute averaged speed and direction (taken every 16 meters through full range of monitoring equipment)

Existing Floating Production Facilities

Water Depths >1,100m



- •Monitoring real-time from near-surface (~30m) to
- ~1000m water depth*
- •Report data to Internet at least once every 12 hours
 - •Equipment type, lat/long, area/block, water temp, & time series of 20-minute averaged speed and direction (taken every 16 meters through full range of monitoring equipment)
 - •ADCP or single-point measurement near bottom (~100m from seafloor)
 - •Report data to Internet within 30 days of retrieval at least every six months or whenever a near-bottom current > 1.0 knot occurs

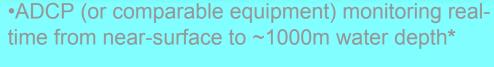
Existing Floating Production Facilities

Water Depths >1,100m

ACOUSTIC

(ADCP)

POINT CURRENT OR



•Report data to internet at once every 12 hours

•Full current monitoring if currents >1.0 knots are measured for more than 24 continuous hours

•Report data to Internet within 30 days of retrieval at least every six months

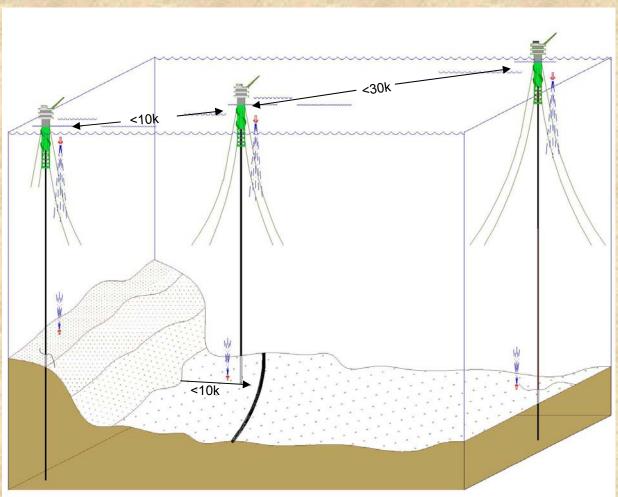
ACOUSTIC • ADCP or single-point measurement near bottom DOPPLER (~100m from seafloor) PROFILERS

•Report data to Internet within 30 days of retrieval at least every six months or whenever a near-bottom current >1.0 occurs

Exclusions

- If you have a 75-kHz system on order or in use prior to effective date of NTL, and that does not meet the provisions of this NTL, you may continue to use system until it fails or you find a current speed >1.0 knot at maximum range of system.
- After obtaining 2 years of data on existing floating production facilities from near-bottom monitor with 70% data return rate & no currents >1.0 knot having been recorded, you may request exclusion from further nearbottom monitoring.
- 5 years of continuous service without any current-related issues or incidents and less than 5 years of remaining service.

Exclusions For Working Within Close Proximity of Other Platforms



A platform within 30 kilometers of an existing platform with no steep topography may apply for exemption provided:

- 1) Water depth does not vary by more than 20% between locations and
- 2) The owner of the existing monitoring system agrees with the dispensation and use of its data

For sites located near steep topography (e.g., Sigsbee Escarpment) the exclusion distance is 10 kilometers

Operational Issues

- MMS encourages use of current data in daily operations, forecasting, and hindcasting as necessary for all ongoing drilling and production activities.
- Ensure technology and equipment used for current monitoring systems are optimized to avoid interference from risers, moorings, and thrusters.
- Ensure design of monitoring system does not interfere with existing acoustic systems used on DP or BOP systems.
- All data collected as part of this NTL are published on a single jointly agreed upon, industry sponsored and publicly available website.

Operational Issues

- Collectively submit a plan with website specifics, data gathering protocol, reporting guidelines and QA/QC protocols.
- If you are unable to publish your current data on the Internet because of communications or equipment failure, do so as soon as communications are reestablished or equipment is repaired.
- If any part of your monitoring system fails or is taken out of service for maintenance or repair for a period of 14 days, provide MMS with written explanation.
- In hurricane or evacuation conditions, gather current data where possible and publish it when activities return to normal.

Applications for Permits to Drill

Pursuant to 30 CFR 250.417(e), with each APD submitted to drill a well using a floating MODU in water depths >400m, provide:

- A description of the specific current speeds that will cause you to implement rig shutdown and/or move off procedures, and
- A discussion of the specific measures you will take to curtail rig operations and move off location when such currents are encountered