### MANAGING HAZARDS

EVENT: Spill Incident



**PREVENTION** 

**CONTROLS & SAFEGUARDS** 

SPILL INCIDENT

RECOVERY

SPILL RESPONSE

THREATS e.g. loss of well control

### **CONSEQUENCES**

### PREVENTION CONTROL MEASURES

#### REDUCE LIKELIHOOD

- Technical standards & procedures
- · Equipment testing, certification
- Risk assessments
- Multiple drilling safeguards

# INCREASED REGULATORY EXPECTATIONS (post-Macondo)

- Independent well examiner
- Improved blow-out preventers
- Real time monitoring
- Increased training & competencies
- CNSOPB oversight plan

#### **RECOVERY MEASURES**

### **MITIGATE CONSEQUENCES**

- Emergency response plan
- Oil spill response plan
- Emergency response team

# INCREASED REGULATORY EXPECTATIONS (post-Macondo)

- Net environmental benefit analysis
- Well containment plan

SPILL INCIDENT PROBABILITY & CONSEQUENCES ARE REDUCED >

**THREATS** 

PREVENTION
CONTROLS & SAFEGUARDS

SPILL INCIDENT

RECOVERY
SPILL RESPONSE

CONSEQUENCES (REDUCED)

(REDUCED PROBABILITY)