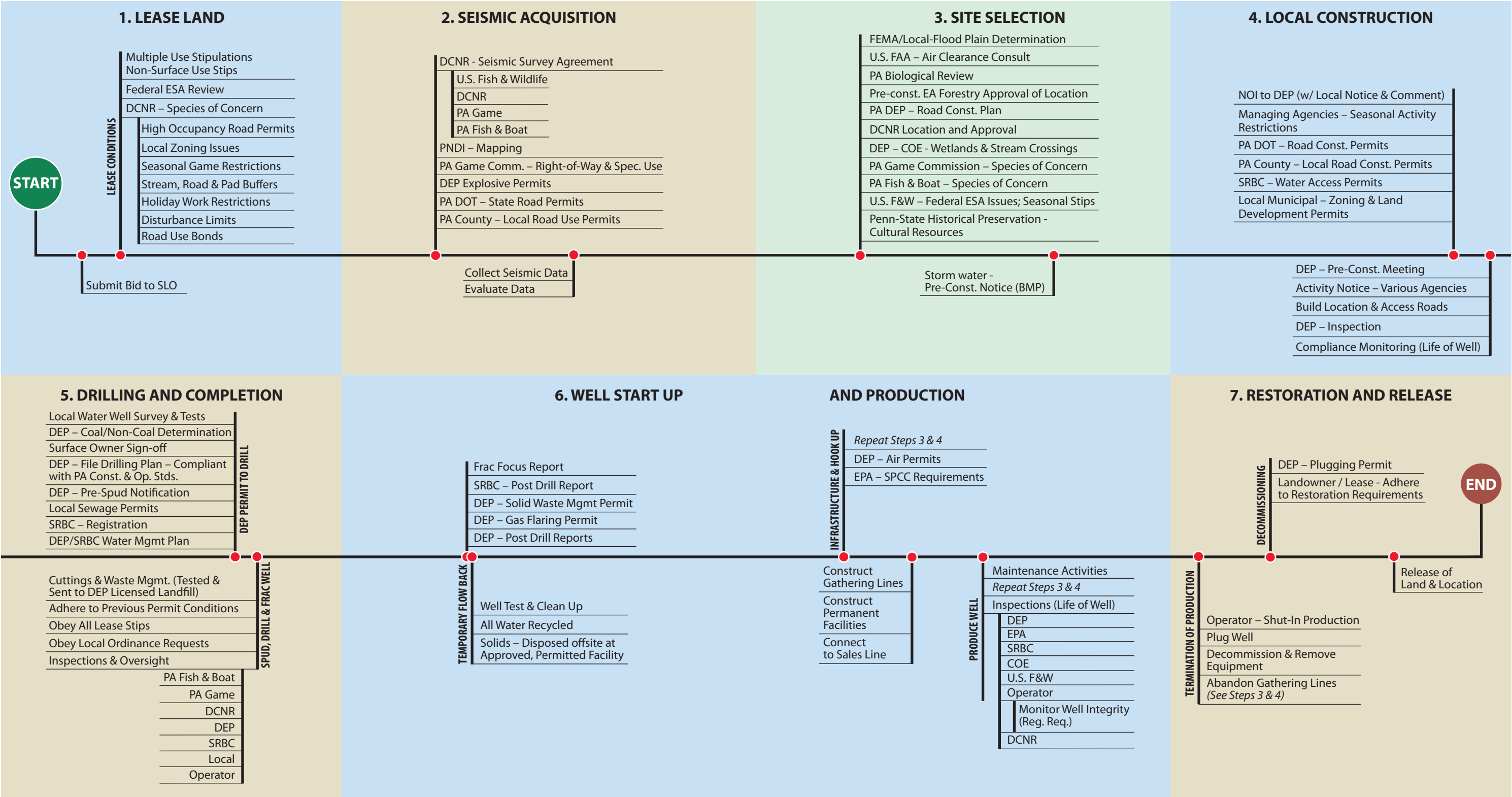


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Figure ES-11. The Natural Gas and Oil Industry Is Well Regulated: Project Development Requirements in Pennsylvania



LEGEND:
BMP – Best Management Practice
COE – U.S. Army Corps of Engineers
DCNR – PA Dept. of Conservation & Natural Resources
DEP – PA Dept. of Environmental Protection
EA – Environmental Assessment
EPA – Environmental Protection Agency
ESA – Federal Endangered Species Act
FAA – Federal Aviation Administration
NOI – Notice of Intent
PA DOT – PA Dept. of Transportation
PNDI – PA Natural Diversity Inventory
SLO – State Lands Office
SPCC – Spill Prevention, Control & Countermeasure Plan
SRBC – Susquehanna River Basin Commission
U.S. F&W – U.S. Fish & Wildlife Service

Source: Adapted from “Governor’s Marcellus Shale Advisory, Commission Report” by Jim Cawley, Lt. Governor, Commonwealth of Pennsylvania, July 22, 2011. Full Report Found at <http://www.pa.gov>. Also see Pennsylvania Public Records for Grugan development: Gathering Line - Permit #ESX10-035-0002, GP0518291004, GP0818291001; COP Tract 289 Pad E - Permit #ESX10-081-0076, API #37-081-20446 (Well #E-1029H); COP Tract 285 Pad C - Permit #GP0718291001, ESX10-035-0007. Additional reporting and oversight required for exceptions to permitted activity not shown.