BRACEWELL

INSIGHTS

Fracking in Europe "“ EU Parliament has voted to require Environmental Impact Assessments for shale gas developments

October 22, 2013

*By: **Jason B. Hutt** and **Darren Spalding***

On 9 October 2013, the European Parliament narrowly voted in favour of an amendment to the EU's Environmental Impact Assessment Directive (EIA Directive) which would require environmental impact assessments (EIAs) to be performed for hydraulic fracturing for coal bed methane, and in shale and formations with shale-like permeability and porosity. If the amendment becomes law, the amended EIA Directive would require all private and public shale gas and many other unconventional exploration projects involving hydraulic fracturing in the EU to undertake an EIA. The effect of this change would be to remove the discretion that EU Member States currently have as to whether or not to require a full EIA as part of the permitting process for certain projects. A full EIA can take up to a year to complete and can be costly. However, EIAs provide a thorough and detailed survey of the aspects of the environment that are likely to be significantly affected by the relevant activity, enabling informed assessments to be made during the permitting process and in respect of the project generally. **Current EU law** Currently, under the EIA Directive, an EIA is mandatory in the EU for projects listed in Annex I of the Directive. In relation to oil and gas projects, Annex I provides that an EIA is required for projects involving the extraction of petroleum and natural gas for commercial purposes where the amount extracted exceeds 500 tonnes/day in the case of petroleum and 500,000 m^3/day in the case of gas. Annex II of the EIA Directive lists other types of projects which must be subject to an EIA if it is determined, either on a case-by-case examination or on the basis of thresholds and criteria set by the relevant EU Member State, that they are likely to have significant effects on the environment. Those include matters such a deep drilling and surface industrial installations for the extraction of coal, petroleum, natural gas and ores, as well as bituminous shale. **The amendment** The proposed amendment adopted by the European Parliament amends Annex I by providing that the following activities require an EIA: *"14a. Exploration, limited to the phase involving the application of hydraulic fracturing, and extraction of crude oil and/or natural gas trapped in gas-bearing strata of shale or in other sedimentary rock formations of equal or lesser permeability and porosity, regardless of the amount extracted. 14b. Exploration, limited to the phase involving the application of hydraulic fracturing, and extraction of natural gas from coal beds, regardless of the amount extracted."* The effect of this amendment is that it removes the discretion that EU Member States currently enjoy as to whether or not to require an EIA for such activities that fall below the 500 tonnes/day (for petroleum) or 500,000 m^3/day (for gas) thresholds. If

this amendment becomes law, all EU exploration activities involving hydraulic fracturing (including private and public projects and including both vertical and horizontal wells) falling within these new paragraphs 14a and 14b of Annex I will require an EIA. **When might it become law?** The EIA Directive was originally adopted following the EU's ordinary legislative procedure, i.e. by a co-decision of the European Parliament and the Council of the European Union. As a consequence and following the European Parliament's approval, the amendment to the EIA Directive now requires the approval of the Council of the European Union before it can become law. Should the amendment become binding EU law, each EU Member State will have a certain period of time to implement the amendment into their national legislative frameworks. There is currently no fixed timeframe for the Council to consider and vote on the amendment but the Member of European Parliament (MEP) with the mandate to enter into discussions with the Council and Commission in respect of the amendment has said that he hopes the amended EIA Directive will be in force by 2016. **The U.K.** The U.K. has large shale resources but the development of those resources is in its infancy. The U.K. Government is committed to encouraging the establishment of a shale gas industry in the U.K. It is doing so through tax incentives and seeking to streamline the permitting process. The Government has established an Office of Unconventional Gas and Oil which states that its aim is to "promote the safe, responsible, and environmentally sound recovery of the U.K.'s unconventional reserves of gas and oil"□. Current EU law is implemented in respect of onshore activities in the U.K. by various statutes including The Town and Country Planning (Environmental Impact Assessment) Regulations 2011 and The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2011 which apply to England and Scotland respectively (there are differences which apply to Wales and Northern Ireland, although the regulations are substantially the same). The regulations set out the types of activities which require EIAs in the U.K. There are two separate categories:

- "Schedule 1 development,"□ for which EIAs are mandatory; and
- "Schedule 2 development,"□ for which EIAs are only mandatory if the particular project is considered likely to give rise to significant effects on the environment by virtue of factors such as its nature, size, or location (i.e. if it is located in a "sensitive area"□).

In England, "Schedule 1 developments"□ currently include extraction of petroleum and natural gas for commercial purposes where the amount extracted exceeds 500 tonnes per day in the case of petroleum and 500,000 cubic metres per day in the case of gas. However, other wells may fall under Schedule 2. Independent of the proposed amendment to the EIA Directive, a number of industry bodies in the U.K. have recently recommended that an environmental risk assessment should be mandatory for all shale gas operations, involving the participation of local communities at the earliest possible opportunity, and that this assessment should address risks across the entire life cycle of shale gas extraction. In response to these recommendations, the U.K.'s Secretary of State for Energy announced in December 2012 that the Department of Energy and Climate Change (DECC) would "take steps to enhance the existing frameworks for consultation and consenting to these activities, in line with these recommendations. Licensees will be required to carry out a comprehensive high-level assessment of environmental risks, including risks to human health, and covering the full cycle of the proposed operations,

including well abandonment; and to consult with stakeholders including local communities, as early as practicable in the development of their proposals. The scope of these assessments would naturally be framed by the operations proposed, so that prospective future production operations would not be in scope for an assessment drawn up for exploration activities."**The position in the U.S.** The U.S. has a mature and successful domestic shale gas industry with thousands of wells having been fracked. Shale gas has revolutionised the gas industry in the U.S. and has the potential to be a game-changer globally as the U.S. ceases its imports (forcing sellers to look elsewhere for replacement buyers) and creates the potential for significant LNG exports which could potentially drive down prices in the global LNG market. Onshore oil and gas exploration is generally permitted in the U.S. at the State (rather than Federal) level. The prevailing view is that States are better positioned than the Federal government to govern the unique geologic and resource protection challenges of their jurisdictions. The Federal Environmental Protection Agency (EPA) does not perform project-specific environmental impact assessments. The EPA is, however, undertaking a broad study of the industry and its environmental impacts pursuant to a Congressional directive. Initial conclusions from the study are expected to be released in late 2014. Several States, such as New York and California, have statutes in place to consider the environmental impacts of a particular project or a particular permitting programme. In New York, permitting of wells that use directional drilling and hydraulic fracturing has been in a political quagmire while the State agencies separately try to perform an impact assessment for the permitting programme. Texas, Pennsylvania and Ohio, by contrast, have modernised their oil and gas permitting regulations and have swiftly enabled exploration work to move forward. As a result, those regions have seen huge developments in the Barnett, Eagle Ford, Marcellus, and Utica basins. The general position for private land exploration in the U.S. is that no Environmental Impact Statement (EIS), the U.S. equivalent of an EIA, is required at the Federal level because no action is required by a Federal agency to authorise the activity. For exploration activities on Federal lands, the National Environmental Policy Act (NEPA) contains a requirement for an EIS in certain circumstances where the activity may have a significant impact on human health or the environment. A handful of Federal agencies, including the Department of Interior, are undertaking reviews like these, for new leases on Federal lands, but oil and gas permitting continues to move forward, enabling exploration work using hydraulic fracturing. **Comments** The amendments to the EIA Directive passed by the European Parliament may require nearly all exploration drilling involving hydraulic fracking to undertake an EIA. If this amendment becomes law, EU Member States would lose the discretion that they currently have in relation to drilling activities which do not currently require an EIA on a mandatory basis. The threshold for discretion being removed by the proposed amendment to the EIA Directive is based upon how much oil or natural gas is produced from the well (i.e. 500 tonnes/day for petroleum or 500,000 m3/day for gas), while the primary underlying concerns that drive EIAs, and similar studies, are based upon the environmental impact of the drilling (regardless of hydrocarbon production levels), including those techniques and fluids that are introduced to the location in order to drill, frack and produce from the well. The potential impact is that EIAs will be required for certain shale gas and unconventional projects in the EU where no EIA may currently be required. For industry, that may increase the time and cost associated with developing a project and delivering

product to market. Geology differs between basins and between countries and regions and opponents of these amendments may argue that it would be better for each EU Member State to determine whether or not a particular project involving hydraulic fracking should require an EIA, rather than being bound by a blanket requirement at the EU level. Those in favour of these amendments will applaud a mandatory rigorous environmental standard applied consistently across all EU Member States.