


EFD Scorecard Introduction



**Environmentally
Friendly Drilling
Scorecard**

Project:
Location:
Ecosystem:
Date:

Points Achieved **Possible Points: 100**

★ 55 - 64 points ★★ 65 - 74 points ★★★ 75 - 84 points ★★★★ 85 - 94 points ★★★★★ 95 - 100 points

ID	Prereq	Description	Possible Points	ID	Prereq	Description	Possible Points
		Air	13			Biodiversity/Habitat	15
		Prereq 1 Compliance w/Air Quality Regs	2			Prereq 1 Species Protection	
		Credit 1 Contractual Obligations for Logistics	2			Prereq 2 Habitat Protection/Enhancement	
		Credit 2 Site Emissions	2			Prereq 3 Regulatory Requirements	
		Credit 3 Dust Suppression	2			Credit 1 Restoration/Interim Reclamation	4
		Credit 4 Clean Power	3			Credit 2 Reduction of Surface Disturbance	3
		Credit 5 Gas Handling	4			Credit 3 Erosion Prevention	1
						Credit 4 Voluntary Offsite Mitigation	1
						Credit 5 Invasive Species Prevention	1
						Credit 6 Reintroduction of Species, Habitat	2
						Credit 7 Avoidance of High Value Areas	1
						Credit 8 Wildlife and Habitat	2
		Water	21			Societal	13
		Prereq 1 Stormwater Management Plan				Prereq 1 Regulatory Compliance	
		Prereq 2 Integrity Testing of Surface Casing				Prereq 2 Communication Plan	
		Credit 1 Water Management Plan	9			Credit 1 Public Outreach	3
		Credit 2 Setbacks from Streams/Sources	4			Credit 2 Noise and Lighting Control	1
		Credit 3 Mitigation Measures/Protect Waters	4			Credit 3 Training of Local First Responders	1
		Credit 4 Reduce Water Usage	2			Credit 4 Air Quality Monitors	2
		Credit 5 Reuse of Water/Fluids	2			Credit 5 Emergency Response Plan	2
						Credit 6 Dispute Resolution Plan	1
						Credit 7 Surface Use Plan	2
						Credit 8 Unintended Consequences Program	1
		Site	18				
		Prereq 1 Regulatory Compliance					
		Prereq 2 Erosion & Sedimentation Control					
		Credit 1 Pre-disturbed Site	2				
		Credit 2 Pad Drilling	2				
		Credit 3 Protect and Restore Habitat	2				
		Credit 4 Contractor Guidelines	2				
		Credit 5 Site Restoration Plan	2				
		Credit 6 Well Design Considerations	2				
		Credit 7 Living Quarters and People	2				
		Credit 8 Organic Materials	1				
		Credit 9 Pre-Plan for Production	1				
		Credit 10 Match Site/Access to Topography	1				
		Credit 11 Logistics Plan - Offsite Storage	1				
		Waste Management	20				
		Prereq 1 Waste Management Plan					
		Prereq 2 Pit Design Pre-site Assessment					
		Credit 1 Drilling Fluid Handling System	6				
		Credit 2 Lubricants, Fluids, Bulk Materials	4				
		Credit 3 Spill Prevention System	3				
		Credit 4 Cuttings Reuse	3				
		Credit 5 Cuttings Rejection	3				
		Credit 6 Life Cycle Plan	1				

EFD Facts

Project:
Location:
Ecosystem:

	Max	Score
AIR	13	0
WATER	21	0
SITE	18	0
WASTE MANAGEMENT	20	0
BIODIVERSITY/HABITAT	15	0
SOCIETAL	13	0
	100	0

An environmental scorecard has been developed to determine the tradeoffs associated with implementing low impact drilling technology in environmentally sensitive areas. The scorecard assesses drilling operations and technologies with respect to air, site, water, waste management, biodiversity and societal issues.

The overall objective of the scorecard is to have a means of measuring the environmental and societal tradeoffs associated with an energy development project. Industry has done an effective job of making safety a core value within each and every employee. The goal of the scorecard is to assist in the development of a mindset within industry that environmental stewardship is a core value. In addition, the scorecard enables all stakeholders to understand the balance between energy development and the impact on the environment.

Low impact operations reduce the environmental footprint of operations by the adoption of new methods to use in (1) getting materials to and from the rig site (site access), (2) reducing the rig site area, (3) using alternative drilling rig power management systems, and (4) adopting best waste management practices at the rig site. The scorecard enables a dialogue to be established and maintained among all interested, concerned and affected stakeholders. In this manner, the industry has a new way of seeing itself within the larger network. The scorecard provides the means to demonstrate the connectivity between energy production and the affected ecosystem.

Objectives of the Scorecard

Development of energy resources is important to the economic development and security of our nation. The scorecard enables a methodology to be employed that documents how environmental and societal issues associated with energy development are addressed. The scorecard enables operating companies to make use of the principle of **what gets measured, gets done**.

Environmentally Friendly Drilling (EFD) practices can promote balance between nature and energy development. In addition, EFD practices may be cost effective, enhance public relations, increase worker productivity and reduce potential liabilities.

Having an operation certified through the use of the Scorecard can demonstrate how an operating company successfully manages operations. EFD practices have environmental, economic, and social elements that benefit all stakeholders, including operating companies, service companies, suppliers, contractors, regulators, landowners and the general public.

The scorecard assesses drilling operations and technologies with respect to air, site, water, waste management, biodiversity and societal issues. Environmentally friendly drilling and completion operations may reduce the environmental footprint of operations by the adoption of new methods to use in (1) getting materials to and from the rig site (site access), (2) reducing the rig site area, (3) using alternative drilling rig power management systems, and (4) adopting best waste management practices at the rig site.

The scorecard enables a dialog to be established and maintained among all interested, concerned and affected stakeholders. In this manner, the oil and gas industry has a new way of seeing itself within the larger network. Environmental sensitivities and other factors vary between various ecosystems. The EFD scorecard process takes this into consideration and enables operating companies to document how environmental factors are addressed for the different ecosystems.

The objective of the EFD scorecard is to have a methodology that is meaningful, simple and easy to implement and understand. Six attributes were identified as meaningful to evaluate: site (soil/sediment), water, air, waste management, biodiversity/habitat and societal issues. The scorecard process builds upon the remarkable safety improvements in a similar process. With safety, the industry reports through the International Association of Drilling Contractors (IADC) and there is a commitment from each contractor to have zero recordable incidents. In similar fashion, the scorecard provides a means to make environmental and societal issues business core values.

Each attribute has several layers or sub-attributes. As an example, within biodiversity, the potential threat to wildlife due to proximity or timing of operations could be assessed and minimized. Drilling activities have the potential risk of temporarily interfering with wildlife. The risk can be mitigated through proper planning and monitoring of operations.

The EFD scorecard has two point levels. First are the prerequisites – those items that must be done. Secondly are optional credits – those items that are considered best practices, going beyond minimum operating requirements.

Prerequisites for the various attributes include rules and regulations that govern the drilling locations. The optional credits include various practices that can reduce the environmental and societal tradeoffs associated with oil and gas operations.

Certification Process

Web Site

An EFD Scorecard web site (www.efdscorecard.org) was developed to enable operating companies to implement the scorecard. Participating operators will be able to download the Scorecard Guidebook, Matrix and support materials from this portal. They may also upload their own records and documentation. Dates and comment areas will be available. Registration is required for this website and agents will be designated by the participating operator to ensure privacy and confidentiality.

Features

The EFD certification system is a voluntary, consensus-based, rating system based on existing, proven technologies. The process evaluates environmental and societal issues associated with energy development. It is based on accepted principles and seeks a balance between energy development and all living systems.

The EFD Scorecard is organized into six attributes: Air, Site, Waste Management, Biodiversity/Habitat, Water and Societal. It is a performance-oriented system where points are earned for satisfying criteria. Different levels of certification are awarded based on the total points earned. The system is comprehensive in scope, yet simple in operation.

The EFD Scorecard will vary with various ecosystems (semi-arid, wetlands and woodlands). Practices, regulations, and methodologies differ in applicability and importance from one ecosystem and/or state to another and the Scorecard takes this into consideration.

Project Registration

Companies interested in obtaining EFD Certification for their project must first register the project. Registration is an important step that establishes the primary contact between the project and the organization that will perform the certification. Agents will be designated by the operator and may come from representatives internal to that operator or a third party selected by operator. Acceptance of the indemnification clause which ensures the party providing documentation and completed scorecard matrixes are true and accurate to the best of knowledge of the submitting party will be required.

Submittals

Once a project is registered, the company may begin to collect information to satisfy the prerequisite and credit submittal requirements. The company should appoint a point of contact that can champion the EFD goals, facilitate communication, track progress and compile the components of the final submittal for certification.

Documentation for submittal should be gathered throughout the process.

Credit Interpretation Rulings

Occasionally the company may encounter difficulties in applying an EFD prerequisite or credit to their project. These problems arise from instances where the Reference Guide may not sufficiently address a specific issue or that there is a conflict that requires resolution. To address such problems, the company may submit an EFD Interpretation Request.

Certification

To earn EFD certification, the applicant project must satisfy all of the prerequisites and a minimum number of points to attain the established ratings.

★	55 – 64 Points
★ ★	65 – 74 Points
★ ★ ★	75 – 84 Points
★ ★ ★ ★	85 – 94 Points
★ ★ ★ ★ ★	95 – 100 Points

To begin the certification process, the company submits a complete application for review. The review process begins when the completed application has been received and the company has paid the certification fee.