





# LICENSING & PERMITTING

The official scoping period began when the Federal Aviation Administration (FAA) published a Notice of Intent to prepare an Environmental Impact Statement (EIS) in the Federal Register on April 10, 2012. The EIS will describe the potential environmental effects from the Proposed Action. The scoping period lasts until May 30, 2012. Information on the NEPA process and the EIS is available on the following website:

[http://www.faa.gov/about/office\\_org/headquarters\\_offices/ast/environmental/nepa\\_docs/review/documents\\_progress/spacex\\_texas\\_launch\\_site\\_environmental\\_impact\\_statement/](http://www.faa.gov/about/office_org/headquarters_offices/ast/environmental/nepa_docs/review/documents_progress/spacex_texas_launch_site_environmental_impact_statement/).

Tonight's scoping meeting is being held to solicit input from the public on what should be analyzed and studied in the EIS. Scoping is one of the first steps in the EIS process and your input during the scoping period is important.

The meeting includes an open-house workshop from 5:00 pm to 6:00 pm. The FAA will provide an overview of the environmental process from 6:00 pm to 6:15 pm followed by a public comment period from 6:15 pm to 8:00 pm.

### During the scoping period, the public can provide comments in 5 ways:

1. Provide written comments at tonight's scoping meeting
2. Talk to our stenographer who can record your comments during the scoping meeting
3. Submit comments electronically to [faaspacexeis@cardnotec.com](mailto:faaspacexeis@cardnotec.com)
4. Fax your comments to (410) 990-0455
5. Mail your comment form to:

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### FAA Licenses, Permits, Regulations, and Approvals

- SpaceX must apply for a launch license or experimental permit.
- SpaceX would be the exclusive user of the site.
- FAA statutory requirements for licenses and permits are described in 14 CFR Chapter III, Parts 400-450.
- FAA conducts a review of the license or permit application including a policy review, payload review, financial determination, environmental review and safety review.
- Successful completion of the environmental review does not guarantee that FAA would issue launch licenses and/or experimental permits to SpaceX.

### AST Licensing and Permitting Review

- **Policy Review** – Determines whether a proposed launch would jeopardize U.S. National Security, International Obligations or Foreign policy interests
- **Payload Review** – Determines if a license applicant or payload owner or operator has obtained all required licenses, authorizations, and permits. Does not apply to payloads under the jurisdiction of any other government agency
- **Financial Responsibility Determination** – Proof of financial responsibility is required. This is usually fulfilled by purchase of liability insurance
- **Environmental Review** – Proposal must be reviewed under the NEPA. This EIS process fulfills the environmental review portion of the license application.
- **Safety Review** – Determines if an applicant can safely conduct the launch of the proposed launch vehicle(s) and payload(s).



## Construction Activities



As part of the Proposed Action, SpaceX would construct new facilities, structures, and utility connections in order to support the launch of the Falcon 9 and Falcon Heavy launch vehicles. The proposed schedule for all construction is a 24-month period from start to finish. The facilities would be located in two areas – a launch site area and a control center area.

The proposed vertical launch area is currently undeveloped and is located directly adjacent to the eastern terminus of the Texas State Highway 4 (Boca Chica Boulevard) and approximately 3 miles north of the Mexican border on the Gulf Coast. It is located approximately 5 miles south of Port Isabel and South Padre Island.

The control center area would be located inland to the west of the vertical launch area, all facilities would be constructed on private land owned or leased by SpaceX. The development of access and supporting utility infrastructure for the vertical launch area and the control center area may occur on lands outside those owned or leased by SpaceX.

### Vertical Launch Area Site Layout

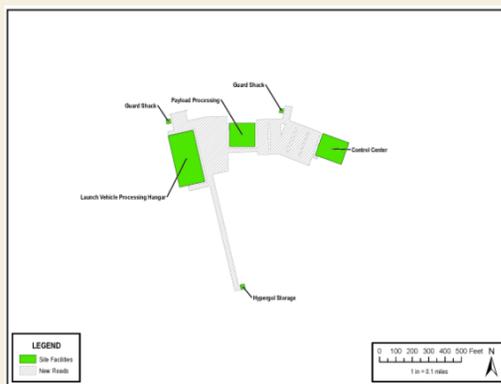
At the proposed vertical launch area, the facilities required would include: an integration and processing hangar, a launch pad and stand with its associated flame duct, propellant storage and handling areas, a workshop and office area, and a warehouse for parts storage.

The hangar facility at the vertical launch area would be used for the preparation of the launch vehicle for launch and the final fueling and integration of the payload onto the vehicle.

The launch pad and stand is used to translate the launch vehicle to vertical and to support it on the pad prior to lift-off.



### Control Center Area Site Layout



The proposed control center area would include: a control center building and a payload processing facility; it might also include a launch vehicle preparation hangar and satellite fuels storage area.

The control center would be used for command and control of the launch vehicle, payload, and ground systems during launch and test operations. The payload processing facility would be used to conduct final processing of payloads prior to integrating them with the launch vehicle. The launch vehicle preparation hangar would be used to conduct refurbishment of flown stages, or pre-integration preparation of the launch vehicle stages before they go to the pad hangar for final integration. The control center area site layout and exact location have not yet been finalized.



# WELCOME TO THE FAA SCOPING MEETING

The Proposed Action is for the FAA to issue launch licenses and/or experimental permits to Space Exploration Technologies Corp. (SpaceX) that would allow SpaceX to launch the Falcon 9 and Falcon Heavy orbital vertical launch vehicles and a variety of reusable suborbital launch vehicles from a launch site on privately owned property in Cameron County, Texas. The FAA will prepare an Environmental Impact Statement (EIS) to evaluate the potential environmental effects of this proposal. FAA representatives are here to explain the proposed project and alternatives, answer any questions you might have about these items, and describe the environmental impact analysis process and related time line. An area has been set aside within the main meeting room to provide you with an opportunity to write and submit your comments, or to speak with a stenographer who will record your comments.

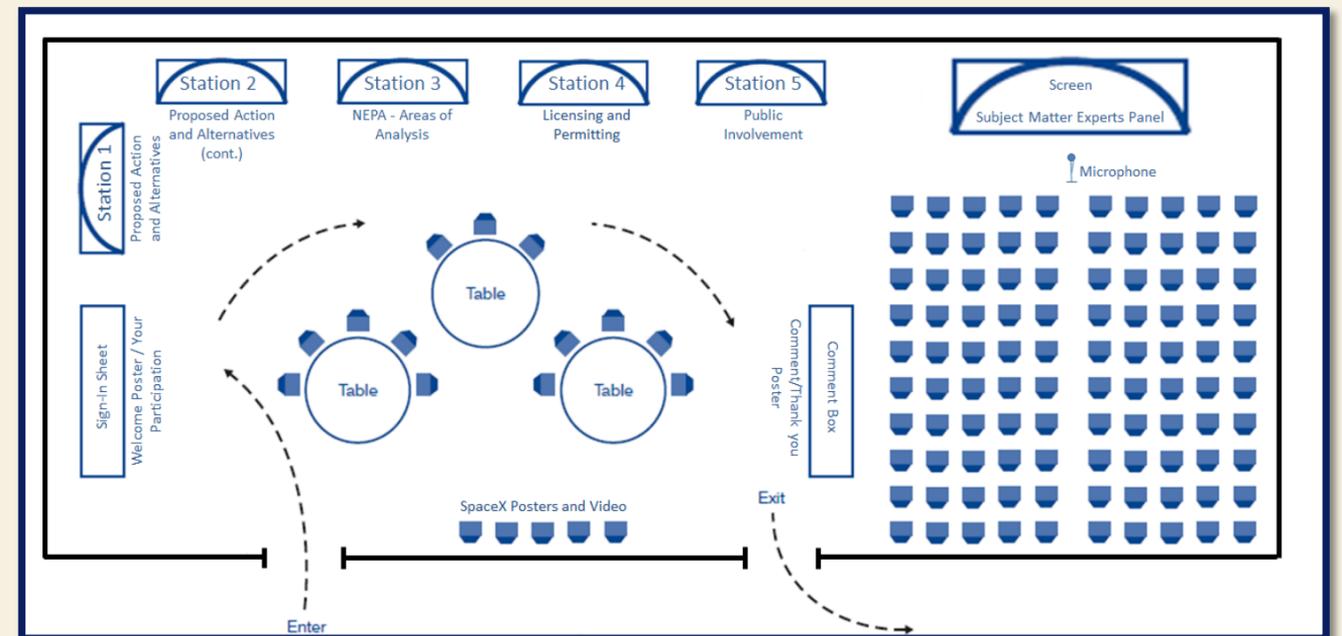
### What is the purpose of this Public Scoping Meeting?

Scoping is an early and open process where the public is invited to help identify issues to be studied in the EIS. The purpose of this scoping meeting is to inform you about the proposed project, explain the National Environmental Policy Act (NEPA) and the associated environmental impact analysis, and solicit your comments and concerns related to the proposal and alternatives.

Please review the displays located throughout the open house, and then provide us with your comments. The approximate layout of the room is shown below.

**What is Scoping?**  
Scoping is an early and open process where the public is invited to help identify issues to be studied in the EIS.

General Room Layout for the Public Scoping Meeting, 5:00 pm to 8:00 pm  
(Actual layout may be different)





# NATIONAL ENVIRONMENTAL POLICY ACT

## Why is the FAA Preparing an EIS?

As part of our compliance with NEPA, the FAA is preparing an EIS to assess the potential environmental impacts of the proposed issuance of launch licenses and/or experimental permits to Space Exploration Technologies Corp. (SpaceX) for operating the Falcon vehicle launch programs from a private site located in Cameron County, Texas. The EIS will consider the potential environmental impacts of the Proposed Action and reasonable alternatives, including the No Action Alternative. The successful completion of the environmental review process does not guarantee that the FAA would issue launch licenses and/or experimental permits to SpaceX. The project must also meet all FAA safety, risk, and indemnification requirements.



Informed decisions are based on a candid and factual presentation of environmental impacts. These facts come from collecting information on the areas and resources affected by the proposal, and then identifying the type and extent of potential impacts resulting from the proposal. For this project, the FAA will analyze potential impacts to:

- Air quality
- Fish, wildlife & plants, including threatened & endangered species
- Historical, architectural, archaeological & cultural resources
- Light emissions and visual impacts
- Water resources, including surface waters, wetlands, groundwater, floodplains, Wild & Scenic Rivers, water quality
- Section 4(f) properties
- Socioeconomics, environmental justice & children’s environmental health & safety risks
- Compatible Land use, including farmlands & coastal resources
- Hazardous materials, pollution prevention & solid waste
- Natural resources, energy supply & sustainable design
- Noise

The analysis will include and evaluation of the construction impacts and secondary (induced) impacts, and will account for cumulative impacts from other relevant activities in the area of Cameron County, Texas. Numerous federal laws and regulations govern the protection and preservation of environmental resources. The FAA strictly adheres to these laws and regulations, such as the Endangered Species Act, Clean Air Act, Clean Water Act, among others.

## Public Involvement in the EIS Process

The FAA invites public participation during the scoping process to help understand community-specific issues and concerns on the Proposed Action and alternatives. We anticipate receiving scoping comments from: business and community leaders, federal, state, and local elected officials, regulatory agencies, and interested individuals. Scoping comments help the FAA determine the issues and concerns to analyze in the preparation of the Draft EIS. The public will have a second opportunity to participate in the NEPA process by commenting on the Draft EIS. The release of the Draft EIS will be announced in a newspaper that serves your area. All comments on the Draft EIS will be addressed in the Final EIS.



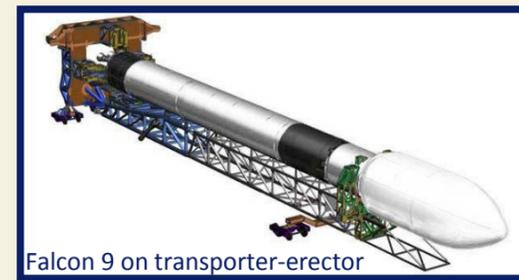
**The National Environmental Policy Act (NEPA) requires that all federal agencies consider the environmental impacts of any major proposed projects.**



# PROPOSED ACTION & ALTERNATIVES

Under the Proposed Action, SpaceX would construct a vertical launch area and a control center area to support up to 12 commercial launches per year. The vehicles to be launched include the Falcon 9, Falcon Heavy (up to two per year), and a variety of smaller reusable suborbital launch vehicles. All Falcon 9 and Falcon Heavy launched would be expected to have commercial payloads, including satellites or experimental payloads. The Falcon 9 and Falcon Heavy may also carry a capsule, such as the SpaceX Dragon Capsule. SpaceX may elect to launch smaller suborbital reusable launch vehicles such as the SpaceX Grasshopper from this site. SpaceX would be required to apply for the appropriate launch licenses and/or experimental permits to be issued by the FAA. Alternatives under consideration include the Proposed Action and the No Action Alternative. Under the No Action Alternative, the FAA would not issue launch licenses and/or experimental permits to SpaceX. Based on comments received during the scoping period, the FAA may propose additional alternatives.

## Operational Activities

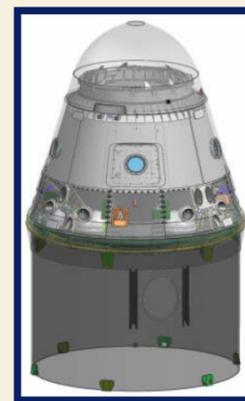


Falcon 9 on transporter-erector

The Falcon launch vehicle program is designed for minimal vehicle assembly and processing on the launch pad. The goal is to launch within a few days to several weeks of payload arrival at a launch site.

The Falcon 9 orbital vertical launch vehicle is a medium-lift class launch vehicle with a gross lift-off weight of approximately 1,000,000 pounds with a maximum length of 230 feet. The Falcon 9 uses liquid oxygen (LOX) and highly refined kerosene, also known as rocket propellant-1 or refined petroleum-1 (RP-1), as propellants to carry payloads into orbit.

The Falcon Heavy is similar to the Falcon 9, except that it has an additional two boosters “strapped on,” each booster being almost identical to the Falcon 9 first stage core. The Falcon Heavy is a heavy lift class launch vehicle with a gross lift-off weight of approximately 3,400,000 pounds. It has an overall maximum length of approximately 230 feet.

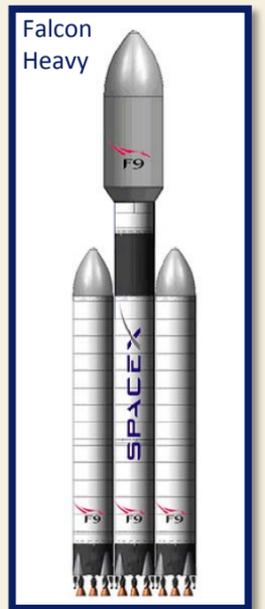


Dragon Capsule

A reusable suborbital launch vehicle could consist of a Falcon 9 Stage 1 tank with a maximum propellant (RP-1 and LOX) load of approximately 6,900 gallons.

In addition to standard commercial satellite payloads, the Falcon 9 and Falcon Heavy launch vehicles may carry a spacecraft, the SpaceX Dragon capsule, which is being developed to deliver cargo and experiments to low Earth orbit. The Dragon capsule’s dry weight could range from 8,000 to 15,000 pounds depending on its cargo and configuration.

On a per-mission basis, launch campaigns (preparation for and the actual launch event) are expected to last from 2 to 8 weeks. During a launch campaign, up to 100 local and 100 transient employees would be present at the site, including payload support personnel. Between launch campaigns, 30 to 50 employees could be present at the site.



Falcon Heavy