

STATEMENT OF NEED
Hydrogen for Rapid City, SD

1. BACKGROUND

The National Weather Service (NWS) is a 24 hour, 365 day operation, and is a public safety agency. The primary mission of the NWS is the protection of life and property. The NWS in Rapid City, SD launches weather balloons routinely twice a day. Each balloon requires approximately 70 cubic feet (CF) of hydrogen. Instrumentation is attached to each balloon which provides measurements of temperature, humidity, wind speed and direction, and height. This data is transmitted worldwide and used to make weather forecasts out to 10 days.

2. OBJECTIVE

The objective of the NWS is to receive and keep on-hand an adequate supply of hydrogen (up to 4,700 CF, but no less than 2,000 CF) to perform the weather balloon launches on schedule. The supply shall be restocked on a bi-weekly basis.

3. SCOPE

The Contractor is responsible for supplying hydrogen to the NWS office located at 300 E Signal Drive, Rapid City, SD. The total amount of hydrogen to be delivered for each period of this requirement (base period plus three option periods) is a minimum of 42,200 CF, up to a maximum of 47,500 CF, achieved with deliveries every 2 weeks of between 1,500 CF and 2,400 CF per delivery. There may be additional unscheduled deliveries during this period.

4. PERIOD OF PERFORMANCE

The base period of performance for this requirement is 12 months, beginning June 1, 2023 and ends May 31, 2024, with the options to extend up to three additional periods of one year each:

- Option 1: JUNE 1, 2024 THROUGH MAY 31, 2025
- Option 2: JUNE 1, 2025 THROUGH MAY 31, 2026
- Option 3: JUNE 1, 2026 THROUGH MAY 31, 2027
- Option 4: JUNE 1, 2027 THROUGH MAY 31, 2028
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5. PLACE OF PERFORMANCE

All deliveries are to be made to the NWS office at 300 E Signal Drive, Rapid City, SD. The point of delivery is at the Upper Air Inflation building.

6. REQUIREMENTS

Site Storage and Usage: This site will store up to 4,700 CF of hydrogen on site at a time in no more than 18 individual cylinders.

All hydrogen must be provided in individual cylinders as the facility is not arranged to allow for other configurations. The Government has space at the delivery point to safely receive and store up to 18

cylinders of hydrogen at a time.

Usage and correlated number of cylinders per delivery depends on how many cubic feet of hydrogen is provided in each cylinder. This also has the potential to vary if we have to launch extra balloons. Over an average seven day period, with no extra launches, the facility will use approximately 900 CF of hydrogen.

Initial Delivery: The Contractor shall supply 4,700 CF of hydrogen on or shortly after June 1, 2023, with the actual delivery date coordinated with the Weather Forecast Office (WFO); see Points of Contacts in section 8, below.

Delivery Schedule: The delivery schedule shall be arranged upon contract award with one of the NWS points of contact listed in section 8, below. After the initial delivery, the Contractor will replenish back to 4,700 CF of hydrogen on a bi-weekly basis, in accordance with the arranged schedule, replacing all empty hydrogen cylinders with full hydrogen cylinders. The Contractor shall pick up the empty cylinders in the same trip.

If additional deliveries are required prior to the next regularly scheduled delivery, the NWS will contact the Contractor and request the additional delivery, with delivery to be completed within two business days of being contacted. The delivery schedule shall be arranged upon contract award with one of the NWS points of contact listed in paragraph 8 below.

Balloon launches occur twice a day, every day of the year, regardless of holidays. Therefore, the delivery schedule needs to be maintained regardless of holidays. If a holiday falls on a scheduled delivery day and the Contractor is not able to complete a regularly scheduled delivery, the Contractor shall make arrangements in advance for an alternate delivery date. The Contractor will contact the NWS office if a delivery is going to be delayed for any other reason.

In the event the Contractor is unable to provide a scheduled delivery, the Contractor is responsible for communicating the shortage to the NWS as soon as possible, but no less than two days prior to the next scheduled delivery. If the Contractor is unable to find a reasonable supply in time to fill the requirement, the NWS reserves the right to purchase hydrogen from another supplier outside of this contract.

Performing Deliveries: The Contractor shall contact NWS personnel at this location when arriving for a delivery. The loading area will remain clear of obstructions and all safety rules shall be followed. Cylinders can be rolled from a truck lift gate to its delivery point. NWS personnel will remain with driver throughout the delivery unlocking and locking doors as needed. NWS personnel will **not** assist with loading or unloading of cylinders.

The Contractor shall ensure the bottles are securely strapped to the stand at delivery and placed in an orderly/neat and clean fashion with cap loose and nozzle facing out. The Contractor shall perform the deliveries in such a manner that there will be minimal interruption to or interference with the normal operation of Government business on the premises.

Evidence of Delivery: The Driver shall provide evidence of delivery by way of receipt signed by an NWS representative at the time of delivery. A copy of the signed receipt shall also be attached to the associated invoice when mailed.

Compliance: If any of the deliveries do not conform to contract requirements (i.e. a delivery results in less than full replenishment of hydrogen to 4,700 CF, or delivery results in unsafe conditions on-site, etc.), the Government reserves the right to require the Contractor to bring the delivery into conformity with contract

requirements within 24 hours' notice, at no increase in contract amount (i.e. without additional delivery charges).

Transition Period: If this contract is awarded to other than the incumbent Contractor, then prior to the first day of the contract, the new Contractor and one of the agency points of contact, listed in section 8 below, shall establish the delivery schedule, including coordinating the initial delivery to coincide with the pickup of cylinders by the former contractor. Likewise, upon completion of this contract, if the new follow-on contract is awarded to other than the current Contractor, the current Contractor shall participate in the transition coordination efforts in order to minimize the risk of a missed balloon launch due to the hydrogen being unavailable at the launch site. The end-of-contract transition period may include a lighter delivery in the final weeks of the contract.

7. SAFETY AND SECURITY

All rules concerning safety, not smoking and the security of the property must be observed at all times.

Safety Data Sheets (SDS) must be provided by the Contractor to the MIC or ASA at each office, where the information will be kept on file in accordance with applicable guidelines of the OSHA Hazard Communications Standard. Requirements pertaining to recordkeeping will be strictly followed, with copy(s) provided to MIC as necessary and upon request.

8. POINTS OF CONTACT

The Government contacts at the NWS office in Rapid City, SD are:

Observation Program Leader – 605-341-7435
Administrative Support Assistant –605-341-9271 x221
Meteorologist In Charge – 605-341-9271 x642

9. INVOICING

The Contractor will invoice in arrears for deliveries and related surcharges. Cylinder rent will be invoiced monthly in arrears. The invoice must include the following items:

- a. Name and address of the contractor, which must be the same as that on the Purchase Order
- b. Invoice date and invoice number
- c. Purchase Order number and associated line item number from the Purchase Order
- d. Description, quantity, unit of measure, unit price and extended price of supplies delivered, and date of delivery
- e. Evidence of delivery by way of receipt signed by NWS representative at the time of delivery
- f. Name (where practicable), title, phone number, and mailing address of person to notify in the event of a defective invoice (a defective invoice is one that does not meet all the above requirements)

The invoices may be sent to the following address:

National Weather Service
Attention: ASA
300 E Signal Drive,
Rapid City, SD 57701
It is best to send invoices by
email. Email to:
karen.maudlin@noaa.gov