

Best Practice Guide Standard for Aquatic Facility Environments (SAFE-D)



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Standard for Aquatic Facility Environments (SAFE-D) Background

Leaders and researchers in environmental health, as well as the public, experience challenges in gathering, comparing, and using information on aquatic facility inspections. There are over 3,000 environmental and public health agencies across the United States, and each agency collects and manages aquatic information in unique processes and files. This variety of processes leads to challenges in analyzing the data collected by each agency.

To address the need for standardizing data across agencies, the Centers for Disease Control and Prevention (CDC) and the National Environmental Health Association (NEHA) partnered to develop a data standard for aquatic facility inspection information. This project was supported by CDC cooperative agreement OT18-1802 Strengthening Public Health Systems and Services through National Partnerships to Improve and Protect the Nation's Health.

To develop the data standard, NEHA gathered aquatic facility inspection data from jurisdictions in four states and reformatted the data into useful datasets. The process took one year to complete. Prior to the data standard, each local government agency used different terms to express the same values and inspection fields for aquatic facility data. This led to thousands of uniquely formatted spreadsheets and datasets, which were challenging to analyze at a state or national level. In addition, 0091o/F1 11.04 Tf1 0 0 1





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Inspections Feed

The inspections feed provides detailed information about the inspections of aquatic facilities and venues. The feed can be divided into three sections:

Information about the facility, including identifier, name, and address information.

Information about the aquatic venue, including venue type and risk categorization.

The details of the inspection, including the final score, any critical violations that were recorded, and other notes. Only critical violations that would cause the venue to fail its inspection are recorded. Others may be included in the notes field.

The records in this file are presented at the inspection level and will be repeated for each inspection, recorded at the time of the inspection. This can also be used to track changes in the venue or facility over time. The Inspections CSV file includes three sets of fields:

Facility Information

The following fields represent a facility that contains one or more aquatic venues. A facility is a location such as an apartment complex, hotel, waterpark, public pool complex, amusement venue, or public park:

Facility ID (optional): The internal identifier, used by the agency supplying the data, for this facility. This can be its license ID, or any other unique identifier.

Facility Name (required): The provided name for the facility.

Facility Address (required): The physical street address of the facility.

Facility Address 2 (optional): If provided, the second line of the street address for the facility.

Facility City (required): The city that the facility resides within.

Facility State (required): The state that the facility resides within, following the ANSI two-letter state abbreviations from INCITS 38:2009.

Facility Postal Code (required): The USPS Zip Code, represented as a 5-digit Zip Code, or a ZIP+4 if available.

Facility County (required): The full name of the county in which the facility resides.

Facility Latitude (optional): The decimal latitude for the facility (may be provided if the location of the facility has been geocoded to a latitude and longitude).

Facility Longitude (optional): The decimal longitude for the facility (may be provided if the location of the facility has been geocoded to a latitude and longitude).



Venue Information

The following fields represent the venue (i.e., the aquatic attraction being inspected):

Venue Type (required): designated type for the venue, which must be one of the following:

- Pool
- Hot Tub / Spa
- Wading Pool
- Interactive Water Play
- Venue Flotation Tank
- Other (i.e., lazy river, water slides and landing pools)

Venue Risk Type (optional): risk type of the venue, using a numeric notation of one through three.

Inspection Results

The bulk of the fields in the feed are those related to the inspection itself. This section includes the details of when and why the venue was inspected, if available, the outcome of the inspection (such as score or pass/fail), and details of any critical violations encountered during the inspection.

Inspection Details

Inspection Date (required): The date and time at which the inspection occurred. If possible, include the time of the inspection, but it is acceptable to provide only a date. This value must be encoded as an ISO 8601 DateTime.

Inspection End (optional): The date and time at which the inspection ended, if recorded. This value must be encoded as an ISO 8601 DateTime.

Inspection Score (optional): If the reporting agency records a score – numeric, letter grade, etc. – for the inspection, it should be provided.

Inspection Purpose (required): the reason for this inspection must be mapped to one of the following values:

- Routine
- Complaint
- Follow-up
- Illness
- Incident
- Other

Inspection Jurisdiction (optional): If multiple jurisdictions are reporting/sharing their inspection data within this feed, include this field to differentiate them. This value must also be present in the Jurisdiction Information Feed, if provided.

Inspection Passed (required): whether the venue passed or failed its inspection (i.e., "True" if the inspection was passed).







Detailed Inspections Schema

Below is a detailed technical schema for the inspections data feed, including datatypes and other details. The file should be named in such a way that it is clear the file represents inspection information.



| Field Name | Description | Data Type | Required? | Formatting Details |
|-------------------------|---|-------------|-----------|--|
| | inspection, but it is acceptable to provide only a date. | | | (hh)(mm)(am/pm) |
| Inspection End | The date and time at which the inspection ended, if recorded | DateTime | Optional | Use ISO8601-compliant dates Ex: Date: MM-DD-YYYY Time: 12-hr clock (hh)(mm)(am/pm) |
| Inspection Score | The final score for this inspection | Text | Optional | Any score format is allowed, but the scoring parameters should be detailed in the metadata CSV |
| Inspection Purpose | The purpose of this inspection | Enumeration | Required | Allowed Values: Routine, Complaint, Follow-up, Illness, Incident, Other |
| Inspection Jurisdiction | If multiple jurisdictions are represented within a feed, include this field to differentiate them | Text | | |



| Field Name | Description | Data Type | Required? | Formatting Details |
|------------|-------------|-----------|-----------|--------------------|
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Detailed Jurisdictions Schema

| Field Name | Description | Datatype | Required? |
|--------------------|---|----------|-----------|
| Inspection Agency | The agency performing inspections for this jurisdiction | Text | Required |
| Jurisdiction Name | Name of the jurisdiction this data file is for | Text | Required |
| Jurisdiction Type | Type of jurisdiction, ex: State, County, City | Text | Required |
| Scoring Minimum | The minimum score possible. Ex: 0, F, etc. | Text | Optional |
| Scoring Maximum | The maximum score possible. Ex: 100, A, etc. | Text | Optional |
| Scoring Passing | The minimum score necessary to pass. Ex: 60, D, etc. | Text | Optional |
| Scoring Regulation | The test of the regulation detailing how inspections are scored | Text | Optional |

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| Field Name | Description | Datatype | Required? |
|---|-------------------------------------|----------|-----------|
| pH Balance Regulation Recirculation Pump Regulation | The text of the detailed regulation | Text | Optional |





