CHAPTER 6—UPDATING AN EMISSIONS INVENTORY QUESTIONNAIRE

This chapter explains how to update a paper EIQ. Review all of the information in this book before attempting to update these forms. For information on completing the EIQ update through the State of Texas Electronic Emissions Reporting System (STEERS), refer to the EAS Web page at <www.tceq.texas.gov/goto/ieas>.

Be certain to review all data in the EIQ for accuracy. Update EIQ items as necessary, using the blank space provided (usually below or to the right of the item), and draw a line through the outdated information. If the EIQ has no blank space for a specific item on the EIQ, write the updated data next to the item, circling or highlighting it if possible. **Important:** The TCEQ will assume that any items left unchanged, including emission rates, are correct for the current EI reporting year and will enter them into the STARS database as part of the current inventory.

The emissions inventory forms and instructions are available online at <www.tceq.texas.gov/goto/ieas>. Any EI forms referred to in this chapter can be downloaded from the website.

Updating EIQ Data

Special Notes

Sample Calculations

30 TAC 101.10(c) requires all regulated entities to submit sample calculations representative of the sources and pollutants from their site. Submit sample calculations showing actual annual emissions determination for each different process type present in the EI, including enough data so that the determination results may be reasonably reproduced. Generic sample calculations cannot be accepted, since they do not contain representative process data and do not demonstrate actual annual emissions determinations.

Use the following guidelines when sending representative calculations:

- When several sources of the same type are present and a **single** calculation methodology was used to determine emissions:
  - Include calculations for the source with the highest emissions.
  - Include typical process data for each source where sample calculations are not supplied.
- When several sources of the same type are present but **different** calculation methodologies were used to determine emissions:
  - Include calculations for the source with the highest emissions for each calculation methodology.

- Include typical process data for each source that uses a different calculation methodology for which sample calculations are not supplied.

Examples of typical process data include heat inputs and fuel types for combustion sources and chemical types and throughputs for storage tanks and loading sources.

Use Permanent Ink

Please use permanent ink instead of pencil when updating the EIQ. Pencil tends to smudge and can be difficult to read, increasing the chance of data-entry errors or omissions. Permanent ink, especially ink in colors other than black, is clearer and more legible. There are no restrictions on ink color, but colors other than black make EIQ updates more noticeable.

Printing the EIQ

The TCEQ no longer mails hard copies of the EIQ. A printable version of the EIQ is available through the Integrated Web Reporting System at the Central Registry website <www12.tceq.texas.gov/crpub/>. Instructions for navigating the Central Registry website and downloading an EIQ formatted for printing are available at <www.tceq.texas.gov/goto/eiqprint> (opens a PDF file). If the owner or operator makes a copy of the completed EIQ for submission, make sure it is printed on only **one** side of each page (do not duplex). **When submitting a paper EIQ, please send only *one* copy to the EAS.**

Note: When printing the EIQ using the Central Registry's Integrated Web Report, the previous reporting year will appear on the EIQ pages. The EIQ referenced is a historical report containing the latest data as entered in STARS. To update, cross out the previous year on page 2 of the EIQ and write the current reporting year. It is not necessary to update the year for subsequent EIQ pages.

1 *Account Information*

General information on the regulated entity is printed at the top of the EIQ's second page, as shown in the example in Figure 6-1, section 1A. For a detailed description of the items in this section, consult the EAS Web page <www.tceq.texas.gov/goto/ieas> on completing an Account Information form.

To make changes to the company name, site name, or site centroid coordinates, draw a line through the incorrect information, and provide the updated information in the corresponding blank. To make any significant changes to any of the other account information, complete a Core Data Form at <www.tceq.texas.gov/assets/public/permitting/centralregistry/10400.pdf> and send it to the TCEQ.

1 *Emissions Inventory Contact Information*

EI contact information is printed at the bottom of the EIQ's second page, as shown in Figure 6-1, section 1B. For a detailed description of the requirements concerning EI contact information, consult the EAS Web page. To correct any of the information in this section, draw a line through the incorrect information and enter the updated information in the blank, or complete and submit the Contact Information form.

TCEQ Emissions Inventory Questionnaire Page: 2

1

ACCOUNT INFORMATION EIQ Year: 2011
RN:RN123456789 _____ Account:HG6789X _____
Company: JOHNSON GAS COMPANY _____ Last EI Date: 12/31/2010
Company is Owner/Operator: BOTH__ Site Independently Owned (Y/N): Y _ No. of Employees: __
Site Name: CREEK COMPRESSOR STATION _____
Primary SIC: 1311- CRUDE PETROLEUM AND NATURAL GAS _____
Secondary SIC: _____
Location: TWO MILES SOUTHWEST OF CORBIN ON FM2345 _____
Near City: HOUSTON _____ County: HARRIS _____ Region:12 ____
UTM Zone: 15 ____ Latitude: 155258 _____
UTM North Meters: 1~~756493~~ **3225729** Longitude: 942521 _____
UTM East Meters: ~~347693~~ **208957** _____
Site Status: O _____ Oper Schedule:24___hr/day, 7___da/wk, 52__wk/yr Tot Oper Hrs: 8760__
Seasonal Operating Percentages (NOTE: Spring%+Summer%+Fall%+Winter% must be equal to 100%)
Spring: 25%_____ Summer: 25%_____ Fall: 25%_____ Winter: 25%_____

1

EMISSIONS INVENTORY CONTACT INFORMATION
Name: CODY MCLAIN _____ Title: ENVIRONMENTAL COORDINATOR _____
Mailing Address: ~~11783 CANYON BLUFF DRIVE~~ **P.O. BOX 13087**

City: AUSTIN _____ State: TX _____ Zip Code:78753-0001 **78711-3087**
Bus Phone: (512)555-1144_____ Fax: (512) 555-1515_____ Email: CMCLAIN@JGC.COM_____

PLANT CONTACT INFORMATION
Name: ~~MATOAKA JOHNSON~~ **I.M. BOSS** Title: ~~PRESIDENT~~ **PLANT MANAGER**
Mailing Address: ~~PO BOX 2575~~ **P.O. BOX 13087**

City: AUSTIN _____ State: TX _____ Zip Code: ~~78753-2575~~ **78711-3087**
Bus Phone: ~~(512)555-114~~4 **(512) 239-1773** Fax:(512)555-1515_____ Email: ~~M@JGC.COM~~ **BOSS@JGC.COM**

Figure 6-1. Sample EIQ Page for Account Information and Emissions Inventory Contact Information

2 Criteria Emissions Totals

This section contains five columns for emissions reporting: *Annual*, *Ozone*, *EE* (Emissions Events), *SMSS* (scheduled maintenance, startup, and shutdown activities), and *EE/SMSS* (totals from EE and SMSS emissions). An example appears in Figure 6-2, section 2A. There are seven rows, each representing a criteria pollutant. Each column contains two subcolumns: one with a printed number and one with a blank. The printed number is the site-wide emissions total reported on the most recently submitted EI. In the blank to the right of that number, enter the site-wide emissions total for the current EI and **do not** draw a line through the printed emissions totals.

The VOC totals only include emissions from volatile organic compounds. Emissions from non-reactive hydrocarbons such as acetone must not be included in the VOC totals. NO_x emissions are reported under contaminant code *70400* (nitrogen oxides). For EI purposes, the total NO_x emissions include emissions reported under contaminant codes *70400* (nitrogen oxides), *70401* (nitric oxide), and *70402* (nitrogen dioxide). Emissions reported under contaminant code *70403* (nitrous oxide) must not be included in the NO_x totals.

Note that these reported emissions totals are not entered into STARS. The reported totals are used for comparison to ensure that STARS correctly sums the emissions reported within the EIQ itself. Emissions reported in the "Criteria Emissions Totals" section must also be reported at the appropriate paths within the EIQ.

For a thorough discussion of the elements of this section, please consult Chapter 4, "Determining and Reporting Emissions," and the form instructions at the EAS Web page for instructions on completing an Account Emissions form.

2 Site Quantifiable Event Totals

Site quantifiable event totals are reported in this section, as shown in the example in Figure 6-2, section 2B. The total number of reportable and non-reportable emission events; reportable and non-reportable scheduled maintenance, startup, and shutdown activities; and excess opacity events are required to be reported each year per 30 TAC 101.201 and 101.211. An explanation of each type of event follows.

Total Number of Reportable Emission Events is the total number of emission events that resulted in unauthorized emissions equal to or in excess of the reportable quantity (RQ) for any individual air contaminant. These events should have been reported previously to the TCEQ as required by 30 TAC 101.201.

Total Number of Non-Reportable Emission Events is the total number of emission events that did not result in unauthorized emissions equal to or in excess of the RQ for any individual air contaminant.

Total Number of Reportable Scheduled Maintenance, Startup, and Shutdown Activities is the total number of SMSS activities that resulted in unauthorized emissions equal to or in excess of the RQ for any individual air contaminant. These activities should have been reported previously to the TCEQ as required by 30 TAC 101.211.

Total Number of Non-Reportable Scheduled Maintenance, Startup, and Shutdown Activities is the total number of SMSS activities that did not result in unauthorized emissions equal to or in excess of the RQ for any individual air contaminant.

Total Number of Excess Opacity Events is the total number of excess opacity events where the opacity readings equaled or exceeded 15 percentage points above an applicable opacity limit, averaged over a six-minute period.

Enter the total number of each type of event in the blanks provided. If there were no events of a particular type, enter zero in the space provided. For additional information on completing this section, consult the Account Emissions form instructions at the EAS Web page. For guidance on interpreting rules concerning EE and SMSS activities, contact the TCEQ regional office where the regulated entity is located.

TCEQ Emissions Inventory Questionnaire Page: 3

ACCOUNT INFORMATION EIQ Year: 2011
RN: RN123456789 Account: HG6789X
Company: JOHNSON GAS COMPANY Last EI Date:12/31/2010

2

CRITERIA EMISSIONS TOTALS

Class	Annual(TPY)/Current	Ozone(PPD)/Current	SMSS(TPY)/Current	EE(TPY)/Current	EE/SMSS(TPY)
PM10	0.0000/ 4.0700	0.0000/ 22.1196	0.0000/_____	0.0000/_____	0.0000
PB	0.0000/_____	0.0000/_____	0.0000/_____	0.0000/_____	0.0000
SO2	0.0000/143.6177	0.0000/780.5310	0.0000/_____	0.0000/_____	0.0000
NOX	0.0000/ 138.49	0.0000/752.6630	0.0000/ 1.2050	0.0000/_____	0.0000
CO	0.0000/220.909	0.0000/1200.5924	0.0000/ 2.3498	0.0000/_____	0.0000
VOC	0.0000/44.2613	0.0000/ 240.5505	0.0000/_____	0.0000/_____	0.0000
PM2.5	0.0000/ 4.0700	0.0000/ 22.1196	0.0000/_____	0.0000/_____	0.0000

2

SITE QUANTIFIABLE EVENT TOTALS

Note:
Report TOTAL NUMBER of each event type for the reported EIQ Year per 30 TAC Sections 101.201 and 101.211.

Reportable Emission Events: 3
Non-Reportable Emission Events: 5
Reportable Scheduled Maintenance, Startup, and Shutdown Activities: 0
Non-Reportable Scheduled Maintenance, Startup, and Shutdown Activities: 2
Excess Opacity Events: 0

Figure 6-2. Sample Account Emissions EIQ Page

3 Emissions Events Certifying Signature

Page four of the EIQ contains two signature sections. The first is an Emissions Events Certification, as shown in the example in Figure 6-3, section 3A. Under Texas Health and Safety Code 382.0215(f), an owner or operator of a regulated entity that experienced no emissions events during the relevant calendar year must include, as part of the reported inventory, a signed statement certifying that the regulated entity experienced no emissions events during the reporting year.

The certification is also required for regulated entities that experienced one or more excess opacity events but did not experience any emissions events.

3 Signature of Legally Responsible Party

Per 30 TAC 101.10(d), a complete inventory requires the signature of the individual responsible for certifying that the inventory is, to the best of his or her knowledge, accurate and complete. Fill in all of the blanks on this portion of the EIQ, as shown in Figure 6-3, section 3B.

For additional guidance regarding the definition of the legally responsible party, please consult 30 TAC 122.165, Certification by a Responsible Official.

Note that the legally responsible party **must not** be a consultant.

TCEQ Emissions Inventory Questionnaire Page: 4

ACCOUNT INFORMATION EIQ Year: 2011
RN: RN123456789 Account: HG6789X
Company: JOHNSON GAS COMPANY Last EI Date:12/31/2010

3

Emissions Events Certification

Pursuant to Texas Health and Safety Code 382.0215(f). I do hereby certify that 'NO Emissions Events' were experienced at this account during the Emissions Inventory Reporting Calendar year.

Signature _____

3

Signature of Legally Responsible Party

I do hereby certify that information reported in this inventory is true, accurate, and fully represents the emissions that occurred during the Emissions Inventory Reporting Calendar year to the best of my knowledge.

I.M. Boss	PLANT MANAGER	(512) 239-1773
Signature	Title	Phone
I.M. BOSS	2/28/2011	(512) 555-1515
Printed Name	Date	Fax

Figure 6-3. Sample Account Information Certification EIQ Page

Facility Information

Descriptions of most of the items in this section, along with information on accepted values, may be found in the instructions for each relevant Facility Information form. The forms and instructions can be downloaded from the EAS Web page. The following discussion focuses on updating facility data.

If corrections to any of the information in this section are necessary, draw a line through the incorrect information and supply the updated information in the corresponding blank, as shown in Figure 6-4, sections 4A through 4G. A discussion of each section follows.

4

Source Classification Code (SCC)

A facility's SCC is an **eight-digit** EPA-developed code that associates emissions determinations with identifiable industrial processes. The TCEQ uses a facility's SCC for modeling, rulemaking, and SIP-related activities; therefore, a facility's SCC must be as accurate as possible.

The EPA maintains a current list of SCCs under the link "EIS Code Tables (including SCCs)" at <www.epa.gov/ttn/chief/eiinformation.html>. When using this file, only use the codes that have a value of "POINT" in the "Data Category" column, as only those codes are appropriate for the point source EI. Please do not enter SIC (Standard Industrial Classification) codes or AMS (area and mobile source) codes for SCCs on the EIQ.

4

Status, Status Date

If the facility's status has changed, enter the appropriate letter and enter the date when the status changed. Status options are:

- **A** (active): If the facility operated for any portion of the reporting year.
- **I** (idle): If the facility was idle or temporarily shut down for the entire reporting year.
- **S** (shut down): If the facility has been permanently shut down and will never operate again. **Note that a facility, once shut down, cannot be reactivated in the STARS database.**
- **D** (demolished): If the facility has been removed from the site.
- **N** (permitted but never built).
- **O** (ownership transferred to a new party): If the facility has been sold, or if responsibility for it has been transferred to another owner, during the reporting year. Supply the new owner's TCEQ air regulated entity reference number.

4 4

Operating Schedule and Annual Operating Hours

These fields must reflect a facility's **actual** annual operating schedule and operating hours, **not** maximum potential hours of operation. Update these fields every reporting year with actual annual data for the facility.

If a facility's operating schedule is inconsistent throughout the reporting year, enter the actual number of weeks that the facility operated in the "Weeks per Year" blank, and enter average data for the fields "Days/Week" and "Hours/Day."

4

Seasonal Operating Percentages

Seasonal operating percentages represent the percentage of actual annual facility operations that occurs during each season. These percentages are normally based upon process rate data. For EI purposes, "spring" includes March through May; "summer" includes June through August; "fall" includes September through November; and "winter" includes January, February, and December of the same calendar year. The percentages must be reported as whole numbers (no decimals) and must sum to 100. Note that the ozone season no longer represents the same time period as "summer", but STARS treats them as such. Therefore, if a facility operated during the ozone season but not during the summer months, enter a nonzero summer percentage (e.g., *1%*) and report the ozone season emissions.

4 4

FIN Group Type, Profile, and Characteristics

In STARS, every facility has a group type associated with it; a list of current group types is available in Table 6-1. These group types also appear on the Facility Information forms. Associating each facility with a group type allows the TCEQ to collect data on sources of interest, and also facilitates data retrieval.

If the facility's group type or profile appears incorrect, consult Table 6-1. Most of the group types are self-explanatory; for examples of facility types that belong to each group, refer to the associated profiles.

If the facility has an incorrect group type or profile (for example, a flare has a group type of "equipment leak fugitive"), correct the group type and profile on the EIQ itself. Next, complete the appropriate Facility Information form to update the facility information; in our example, a Facility Information for Combustion Unit—Flare Profile form will be necessary. To avoid any confusion, the word "update" must appear at the top of the form.

For more information about the characteristics associated with each profile, please identify the facility-appropriate group type, and then consult the instructions for completing the relevant facility form at the EAS Web page. For example, if additional information is needed for a cooling tower's characteristics, consult the instructions for completing a Facility Information for Cooling Towers form.

Table 6-1. STARS Facility Group Types, Profiles, and Characteristics

Group	Profile	Characteristics
Cleaning	Dip degreasing Vapor degreasing Barge cleaning Railcar cleaning Tank truck cleaning Other	Not applicable
Combustion	Flare	Design capacity in MMBtu per hour Assist type (steam, air, or none) Service type (process, emergency, or both) HRVOC Service? (yes or no)
	I.C. engine	Number of cycles (two or four) Burn type (rich or lean) Design capacity in MMBtu per hour Engine rating in horsepower
	Boiler, dryer, furnace, heater, incinerator, kiln, oven, turbine, thermal oxidizer, other	Design capacity in MMBtu per hour Firing type
	Fluid catalytic cracking unit (FCCU)	Not applicable
	Boiler—Electric Generation I.C. Engine—Electric Generation Turbine—Electric Generation	Design capacity in MMBtu per hour Firing Type Power Generation Capacity in MW

Group	Profile	Characteristics
Coating or printing	Coating or printing	Not applicable
Cooling tower	Cooling tower	Design flow rate in MMgal per day Draft design type (natural or mechanical) Number of cells Sampling schedule Sample tested for VOCs? Sampling data used to calculate emissions? HRVOC Service? (yes or no)
Equipment leak fugitives (Leaking component fugitives)	Equipment leak fugitives	Emissions determination methodology* Leak detection and repair program* % VOC in Stream* Monitoring equipment data* ** refer to the Facility Information for Component Fugitives form*
Loading	Railcar Tanker truck Railcar / tanker truck Marine Other	Not applicable
Other	Other	Not applicable

(continued)

Table 6-1. STARS Facility Types, Profiles, and Characteristics, continued

Group	Profile	Characteristics
Tanks	Horizontal fixed roof Vertical fixed roof Internal floating roof Pressure tank Underground tank External floating roof: double deck, single seal External floating roof: double deck, double seal External floating roof: pontoon, single seal External floating roof: pontoon, double seal Domed external floating roof: double deck Domed external floating roof: pontoon Other	Refer to the Facility Information for Storage Tanks form.
VOC process	Analyzer Blowdown operations Delayed coker unit Flexi coker unit Glycol still Polyethylene unit Polypropylene unit Mixing vessel Reactor Other	Not applicable

Group	Profile	Characteristics
Wastewater	Wastewater system	Flow model (flowthrough or disposal) Aeration (diffused air, mechanical or none) Biodegradation mechanism (biodegradation, activated sludge, or none) Design type (surface, subsurface, or other) Depth Surface area Flow rate in MMgal per day
Wastewater	Basin Clarifier Closed sump Lift station Open sump Reactor Stripper Separator Other wastewater component	Not applicable

FIN: ENGINE1 EPN: VENT
Comment: ~~STANDBY UNIT FOR 2005~~

FACILITY INFORMATION

FIN: ENGINE1 Facility Name: ~~COMPRESSOR ENGINE NUMBER 1~~ Plant ID:
_____ **Internal Combustion Engine 212** **PROCESS 1**

Comment
OPERATED AT 1650 HP in 2011

4 SCC: ~~20200254~~ **20200253** Description: INDUSTRIAL NATURAL GAS 4-CYCLE LEAN BURN

4 Status: ~~I~~ **A** Status Date: ~~1/1/2006~~ **1/1/2011** Operating Schedule: 20__hrs/day, 7 __days/wk, 52__wks/yr 4

4 Annual Operating Hours: ~~0~~ **7280** Percentage Max Capacity: ~~0~~ **88** Start Time: 0600 _____

4 Seasonal Operating Percentages (NOTE: Spring % + Summer % + Fall % + Winter % must be equal to 100%)
Spring: 30%_____ Summer: 29%_____ Fall: 31%_____ Winter: 10%_____

4 Group Type: COMBUSTN
Profile: I.C. ENGINE

4

Characteristic	Value	Unit	Characteristic	Value	Unit
BURN TYPE	RICH	----	CYCLE	4	----
DESIGN CAPACITY	~~5.44~~ **160**	MMBTU/HR	ENGINE RATING	**2085**	
FIRING TYPE	OT				

Figure 6-4. Sample Facility Information EIQ Page

Control Device Information

Descriptions of the items in this section, along with information on accepted values, appear in the instructions for completing the Abatement Device Information form. If corrections need to be made to any of the information in this section, draw a line through the incorrect information and provide the updated information in the corresponding blank, as shown in Figure 6-5, sections 5A through 5E.

For each abatement device, verify that:

5

- 5 the abatement code and number of units are correct,
- 5 the percentage of time offline is reflected in annual emissions determinations,
- 5 the inspection and maintenance (I/M) schedule is accurate, and
- 5 the stated abatement efficiencies are accurate.

For abatement devices that can also be considered facilities, such as combustive abatement devices, ensure that these devices are not abating their own emissions. Abatement devices cannot abate themselves.

```
RN: RN123456789      Account: HG6789X
Company: JOHNSON GAS COMPANY                                          EIQ Year: 2011


FIN: ENGINE1       EPN:  VENT
Comment: STANDBY UNIT FOR 2005
-------------------------------------------------------------------------------------------
CONTROL DEVICE INFORMATION
-------------------------------------------------------------------------------------------
*CIN: CAT       Name:  CAT 001
     ______            ____________________________________________________________________

5    Abatement Code:631 ____  Desc: CATALYTIC REDUCTION
                                                                  5
5    No. Of Units:1 ___ Annual Operating Hrs: 7280 ___ % Time Off Line: 0 ___ IM Schedule: Q ___   5
5    Control Efficiencies:
       VOC: 50.00%_____        NOX: 92.00%_____        CO: 90.00%_____       IOC:  0.00%_____
       TSP:  0.00%_____       PM10:  0.00%_____       SO2:  0.00%_____     C1-C3:  0.00%_____
       C4+:  0.00%_____        H2S:  0.00%_____       NH3:  0.00%_____
```

Figure 6-5. Sample Control Device Information EIQ Page

Parameters for Emission Points

Descriptions of most of the items in this section, along with information on accepted values, may be found in the instructions for completing the relevant Emission Point Information form. If corrections need to be made to any of the information in this section, draw a line through the incorrect information and update the information in the corresponding blank, as shown in Figure 6-6, sections 6A through 6C.

6

Emission Point Coordinates

Accurate coordinates for each emission point are essential to urban airshed modeling activities. All UTM and latitude-longitude coordinates must be expressed in the North American Datum of 1983 (NAD83) coordinate system and all latitudes and longitudes must be expressed as degrees, minutes, and seconds (in the format *DDMMSS*).

Verify that each emission point has accurate coordinates; for most nonfugitive emission points, these coordinates must be unique. Also, verify that the site centroid, printed on page 2 of the EIQ, is correct.

6

EPN Profiles

In STARS, every emission point has a profile associated with it, currently, *stack*, *flare*, or *fugitive*. Associating each emission point with a profile allows the TCEQ to collect data on sources of interest and facilitates data retrieval.

If the emission point profile is incorrect, draw a line through the printed profile on the EIQ and write in the correct profile.

6

EPN Parameters

Accurate emission point parameters are essential to urban airshed modeling activities. Emission point parameters must represent **actual** stack, fugitive, or flare parameter values, not values for permit modeling purposes. Verify that all emission points have accurate, actual parameter values.

If the EPN profile was corrected, fill out the appropriate Emission Point Information form. Write “updated” at the top of the form. The parameter data may also be corrected by writing the information directly on the EIQ.

```
FIN: ENGINE1       EPN:  VENT
Comment: STANDBY UNIT FOR 2005.
-------------------------------------------------------------------------------
EMISSION POINT INFORMATION
-------------------------------------------------------------------------------
 EPN:VENT  _______________   Point Name: ENGINE 1 VENT_______________________________

6  UTM Zone: 15 _________                          Latitude: 155258 _______________
   UTM North Meters: ~~1756493~~  3225729          Longitude: 942521 _______________
   UTM East Meters: ~~347693~~  208957

6  Profile: ~~FUGITIVE~~  STACK

6  Characteristic        Value       Unit
   ---------------------------------------------
   DEGREES               ~~36~~      ~~DEGREES~~    DIAMETER    2.5    FEET
   HEIGHT                ~~1~~       ~~FEET~~       HEIGHT      40     FEET
   LENGTH                ~~55~~      ~~FEET~~       HORDSCHG    N
   OFNORTH               ~~E~~       ~~----~~       MOISTURE
   WIDTH                 ~~89~~      ~~FEET~~       TEMP        813    DEG F
                                                    VELOCITY    8.3    FT/SEC
```

Figure 6-6. Sample Emission Point Information EIQ Page

7 Total Aggregate Annual Heat Input

For combustion units, enter the total heat value (in MMBtu) of all fuels that the facility combusted during the year, as shown in Figure 6-7, section 7A. **This value must be entered every year. It is not carried over from the previous year.** When the facility has multiple emission points, do not divide the heat input between paths. Instead, sum the individual heat inputs and report the total annual aggregate heat input for the unit.

To determine the total aggregate annual heat input, first determine the heat input for **each** fuel that the facility combusted during the year by multiplying the fuel's gross heating (calorific) value (in Btu/lb) by the fuel's annual feed rate (in lb/year). Next, sum these individual annual heat inputs for all fuels combusted during the year, and convert from Btu to MMBtu to obtain the total aggregate annual heat input (in MMBtu/year).

7 Emissions Factors

In the spaces provided, supply the emissions factors that were used to determine the emissions for each individual FIN/EPN path. In the far right column, enter the source of the emissions factor. This is shown in Figure 6-7, section 7B.

To promote consistency among similar emissions sources, the TCEQ requests that the NO_x emissions factors be based upon the following process-rate data. Examples of the preferred process-rate-based NO_x factors include:

- lb/MMBtu (boilers, furnaces, heater, and turbines)
- g/hp-hr or lb/MMBtu (all engines)
- lb of NO_x/ton of clinker (cement kilns)
- lb of NO_x/ton of calcium oxide (lime kilns)
- lb of NO_x/ton of product (lightweight aggregate)
- lb/Mgal (liquid-fired boilers)
- ppmv @ 0% O_2 (FCCUs)

If a NO_x factor is reported as a lb/hour (or similar) rate, use the factor and the process rate at the time of testing to obtain a process-based emissions rate. For example, for combustion sources, divide the lb/hour emission rate by the MMBtu/hour fuel-usage rate to obtain a factor with units of lb/MMBtu. Similarly, for cement kilns, divide the lb/hour emission rate by the tons of clinker/hour to obtain a factor with units of lb/ton of clinker.

If the process-rate-based NO_x factor from a CEMS or PEMS cannot be obtained, calculate one by converting the reported tons/year of NO_x to

lb/year, and then divide the result by the MMBtu/year heat input to obtain an NO_x factor in units of lb/MMBtu.

Ensure that a NO_x emissions factor has been entered for every NO_x source on the "Emissions Factor" portion of the EIQ. **This value must be entered every year. It is not carried over from the previous year.** *Note:* The factors must account for any controls. If controls exist, the reported NO_x emission factor must not be an uncontrolled factor.

In cases where multiple NO_x emissions factors exist (e.g., when the facility burns multiple types of fuel), either report a single weighted average NO_x factor, or report separate factors for each type of fuel.

Updating Reported Emissions

Detailed discussion of the Path Emissions form can be found at the EAS Web page. The following discussion focuses primarily on updating emissions data for each path.

Updated emissions must be reported on the appropriate EIQ forms. **The TCEQ does not allow the submission of spreadsheets in lieu of completed EIQ forms.** If the emissions information in this section needs to be updated, supply the updated information in the corresponding blank, as shown in Figure 6-7, sections 7C through 7H.

7 Determination Methodology

The determination methodology represents the method used to determine the reported emissions. Acceptable methods are described in Chapter 4.

Verify an emissions rate's determination methodology every year, updating the methodology as needed with the correct code under the "Method" heading (on the Path Emissions portion of the EIQ). To obtain the code for a particular EIQ determination methodology, consult the appropriate heading in Chapter 4.

7 Annual Emissions

For annual emissions, report total annual emissions for the year during routine operations for all contaminants emitted, quantified in tons. Annual emissions must not include emissions from emissions events or schedule maintenance, startup, and shutdown activities that are not authorized by a new source review permit or permit by rule. However, annual emissions must include authorized emissions from maintenance, startup, and shutdown activities. Ensure that all criteria emissions totals (as updated on page 3 of the EIQ) are included as path emissions within the body of the EIQ.

Update annual emissions under the "Path Emissions" portion of the EIQ. The printed numbers in this section reflect the emissions rates submitted on the most recent inventory. Enter the new rates in the space provided; only **one** rate may be entered per blank. If no update is made in the blank

provided, the TCEQ will not enter the rate as zero but instead will apply the printed rate for the current EI year. If the rate needs to be updated to zero, the owner or operator must enter a zero in the blank. Crossing out the previous rate or putting a line in the blank will not cause the emissions to be entered as zero.

7

Ozone Season Emissions

For ozone season emissions, report actual emissions during the ozone season, measured in pounds per day. Recall that the ozone season is defined in Chapter 4, "Determining and Reporting Emissions". Ozone season emissions are mandatory for all regulated entities in El Paso County and for all regulated entities in any county east of the Central Meridian. These counties are listed in Table 4-5. The EAS database can no longer automatically calculate ozone season rates.

The printed numbers in this section reflect the emissions rates submitted for the most recent inventory. Enter the new rates in the space provided; only one rate may be entered per blank. If no update is made in the blank provided, the rate will not be entered as zero; instead, the TCEQ will apply the printed rate for the current EI year. If the rate needs to be updated to zero, the owner or operator must enter a zero in the blank. Crossing out the previous rate or putting a line in the blank will not cause the emissions to be entered as zero.

7

Scheduled Maintenance, Startup, and Shutdown (SMSS) Activities

Report emissions from scheduled maintenance, startup, and shutdown activities that are not authorized by a new source review permit or permit by rule in the "SMSS" column, using the blanks provided. Emissions from maintenance, startup, and shutdown activities that are authorized under a permit or permit by rule must not be included in the "SMSS" column. Instead, these emissions must be reported in the "Annual" column. For more information on SMSS emissions, see Chapter 4.

Note: When printing the EIQ using the Central Registry's Integrated Web Report, the EE and SMSS emissions from the previous EI are shown. Please update these emissions as well.

7

Emissions Events (EE)

Report emissions from emissions events in the EE column, using the blanks provided. For more information on emissions events, see Chapter 4, "Determining and Reporting Emissions."

Note: When printing the EIQ using the Central Registry's Integrated Web Report, the EE and SMSS emissions from the previous EI are shown. Please update these emissions as well.

EE/SMSS Column: Reporting Guidelines

As outlined in the previous section, emissions from emissions events and/or SMSS activities must be reported in either the EE or SMSS column, as appropriate. **If an owner or operator reports emissions in the "EE/SMSS totals" column, he or she must also report emissions in the "EE" or "SMSS" columns, or both, as appropriate.**

7I

Adding Emissions Rates

To add an emissions rate to the EIQ, the owner or operator will need to identify a contaminant code. Contaminant codes are unique five-digit codes associated with individual contaminants. An updated list of contaminant codes is available at the EAS Web page.

To report emissions of a contaminant not printed on the form, simply add the following below the last printed entry:

- the contaminant code;
- the determination methodology; and
- the associated annual, ozone, EE, and SMSS emissions rates (as applicable).

If numerous contaminants need to be added that will not fit on the EIQ page itself, an additional Path Emissions form must be submitted with the appropriate information. On the form, write "Additional contaminants being added to an existing path."

If a contaminant does not appear to have a contaminant code, try electronically searching for the contaminant's Chemical Abstracts Service (CAS) number in the list at the EAS Web page. If a search by CAS number fails, contact the EAS for assistance; be sure to have the chemical's name and CAS number readily available.

Emissions Rates: Numeric Format

STARS cannot accept emissions rates beyond four decimal places. Emissions rates that extend beyond four decimal places must be rounded as appropriate. Under no circumstances may scientific notation be used when reporting emissions rates, as data in this numeric format cannot be entered into STARS.

Only one emissions rate can be entered per blank. STARS does not support the routine reporting of emissions rates for periods of less than one year, such as quarterly emissions rates.

Changing FIN and EPN Designations

The TCEQ does not normally change FIN or EPN designations, due to the historical nature of emissions data. Exceptions to this policy will be made to correct errors or to align EI nomenclature with permit nomenclature. If revisions to FIN or EPN designations are necessary, please submit a

Revision Request form and give a reason for the requested revisions. Include any applicable supporting information, such as a copy of the Maximum Allowable Emissions Rate Table (MAERT). Note that the TCEQ reserves the right to approve or disapprove all such revision requests. Additional information about the Revision Request form is available in the instructions at the EAS Web page.

FIN: ENGINE1 EPN: VENT
Comment: STANDBY UNIT FOR 2005

EMISSIONS FACTORS

7 Total Annual Aggregate Heat Input: 1,164,800 MMBTU (Combustion Units Only)

7

Criteria Pollutant	Emissions Factor	Emissions Factor Units	Reference/Source
VOC	0.0296	lb/MMBtu	AP-42
NOX	2.21	lb/MMBtu	AP-42
CO	3.72	lb/MMBtu	AP-42
SO2	0.000588	lb/MMBtu	AP-42
TSP	0.01941	lb/MMBtu	AP-42

EMISSIONS INFORMATION

7 7 7 7 7 7

Code	Cas #	Contaminant	Method	Annual(TPY)	Ozone(PPD)	SMSS(TPY)	EE(TPY)	EE/SMSS
10000	0	PART-U	A	0.0000	0.0000	0.0000	0.0000	0.0000
				11.3044	71.2668			
20000	0	PM10 PART-U	A	0.0000	0.0000	0.0000	0.0000	0.0000
				11.3044	71.2668			
50001	0	VOC-UNCLASSIFIED	A	0.0000	0.0000	0.0000	0.0000	0.0000
				3.6749	23.168			
70400	0	NITROGEN OXIDES	A	0.0000	0.0000	0.0000	0.0000	0.0000
				1287.1040	8114.3513			
70510	0	SULFUR DIOXIDE	A	0.0000	0.0000	0.0000	0.0000	0.0000
				0.3425	2.1589			
90300	0	CARBON MONOXIDE	A	0.0000	0.0000	0.0000	0.0000	0.0000
				2166.5280	13658.5461			
39999		$PM_{2.5}$	A	11.3044	71.2668	0.0000	0.0000	0.0000
51680		Formaldehyde	A	11.9392	75.2689	0.0000	0.0000	0.0000

7I

Figure 6-7. Sample Path Emissions EIQ Page