Frequently Asked Questions
The allowable emissions at my site are incorrect, how can I fix these?

Please disregard the allowable emission estimates. DEEP is aware that they are incorrect and is working with our consultant, who created EMIT, to correct these errors.

What do I do if the activity units for Annual and Daily Usages or emission factors units are wrong?

If the activity or emission factor units are wrong, contact the Help desk. If you are not sure what the correct activity units or emission factor units are but suspect that they are wrong in EMIT, you may refer to a previously submitted emission statement to see what the correct units are for the source/SCC in question. If there are errors in the activity units please select the Notes Tab above and type in "The activity units and emission factor units are incorrect they should be…". We strongly encourage you to submit your emission statement electronically and then print out the emission statement report and make edits where the activity units are incorrect using a red pen. Mail in the marked up report and attach a signed certification page. The Emissions Inventory Group will recognize this hardcopy report with corrections as an amendment to your electronic submittal. We very much appreciate you submitting your data electronically, even if you are mailing in an amended report. This helps us process your emission statement much faster.

Do I have to report every source listed in my Title V permit?

Sources at your site that meet the following requirements, should be reported on your annual emission statement:
   a) Sources in Table II.A of your title V permit with source specific requirements

   b) Sources operating under a permit-by-rule limit, (i.e. 3b or 3c)

   c) Any new source that has been added to your site since your Title V permit was issued, that has source specific requirements (i.e. is subject to a New Source Review Permit (NSR), or section 3b or 3c of our regulations, NOx RACT, VOC RACT, etc.)

   d) Sources already identified at your site in the DEEP inventory

   e) Each source or group of similar sources not covered in a) through d), for which the Permittee is subject to State or Federal air regulations requiring periodic recordkeeping of fuel or material consumption and, that emit greater than or equal to 0.5 tons/yr. of actual annual emissions of any one of the following pollutants: NOx, SO2, CO, PM10 primary, VOC or lead during the reporting period,

   - **This does not include equipment and activities that would be categorized as Trivial Activities in accordance with White Papers 1 and 2, which can be found here:** EPA White papers, **or a source listed and defined as an Insignificant Emissions Unit in section VI of the Title V application.**

o For example, if you have 3 boilers that collectively emit greater than or equal to 0.5 tons/yr. of actual annual emissions of any one of the pollutants listed above, then these three sources should be reported as a group. Here is a more detailed example; a group of similar sources would not meet this specific reporting criteria if, on an annual basis, they collectively emitted 0.4 tons of NOx, 0.2 tons of SO2, 0.1 tons of CO, 0.1 tons VOC, 0 tons PM10 primary, and 0 tons Lead. Similar sources can be reported as a group if they are not subject to source specific requirements listed in Table II.A of your Title V permit. When reporting emissions from a group of similar sources, please maintain a record of how and for which sources these emissions were calculated.

NOTE: When reporting VOC emissions for small unpermitted, unregistered sources, remember it is our primary intent to have an accurate estimation of total VOCs reported for each source or group of sources meeting the reporting criteria. A corresponding representation of HAP emissions should be included if the HAP emissions reporting does not represent a significant burden to the Permittee.

- For Major Sources of HAPs you may report the emissions of just the highest HAP constituent(s) from that source or grouping of sources as the equivalent of Total VOC from that source or grouping of sources.

- For Minor sources of HAPS, that are close to a Major HAP source threshold, and have been avoiding MACT requirements by claiming that potential emissions are below an applicable threshold, there should be a rigorous accounting of HAPs, even from these small sources. To reduce burden, you may report emissions for just the highest HAP constituent(s) in the VOC emissions from that source or grouping of sources as the equivalent of Total VOC from that source or grouping of sources. If there are multiple HAPS that are emitted in quantities close to a Major HAP threshold, then you should demonstrate that each of these individual HAPs aren't triggering any applicable requirements.

f) You need not report emissions for any source or group of sources that satisfy d.) above, and have not emitted at least 0.5 tons/yr. of actual annual emissions of any one of the following pollutants: NOx, SO2, CO, PM10 primary, VOC or lead during each of the last 3 calendar years.

NOTE: For each source or group of sources in EMIT for your site, that meet the specific criteria in this section f), please enter zero for that source's activity (e.g. fuel usage), and also enter a note to verify that the actual emissions are greater than zero. (e.g. – 'Emissions for PointId E0001 are below the reporting threshold so the activity and emissions are reported as zero in accordance with the reporting instructions.'). If you have any questions please do not hesitate to contact the technical services group at the bureau of air management.

o For example, if you reported a group of space heaters that are not covered by a) through c) and that, as a group, has not actually emitted more than 0.5 tons/yr. of any one of the listed pollutants during each of the past 3 calendar years, then the group of space heaters does not need to be reported.

o   Also, if you reported a source that is not part of a group of similar sources, is not covered by a) through c), and this source has not actually emitted more than 0.5 tons/yr. of any one of the listed pollutants during each of the past 3 calendar years, then the source does not need to be reported.

o   If any source or group of sources has been removed from EMIT but now needs to be reported because it satisfies criteria a) through c) or e) above, then **please contact the technical services group at the bureau of air management to restore the source to your site's list of sources in EMIT.**

What is the difference between PM10 and PM2.5 primary, filterable and condensable?

The emission factor listed as primary is a sum of both filterable and condensable components. All condensable PM is smaller than 2.5 microns-in-diameter so PM condensable represents both PM10 and PM2.5 condensable. PM2.5 primary is sum of both PM2.5 filterable and PM condensable. PM10 primary is a sum of both PM10 filterable and PM condensable.

When I try to save changes on the emissions information screen, I get an error message stating the PM10, primary emissions cannot be less than the PM2.5, primary emissions, what do I do?

Since PM2.5 is a subset of PM10, PM10 emissions cannot be less than PM2.5 emissions. There are some SCCs where the EPA default emission factor for PM2.5 exists but the PM10 emission factor does not. If no reliable PM10 primary emission factor exists, then use a PM10 primary emission factor that results in the PM10 primary emissions being equal to the PM2.5 primary emissions.

What do I do if the EPA default emission factor is wrong?

If you notice that the EPA default emission factor appears to be wrong, then select the edit button and then hit save. This will refresh the emission factor from the EPA default emission factor table. Some of the EPA default emission factors used in previous years have been revoked by EPA so use the latest EPA emission factor resources like AP-42 or EPA's FIRE database to ensure that indeed there is an error. If the EPA default emission factor in EMIT is incorrect then select the edit button for the incorrect emission factor and change the emission factor origin to "EPA Alt Emission Factor" and type in the correct emission factor. Finally, click on the Notes tab above and type in "*The EPA default emission factor is incorrect, so the emission factor origin was changed to* EPA Alt Emission Factor *and the correct EPA default emission factor was entered.*" This will help us identify where the EPA default emission factor is incorrect so that we can fix this problem and expedite the review of your emission statement.

Why are my Sulfur Dioxide emissions not calculating properly?

Check to ensure that the sulfur dioxide emission factor is correct. If the emission factor includes *S then make sure that the %sulfur content has been entered correctly as well. Some SCCs require the %sulfur content be included in the emission factor. Typically, these SCCs are for fuels such as coal, #6 oil, and #2 oil. Check the EPA default emission factor in EPA's AP-42 or FIRE database. If the Sulfur Dioxide emission factor is a formula that includes the %sulfur content then the %sulfur content needs to be included in the sulfur dioxide emission factor that you are supplying. To include the %sulfur content in the emission factor insert the following after the number *S. For example, if you stack tested your boiler burning #6 oil and the emission rate was 40 lbs of SO2/1000 gallons and your %sulfur content was 0.25, then you should **enter**   160*S for your SO2 emission factor. When multiplied out the emission factor is 160*0.25= 40. Also see the answer to **"**What do I do if the EPA default emission factor is wrong?**"**

What do I do if there is no EPA default sulfur dioxide emission factor but there is a sulfur oxides emission factor?

If there is no EPA default Sulfur dioxide emission factor then use the Sulfur oxides emission factor.

Why are my PM10 or PM2.5 emissions not calculating properly?
Check to ensure that the PM10 or PM2.5 emission factors are correct. Some PM10 and PM2.5 emission factors are calculated using the %sulfur content or the %ash content. If the emission factor includes *S then make sure that the %sulfur content has been entered correctly. If the emission factor includes *A then make sure that the %Ash content has been entered correctly as well. For some particulate matter emission factors "A" represents an equation involving the %sulfur. For example, A= 1.12*s + 0.37 for the SCC = 10200402. Also see the answer to **"**What do I do if the EPA default emission factor is wrong?**"**

Do I report Hazardous Air Pollutants (HAPs)?

Yes, you need to report only those HAPs identified in Section 112 of the clean air act amendment that have not been delisted by EPA, which are emitted at your facility. To assist you in reporting HAPs, EMIT will pre-populate your emission statement with EPA default uncontrolled HAP emission factors from WebFIRE based upon the SCCs associated to each source at your facility. When filling out your emission statement you should double check to ensure that you have properly accounted for reductions from control equipment. For example, if a source has VOC controls and the source emits VOC HAPS you should review to see if the VOC HAP emissions reported took into account reductions due to the existing controls. The same should be done for PM controls when the source is also emitting PM HAPs. The Control Banks tab is used to add the control efficiency for a pollutant at a source

Should I continue to include non-photochemically reactive VOC HAPs such Methylene Chloride and 1,1,1-trichloroethane in my criteria air pollutant VOC emission estimate?

No, do not include non-photochemically reactive VOCs in the VOC pollutant emission estimates provided in the Criteria Air Pollutant grouping. Please report your non-photochemically reactive VOC HAPs in the non-photochemically reactive VOC HAPs pollutant grouping. In the past DEP had requested that Methylene Chloride and 1,1,1-trichloroethane be included in the VOC emission estimates. However, with EMIT's ability to collect HAPs individually we no longer need to implement this work around. For example if you have a Methylene Chloride degreaser that emitted 2 tons of Methylene Chloride, you would now report 0.0 emissions for VOC and 2.0 tons of Dichlormethane (Methylene Chloride) under the non-photochemically reactive VOC HAPs grouping.

How do I estimate Fugitive Emissions from Loading Racks?

Use the emission factors stipulated in your permit converted into the requested units, or source specific information that you have, or refer to EPA's latest guidance found in section 5.2 of AP-42, Fifth Edition, Volume I: http://www.epa.gov/ttn/chief/ap42/ch05/final/c05s02.pdf

What documents should I attach to my Emission Statement Submittal?

If you are using the Tanks Model to estimate emissions from an above ground storage tank please attach the input and output files to your emission statement submittal. Also, please attach any documents that support your submittal. For example, if you have supplied a stack test based emission factor please attach stack test information that supports the emission factor.

How do I report emissions based on CEM?

When you are on the screen where you enter in emission factors, Select "CEM" for the emission factor origin for the monitored pollutant and then EMIT allows you to enter in your CEM emissions directly. You no longer have to back calculate emission factors. In fact EMIT will not allow you to enter in an emission factor when you select CEM as your emission factor origin.

1. If you have CEM on a multi-fueled source, then select the EPA default emission factor for the cleanest fuels and let EMIT calculate the emissions. The sum of these pollutant emissions should be subtracted from the total CEM monitored emissions for this emission unit. Then enter in the result of this

calculation for pollutant emissions of the dirtiest fuel (the one you think resulted in the most emissions during the year) by selecting the Emission Factor Origin "CEMS". For example, a facility has a CEM monitoring its NOx emissions from a boiler that burns 3 different fuels (Coal, #6 oil and #2 oil). If the usage of all 3 fuels are the same then #6 oil and # 2 oil would be considered cleaner than coal so for these two fuels use the default EPA emission factors and let EMIT calculate the emissions. Let's say that the resulting emissions for #6 oil and #2 oil are 20 and 30 tons per year and that the CEM total emissions for the source is 120 tons per year. Then 70 tons per year of NOx would be assigned to the Coal SCC after selecting the Emission Factor Origin of "CEMs" and typing the 70 directly into the emissions field. For municipal waste incinerators the dirtiest fuel is considered the municipal waste being combusted.

2. Alternate option. If you have CEM on a multi-fueled source and you are a Municipal Waste Incinerator, then for the SCC that represents the incineration of municipal waste, select CEMS as the emission factor origin for the pollutant the CEM monitors and enter in the emissions directly. It is assumed that the emissions from the auxiliary fuels are small so for these SCCs and CEM monitored pollutants select emission factor origin "Emittant Accounted For". For example, your municipal waste incinerator has a CEM for NOx and three different SCCs. One SCC describes the combustion of municipal waste (50100103) and two other SCCs that describe the auxiliary fuels used to help combust the garbage (10100205 and 10100602). For SCC 50100103 in the Emission Information Tab, set the emission factor origin to CEMS and enter in the CEM emission for NOx. For SCCs 10100205 and 10100602 go to the Emission Information Tab for each of these SCCs and set the emission factor origin for NOx to "Emittant Accounted For" this will set the NOx emissions for these SCCs to zero for NOx.

What Pollutants do I need to report?

You need to report Carbon monoxide (CO), Nitrogen oxides (NOx), Sulfur dioxide (SO2), Particulate matter (PM10 and PM2.5), Lead (Pb), Volatile Organic Compounds (VOC), Ammonia, and hazardous air pollutants listed in Section 112of the clean air act amendment. PM10 and PM2.5 are acronyms for particulate matter consisting of particles smaller than 10 and 2.5 micrometers, respectively.

CO, SO2, PM10 and PM2.5 are criteria pollutants. Lead is both a criteria air pollutant and a hazardous air pollutant. VOC, NOx and Ammonia (NH3) are precursors/promoters of criteria air pollutants. VOC and NOx are precursors/promoters of Ozone and NH3 is a precursor/promoter of fine particulate matter.

VOC and NOx in the presence of sunlight form Ozone, a criteria pollutant. Ammonia reacts with nitric and sulfuric acids in the atmosphere to form fine particulate matter.

Why do the Summer Day Use and Annual Usage Units and Material looks different than they did in 2009?

Standardization of SCC Units of Measure and Material was part of the effort to provide appropriate default EPA emission factors. While the general format is different than that used in 2009 (i.e. E3GAL is used instead of 1000 gal, E6FT3 is used instead of MMCuFt, etc) the actual units and material should be consistent with what was used in 2009. If the units and material differ from what was used in 2009 then please contact DEP help so that we can make any appropriate corrections. Also if an SCC has units of tons and no material specified for Summer Day Use and Annual Usage, please contact DEP so that we can assign the proper units and material.

Why does the Summer Day Use and Annual Usage have units of measure but no material specified?

If material appears to be missing, especially if Summer Day Use and Annual Usage has units of tons and no material specified, please contact DEEP so that we can assign the proper units and material to the SCC.

What should I do if I need to add a SCC to a source?

EMIT will support the addition of an SCC to a source, so you should be able to add the SCC to the source. If material appears to be missing, especially if Summer Day Use and Annual Usage has units of tons and no material specified, please contact DEEP so that we can assign the proper units and material to the SCC. Also if you expected EPA default emission factors based on WebFIRE data for this SCC, you can contact DEEP to have the defaults loaded or use the "Alt EPA Emission Factor" method code with the appropriate emission factors.

Do I need to report control equipment associated to a source even if I cannot quantify its control efficiency or the control efficiency is not used in the emission calculations?

Yes, specifying the control equipment that you have more completely describes your source. For example units with low NOx burners should identify this control device on the Source to Stack tab and Control Banks tab even though the percent control efficiency may not be known, or the control efficiency is not used in the emission calculation because the emissions are based on CEM or an after control emission factor.

Do I need to report my Stack Test Date?

Yes, if emission factors are based upon a stack test please remember to fill in the stack test date on the Stack Information panel located on the Source to Stack tab. Stack test based emission factors, should be based on the most recent stack test approved by the DEEP

I can quantify the PM10 primary emissions from my source but I cannot estimate the PM2.5 primary emissions because there is no PM2.5 primary emission factor available. How do I estimate my PM2.5 primary emissions?

1. If you are reporting PM10 primary emissions that are greater than zero then you must report PM2.5 primary emissions even if they are zero. If the emission method code for PM2.5, primary is "EPA Emission Factor" and the PM2.5 primary emission factor is zero and you are reporting PM10, primary emissions greater than zero then you must change the PM2.5 primary's emission method code to another value such as "Engineering Judgment" and enter in the emission factor. For help in determining the most accurate PM2.5 primary emission factor value to apply in this situation you may refer to the following sources of information:
   a. CEM data
   b. Stack test data
   c. Emission factor in permit
   d. EPA Emission Factors (no order of preference)
      i. APPENDIX B.1 PARTICLE SIZE DISTRIBUTION DATA AND SIZED EMISSION FACTORS FOR SELECTED SOURCES
      http://www.epa.gov/ttn/chief/ap42/appendix/appb-1.pdf

ii. AP42 - APPENDIX B.2 - GENERALIZED PARTICLE SIZE DISTRIBUTIONS
http://www.epa.gov/ttn/chief/ap42/appendix/appb-2.pdf
iii. Link to the access tables "PM Calculator"
http://www.epa.gov/ttn/chief/eiinformation.html

e. The most conservative approach would be to set the PM2.5 primary emissions equal to the PM10 primary emissions. To do this, first set the control efficiencies for PM2.5, primary equal to the control efficiencies for PM10, primary on the Control Banks tab, then on the Emission Information tab set the PM2.5 primary emissions method code to "Engineering Judgment", and the PM2.5 primary emission factor equal to the PM10 primary emission factor.

f. If you believe that the PM2.5 emissions are zero and you are reporting PM10 primary emissions that are greater than zero, then for PM2.5 primary, you must select an emission method code other than "EPA Emission Factor" and enter in zero for the PM2.5 emission factor. This will make it clear to us that you are stating that there are no PM2.5 primary emissions. The reason that this is necessary is because, EMIT will when no emission method code value has been entered, automatically assign the emission method code value of "EPA Emission Factor" for criteria air pollutants even when there is no EPA emission factor and then display the emission factor value as zero. Some sites had overlooked reporting their PM2.5, primary emissions because they thought that there was an EPA Emission Factor for this process and that it was zero. There are processes that have PM2.5 emissions that do not have an EPA emission factor.

What is the percent seasonal use?

The percent seasonal use is the percent of the total yearly operating activity which occurs during each of the following periods:

1. December 1 through February 28/29 (e.g., January 2012, February 2012 and December 2012)
2. March 1 through May 31
3. June 1 through August 31
4. September 1 through November 30

The sum of the four percentages must equal 100%.

What does it mean if the Emission Factor Origin is EPA Emission Factor and the Emission Factor value is zero for a pollutant on the Emission Information tab in EMIT?

This means that there is no EPA default emission factor available in EMIT's EPA default emission factor lookup table for the Source Classification Code (SCC)/Pollutant. If the pollutant is emitted from your source/SCC then you must quantify these emissions. To do this, on the Emission Information tab in EMIT, change the Emission Factor Origin to an appropriate value. If the Emission Factor Origin is changed to "CEMS – Continuous Emission Monitoring System" or "Tank Model" then EMIT will allow you to enter in the emissions directly. For all other Emission Factor Origin values, you must provide an emission factor and EMIT will calculate the emissions once the data is saved.