Helpful Tips

- **SLEIS facility user information and applications**

Please review all user information for each facility and if changes to user information or user roles are necessary, please send an updated SLEIS application form to the Arkansas Department of Energy and Environment, Division of Environmental Quality (DEQ) (e-mail to: EE.emissioninventory@arkansas.gov is acceptable). Any users currently listed for the facility will be deactivated if they are not included on the revised application. DEQ Emission Inventory personnel will only make changes to inventory reports on behalf of a facility if given authorization from a facility representative with a SLEIS account.

- **Review all information that is already populated in SLEIS**

Remember to review all information that is already populated in SLEIS. Changes should be made to any incorrect or outdated information as necessary.

- **Contact information should be consistent**

Contact information (telephone numbers, e-mail addresses, etc.) must match in all of the following locations:

a) Facility tab in SLEIS
b) SLEIS Application Form(s)
c) Arkansas Point Source Inventory Facility General Information Form
d) Electronic Signature Agreement Form (Only required for Responsible Official)

- **SLEIS users should not select the "Save" option when reviewing report data**

SLEIS users should not save when reviewing data (saving should only be done when entering data). Reviews should be completed in Viewer mode. Ex. "One item of note is that we ask SLEIS users to review reports using the "View" mode  whenever possible. This will not only minimize the chances of making a mistake while in Edit mode but will also avoid saving a time/date stamp showing that an edit was made every time that a particular screen is viewed. If you are in Edit mode when reviewing a page and **you do not make any changes to that page**, you can simply select the Cancel button instead of saving and it will avoid assigning a new time/date stamp to the page you are in.

- **All permits active during the reporting period should be used to guide data entry**

All permits active during the reporting period should be used to guide data entry. DEQ Emission Inventory QA/QC procedures are based on review of all permits that were active during the entire reporting period. If a particular Emission Unit, Unit Process, or Pollutant appears in any of the permits (current or past) that were active during the reporting period, reporting for that Unit, Process, or Pollutant is required.

- **All emissions that are reported should be actual emissions and should be post-control**

As far as SLEIS reporting is concerned, the emissions that DEQ is required to report are Post-Control emissions only. This means that no matter what happens to the emissions on the way to the release point (whether they go through controls before they reach the release point or not), the end resulting emissions that are released into the atmosphere are what is required to be reported. Reporting facilities must report only final (Post-Control) emissions. If Pre-Control SLEIS calculation methods are used, the software may adjust the calculations of final emissions based on any control device(s) that have been entered. It is important to note that, although reported emissions should be post-control, **all control devices should still be included in the inventory.**

Pollutant Guidelines

a) Process Emissions Data for a defined Group of Pollutants can contain either the pollutant representing the group total value, or any number of pollutants representing the group member values, but not both. A common example is that a speciated pollutant (Chromium VI) and its pollutant family (Chromium) cannot be reported in the same process. If reporting Chromium VI (pollutant code **18540299**) for a particular process, report all remaining Chromium in that process as Chromium III (pollutant code **16065831**) instead of reporting the total Chromium using pollutant code 7440473.

b) Pollutant Code **130498292** (PAH, total) should be used to report PAH.

c) Pollutant Code **250** (PAH/POM – Unspecified) should be used to report POM.

- **Control measure data must be entered into SLEIS**

Control measure data must be entered into SLEIS. All control measures and associated data must be entered into the SLEIS report. Although Post-Control emissions are the focus of the inventory, EPA requires the reporting of control measures and their associated efficiencies to the National Emissions Inventory (NEI).

- **Stack Diameter and Height**

If a stack type other than “Fugitive” is selected, the stack diameter entered should be less than the stack height entered – In situations where a stack type other than “Fugitive” is selected and the stack diameter entered is equal to or greater than the stack height, an explanation should be entered into the “Comments:” box.

• When a Facility, Emission Unit, Unit Process, or Control Device has been shutdown

If a facility reports the shutdown (either temporarily or permanently) of the facility, a unit, a process, or a control device for a particular reporting year, the shutdown status date should be entered as January 1 of the first year after the last reporting period with reported emissions (i.e. is operational).

If a facility, unit, process, or control device has been shutdown (temporarily or permanently) but has either:
1) Reported in previous years (or in the current year as **operational but not reporting**)
2) Has been reported in previous years or in the current year with **zero emissions**

If you are going to shut down the facility, unit, process, or control device, then you must use the shutdown status date of the first day of the year for the first year after the facility/unit/process/control device was reported as operational in order to avoid errors in the EPA database system. Please also note the actual date that the unit was taken out of service in the **Comment** box. Examples are given below.

- Permanent Shutdown for a Unit Example: Unit 001 was not used after 5/2/2011 and was reported as having no emissions (0 as the emission values) for the 2012, 2013, 2014, and 2015 EI reports because the facility was not sure if the unit would be used again. In 2016, it is determined that the unit is no longer going to be used and it is removed from the facility. The unit status should be changed in SLEIS to "**Permanently Shutdown**" with a status date of 1/1/2016 and a note should be made in the **Comment** box indicating that the actual unit was taken out of service on 5/2/2011.

- Permanent Shutdown of a Facility Example: Facility ABC closed on 5/2/2016 but the facility is reporting 2016 emissions (for activity from 1/1/2016 to 5/2/2016). Emissions should be entered for 2016 and a note should also be made in the **Comment** box indicating that the facility was closed on 5/2/2016. (Note that if there had been no emissions in 2016, the facility status would need to be changed to Permanently Shutdown with a status date of 1/1/2016 and an explanation entered into the **Comment** box).

- Temporary Shutdown of a Process example: Process is no longer being used as of 7/5/2016, but the process may be brought back online at a later date. When completing the 2016 inventory report, simply enter the emissions that did take place in 2016 with a note concerning the status of the process. For the 2017 inventory report, simply enter the reason that the process is not being operated into the **Comments** box in the Process module and Uncheck the **Process is Reported?** box for the related Process Emissions (or enter 0 for all emissions to save pollutants for future use – see the **When a process is not active during the reporting year** section above).

- Permanent Shutdown of a Process example: If there are no emissions in 2016 and a process is being permanently shutdown as of 5/5/2016. The facility would enter 2015 in the **Last/Final Emission Year** box and enter the process shutdown information into the **Comments** box of the Process module.

• When a process is not active during the reporting year

We would like to alert you to a feature in SLEIS that may cause extra work in future year reporting if a process is not active during the reporting year. In the SLEIS Process Emissions module under the "Process" tab there is a check box function to indicate whether a process is going to be reported for the current year. The box name is "Process is Reported?" and the default setting is to have the box checked. In a situation where the process was not active for the current reporting year, the user would remove the check from the check box and no additional information would be needed.

However, when the box is unchecked, SLEIS has been designed to clear fields in the Process Emission "Process" and "Operations" tabs. Of concern is that all pollutants in the "Emissions" tab would be deleted. The result is that if the process becomes active again in future reporting years, all pollutant records would have to be re-entered manually. Some processes have only a few pollutants but combustion processes can approach fifty pollutants.

There are two options available to the user.

1) If the user believes the process will not be active in the future, the user can remove the check from the check box for "Process is Reported?" in the Process Emissions "Process" tab and save. Fields will be cleared and pollutant records will be deleted for that process.
2) If the user wants to retain Process Emissions throughput unit of measure, throughput type, throughput material, and existing pollutant information the user must do the following:

- Zeros (0) will have to be added to the throughput field in the Process Emissions "Process" tab.
- Zeros (0) will have to be added to the Average Hours/Day, Average Days/Week and Average Weeks/Year fields in the Process Emissions "Operations" tab.
- A zero (0) will have to be added to the Estimated Emissions (Tons) field in the Process Emissions "Emissions" tab for pollutants with calculation methods of Material Balance or Engineering Judgment.

- When a pollutant has a calculation method requiring an emission factor and an emission factor has been entered, no action is needed. Zero (0) emissions will be calculated by the system based on zero throughput.

- In i-STEPS, there were calculation methods for which an emission factor was used in the emissions calculation, but emissions were calculated outside the system and no emission factor was provided. These emission unit/process/pollutant combinations were assigned a SLEIS calculation method 33, "Other EF" with no pre-populated emissions factor. This would prompt the user to choose a potentially better calculation method or provide an emissions factor. To retain the calculation method 33 pollutants the user will need to add a zero (0) for the emissions factor. The Process Emissions information can then be successfully saved.

• Design Capacity must be entered for any emission unit that is a combustion source

Design Capacity must be entered for any emission unit that is a combustion source (ex. boilers, heaters, etc.).

- **Adding Identification numbers when creating a new Control Device, Release Point, Emission Unit, or Unit Process**

The SLEIS system does not allow changes to entries made in the "Identifier:" field once a new Control Device, Release Point, Emission Unit, or Unit Process is created and submitted (it does allow changes to entries in the "description" field). Therefore, extra attention should be given to entering the identifier when creating a new Control Device, Release Point, Emission Unit, or Unit Process because this is a permanent change. DEQ provides guidance on creation of new Identifiers to promote consistency within the system. Use of these guidelines will assist in keeping things orderly when viewing most SLEIS reports.

It is normally recommended that only numerals be used (two digits for Release Point identifiers, two digits for Control Device identifiers, three digits for Emission Unit identifiers, and two digits for Unit Process identifiers). These numbers should correspond to the permitted source number or any available sequential number. Please note that use of alphabet characters is generally discouraged because they cause sources to be placed out of any chronological order in the report and may make them more difficult to locate during analysis.

It is also worth noting that the "SN" number should be included in the "Description:" field (not the "Identifier:" field) if at all possible.

These are currently only guidelines and are not requirements, but it is a **recommendation to follow this guidance or ask a DEQ Emission Inventory Team member if you are adding new items to the report**. This will likely make it easier for you to locate and enter data in the future.

Example:
A facility has added a new piece of equipment (SN-07) that has several processes and must add this source to their SLEIS inventory report.

- When creating the Release Point, "07" (or the next available number if 07 has already been used) would be entered in the "Identifier:" field and "SN-07 Example Source" would be entered in the "Description:" field.
- When creating the Control Device, "07" (or the next available number if 07 has already been used) would be entered in the "Identifier:" field and "SN-07 Example Control Device" would be entered in the "Description:" field.
- When creating the Emission Unit, "007" (or the next available number if 007 has already been used) would be entered in the "Identifier;" field and "SN-07 Example Emission Unit" would be entered in the "Description:" field.
- When creating the Unit Process, "01" (or the next available number if 01 has already been used) would be entered in the "Identifier:" field and "SN-07 First Example Unit Process" would be entered in the "Description:" field for the first process.
  When creating the second process, "02" (or the next available number if 02 has already been used) would be entered in the "Identifier:" field and "SN-07 Second Example Unit Process" would be entered in the "Description:" field.

- **Hours in a Year**

A typical year has 8760 hours while a leap year has 8784 hours

• PM filterable and condensable should be reported if available

- If a facility's permit notes a limit for any size of particulate matter (PM), both filterable and condensable forms of the specified PM should be reported if that information is available. In addition to any filterable and condensable PM data, the primary (PRI) measurement for the class or classes of PM specified in the permit must always be reported and should equal the sum of the filterable and condensable PM components

  ****Please report PRI AND FIL/CON measurements for each PM class (PM, PM_{10}, $PM_{2.5}$) specified in the permit(s) active during the reporting period (if FIL/CON information is available).**

  ****If FIL and CON components are reported, then FIL + CON must equal PRI.**
- If a smaller class of PM is reported, emissions for all larger classes must be reported and should be equal to or greater than the smaller classes of PM reported
  Example: If a permit lists an emissions limit for PM_{10} - Emissions should be reported for PM10-PRI (in addition to PM10-FIL and PM-CON if they are available) and PM-PRI with PM-PRI emissions being equal to or greater than the PM10-PRI emissions.
- A Particulate Matter Information Sheet is available on the DEQ SLEIS website under the "News" section.

  PM Reporting Examples

  + Examples: (Mandatory minimum reported PM pollutants are shown in bold)

  A) If a permitted process lists an emission limit for PM_{10}, emissions must be reported for **PM10-PRI** in addition to PM10-FIL and PM-CON (if available). Emissions must also be reported for **PM-PRI** and PM-FIL (if available) with PM-PRI emissions being equal to or greater than the PM10-PRI emissions.

  B) If a permitted process lists an emission limit for $PM_{2.5}$, emissions must be reported for **PM25-PRI** in addition to PM25-FIL and PM-CON (if available), **PM10-PRI** in addition to PM10-FIL (if available), and PM-PRI (as well as PM-FIL if it is available) with PM-PRI emissions being equal to or greater than the PM10-PRI emissions and PM10-PRI emissions being equal to or greater than PM25-PRI emissions.

  C) If a permitted process lists an emission limit for PM_{10} FIL, emissions must be reported for **PM10-PRI** in addition to **PM10-FIL** and **PM-CON** (where PM10-FIL + PM-CON = PM10-PRI). Emissions must also be reported for **PM-PRI** and **PM-FIL** (where PM-FIL + PM-CON = PM-PRI) with PM-PRI emissions being equal to or greater than the PM10-PRI emissions.

• Only Point Source SCC (Source Classification Codes) should be used in the emission inventory

During review/completion of the Emission Inventory, please report only current Point Source SCC Codes. An Excel Spreadsheet is available that lists the current Point Source Classification Code (SCC) options available for use in SLEIS (eliminating all other types of SCC Codes such as NonPoint, Biogenic, etc.). The spreadsheet can be accessed with this link: Current SLEIS Codes.

• Seasonal Operations fields are required

Seasonal Operations fields are required - The percent of time the process was operational during each season must be entered and all percentages must sum to 100%.

- **HAPs must be speciated if they are speciated in the facility's permit**

- See the following scenarios for clarification:
    1) If Hazardous Air Pollutants (HAPs) are individually speciated in a facility's permit, emissions for each HAP must be reported individually in SLEIS. HAPs that are listed individually in the permit should not be totaled and reported as one figure.
    2) If HAPs are totaled in a facility's permit (ex. emissions limit is only listed for "Total HAPs" and individual HAP pollutants are not listed), then the total HAP emissions should be reported using SLEIS pollutant code THAP (TOTAL HAPS).
    3) If a facility's permit notes a limit for the category "Single HAP" in a particular process, the highest emissions for any single HAP within that process should be reported in SLEIS using pollutant code HAP (SPC) HAZARDOUS AIR POLLUTANTS.
    4) If a facility's permit notes a limit for both individually speciated HAPs and a limit is given for Total HAPs in the same process, emissions for each individual HAP and a Total HAPs calculation should be reported for that process. This will not result in double counting but will instead give reviewers and end users of the inventory data an option of which calculation(s) to use when calculating HAPs for that particular process.
    5) In a case where there are multiple permits active during the reporting year and one of the permits lists limits for individual HAPs in a specific process while another permit lists a limit for "Total HAPs" for that same process, emissions for both speciated HAPs and Total HAPs should be reported for the process.

- **Always contact the DEQ Emission Inventory Team with questions**

The DEQ Emission Inventory Team is available to provide assistance if any questions arise during the emission inventory reporting and submission processes. If there is any uncertainty about a particular action in SLEIS, please contact a member of the DEQ Emission Inventory Team - It will often save time and effort if questions are asked before changes are made in SLEIS.