Connecticut Department of Energy and Environmental Protection

Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

2012 Emission Statement Reporting

1/10/2013

Chris Mulcahy
SIPRAC / DEEP HQ

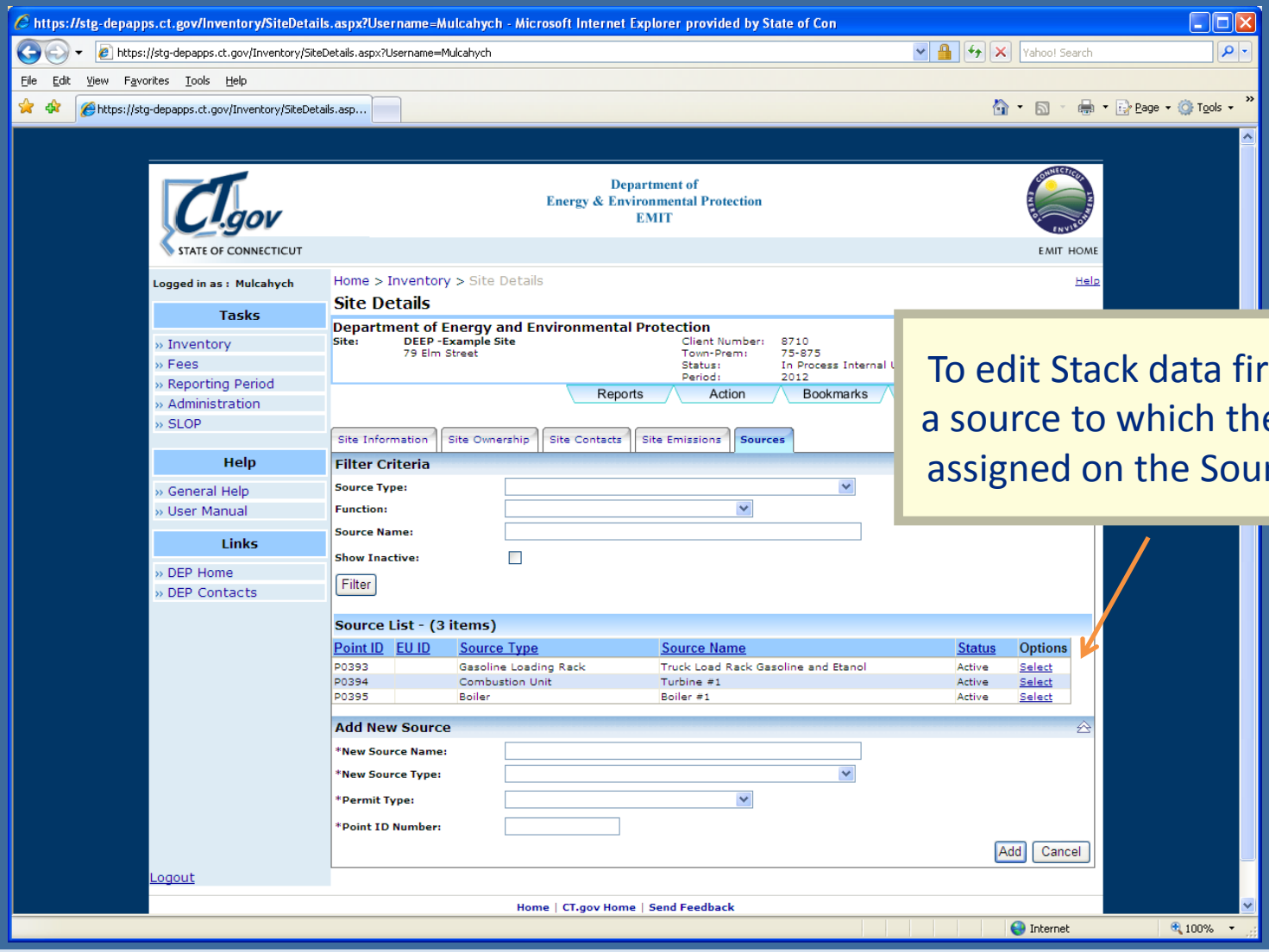
2012 Emission Statement Reporting

- Emission Statements are Due on Friday March 1, 2013.
- Please review your editor and submitter authorizations for accessing EMIT and as needed, provide updated authorizations for EMIT users; please send this information to the technical services group of the Bureau of Air Management.
- We also need up to date e-mail contacts for system users.
- Link to: electronic signature authorization forms

Items to Remember for 2012

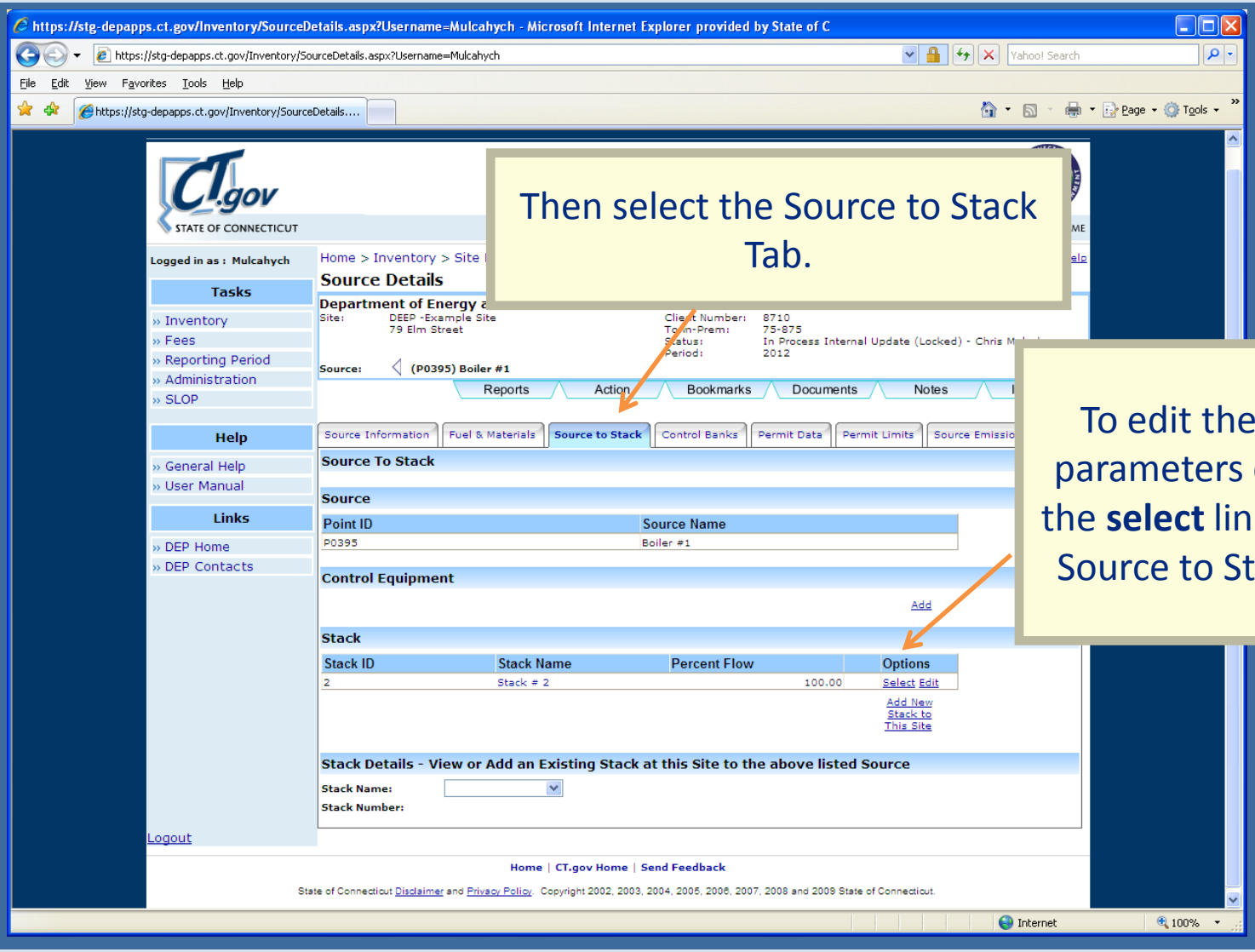
1. Fix stacks that have missing data
2. Report the Stack Test Date when emission factors are based upon a stack test
3. Identify control devices and efficiencies even if not used to estimate emissions
4. How to report PM2.5 primary emissions when PM10 primary emissions are greater than zero and the PM2.5 primary emission factor is not known.
5. Account for Controls when estimating HAP emissions
6. Ensure that summer day activity is correct (i.e. it should not be greater than annual activity).

Fixing Stacks That Have Missing Data

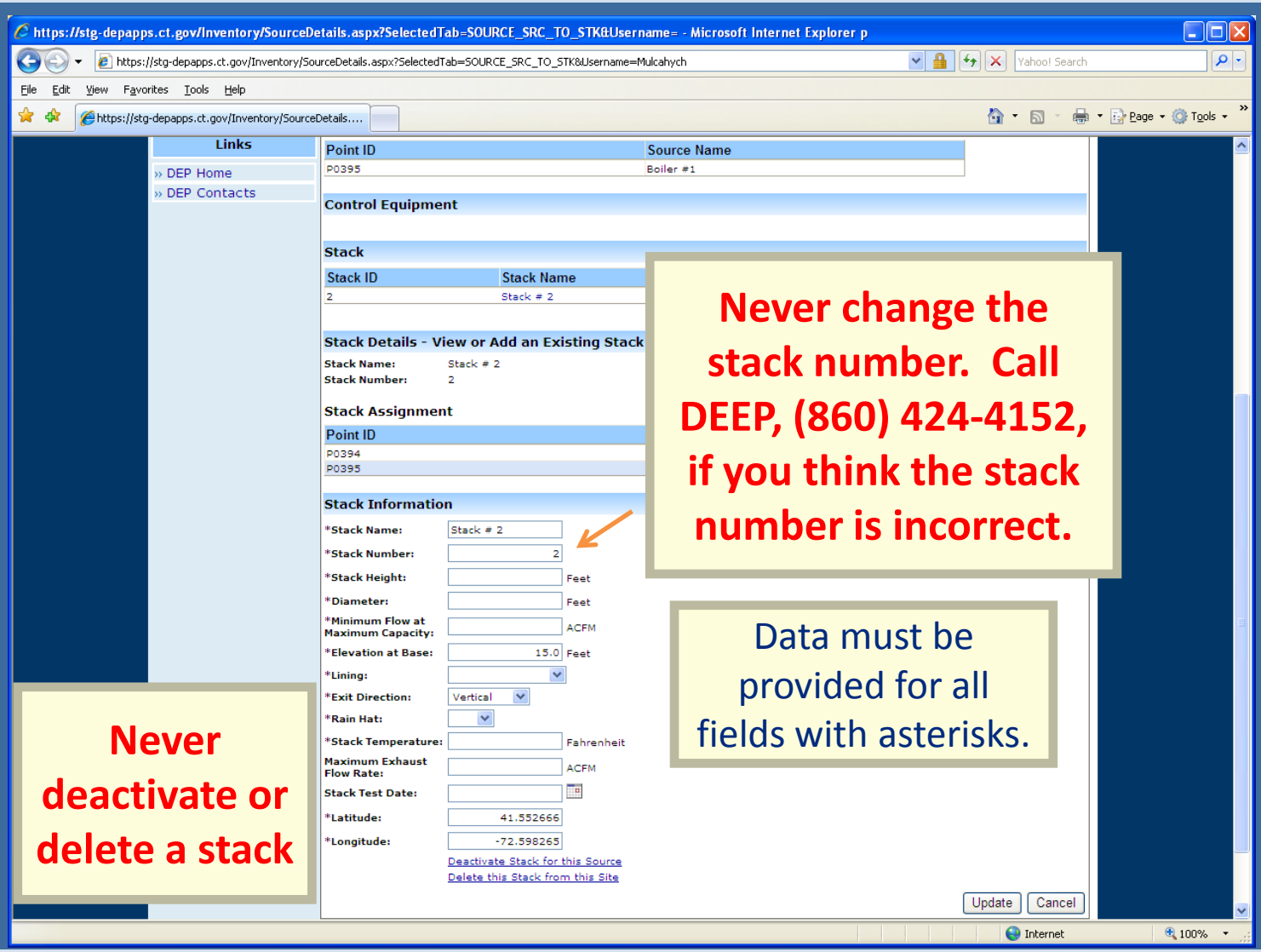


To edit Stack data first select a source to which the stack is assigned on the Sources tab.

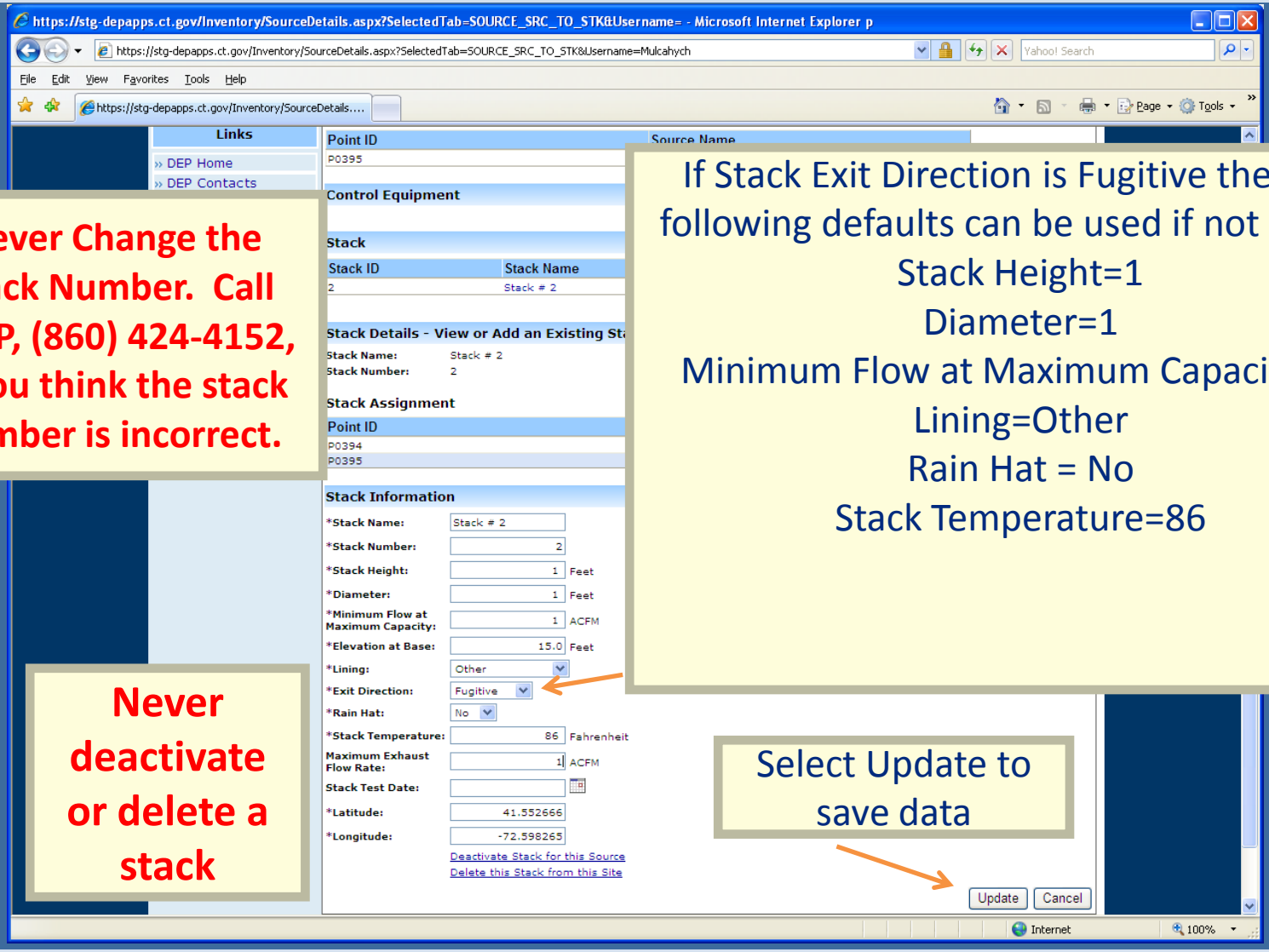
Fixing Stacks With Missing Data



Fixing Stacks With Missing Data



Fixing Stacks With Missing Data



Never Change the Stack Number. Call DEEP, (860) 424-4152, if you think the stack number is incorrect.

If Stack Exit Direction is Fugitive then the following defaults can be used if not known

Stack Height=1

Diameter=1

Minimum Flow at Maximum Capacity = 1

Lining=Other

Rain Hat = No

Stack Temperature=86

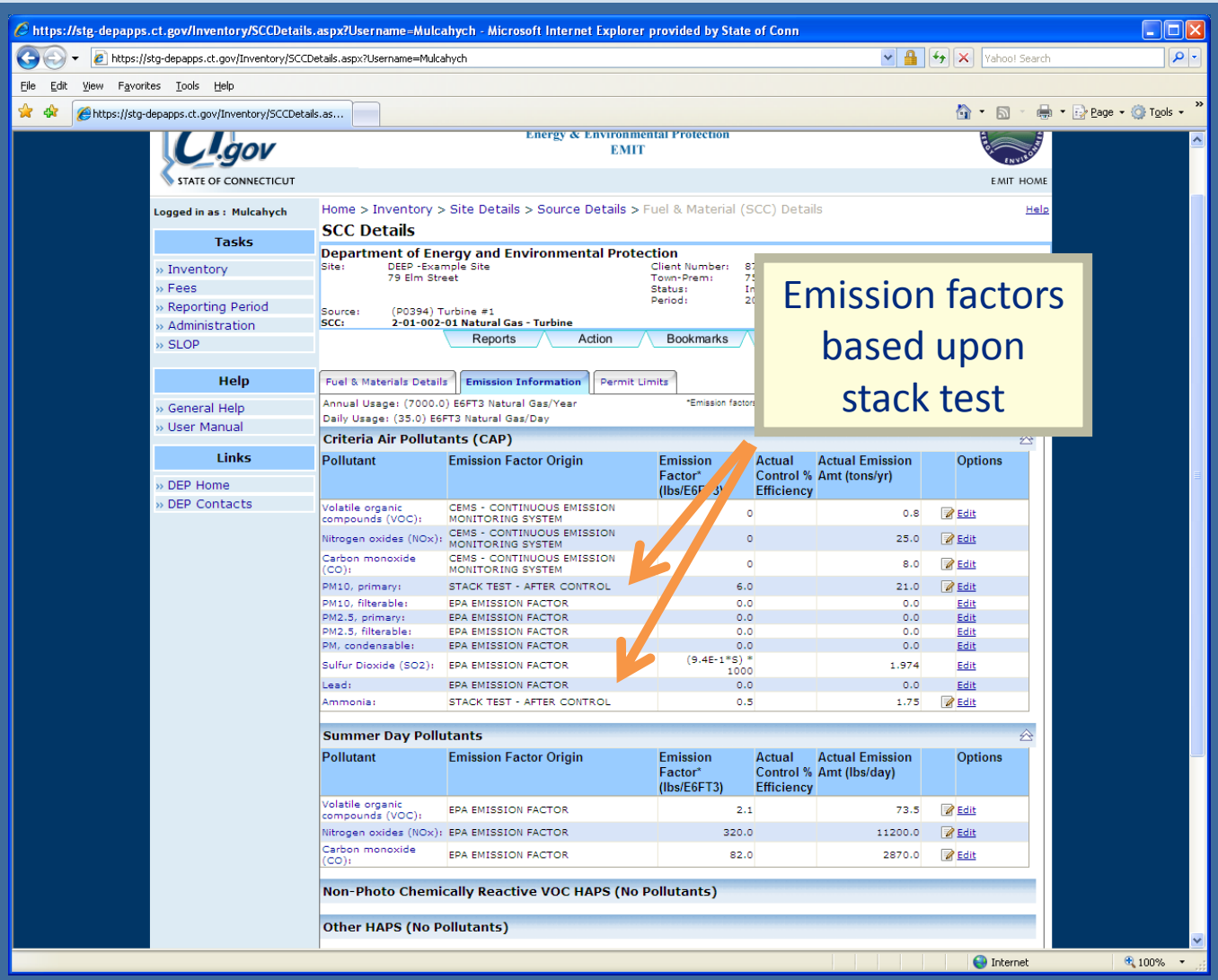
Never deactivate or delete a stack

Select Update to save data

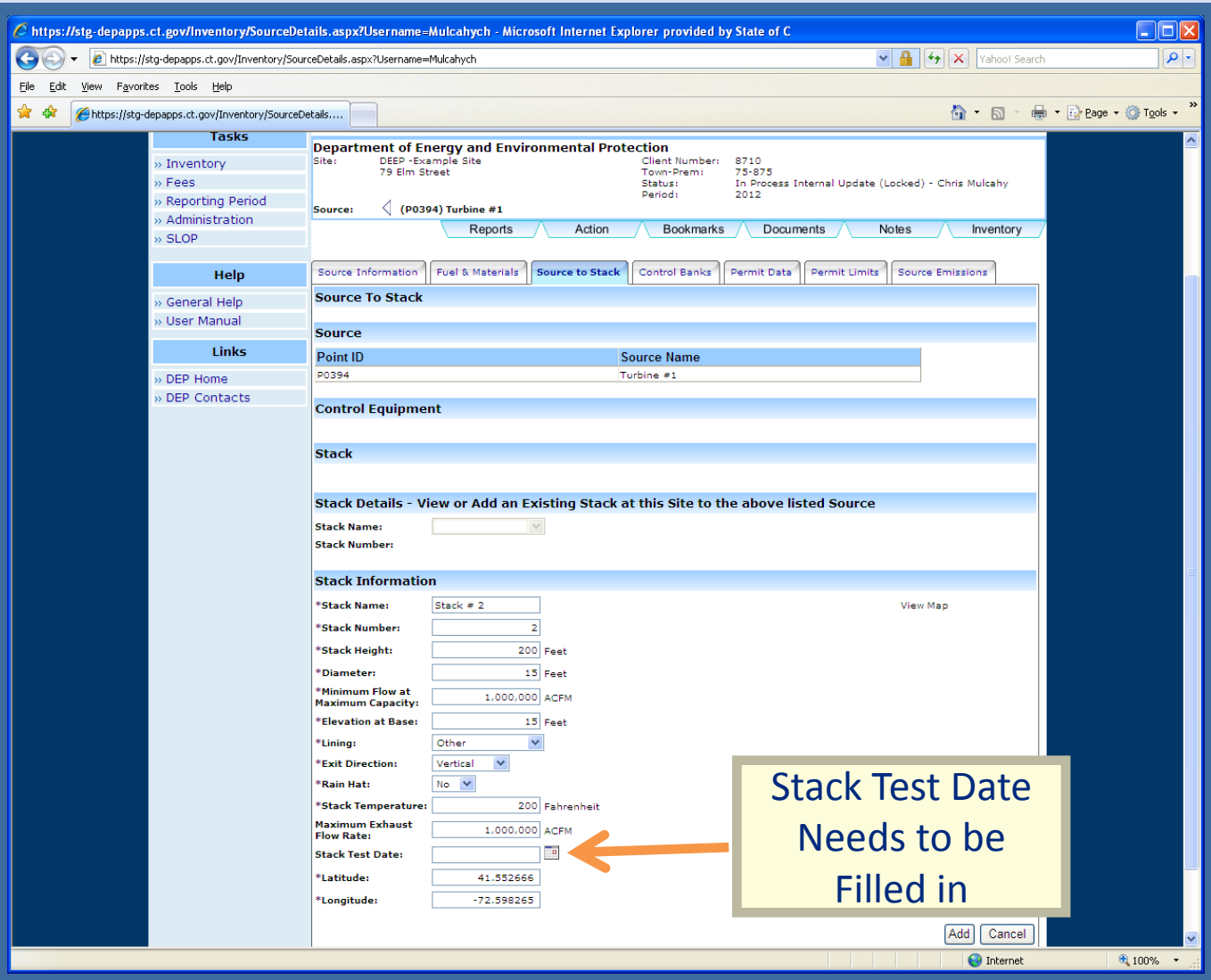
Stack Test Date

- If you reported emission factors based upon a stack test then please remember to fill in the stack test date on the Stack Information panel located on the Source to Stack tab.
- Do not assign emission factor origins “Stack Test –After Control” and “Stack Test –Prior Control” when emission factors are based upon stack tests that have **not** been approved by the DEEP. Instead use “Engineering Judgment” and provide supporting documentation (i.e. stack test results).

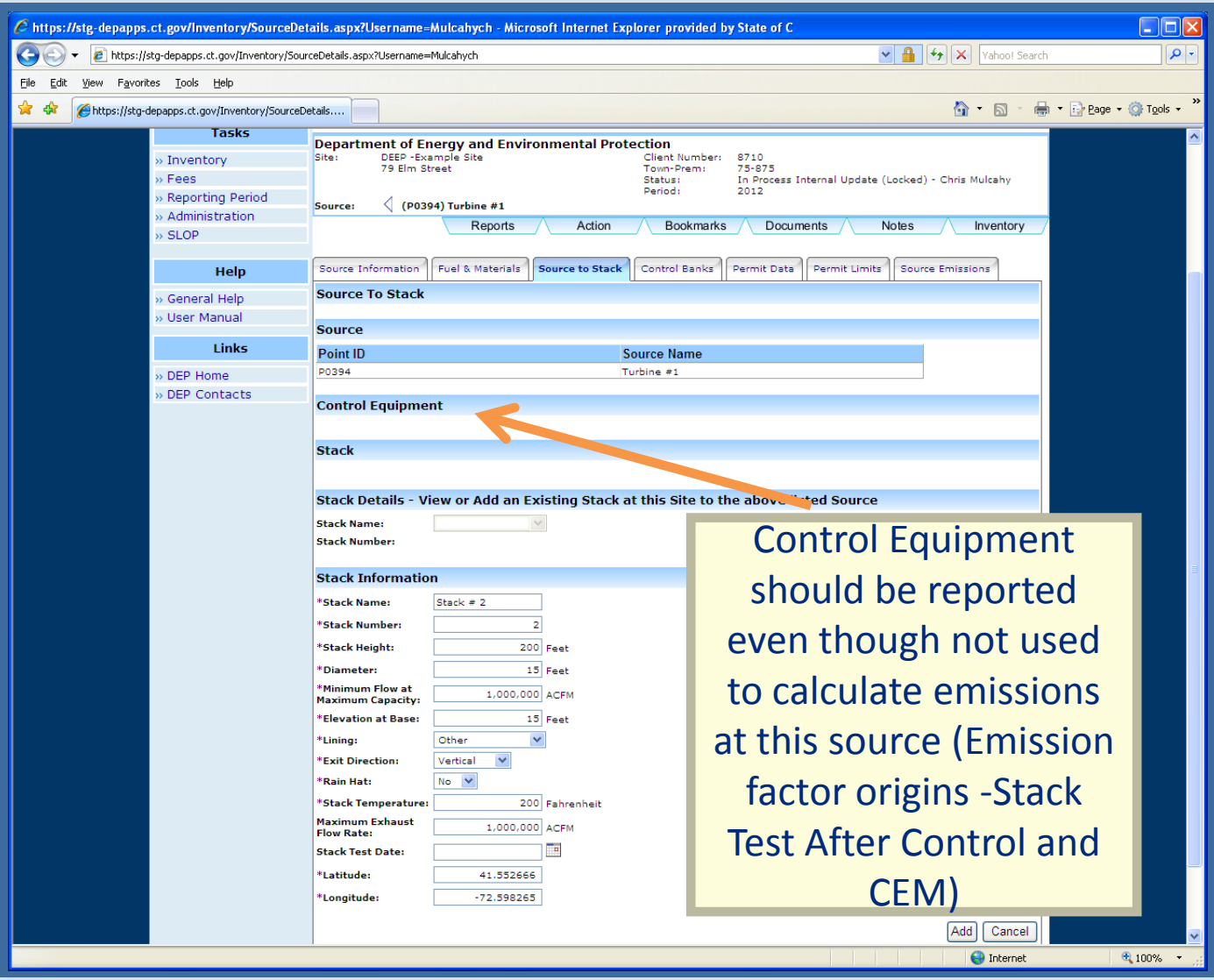
Stack Test Date



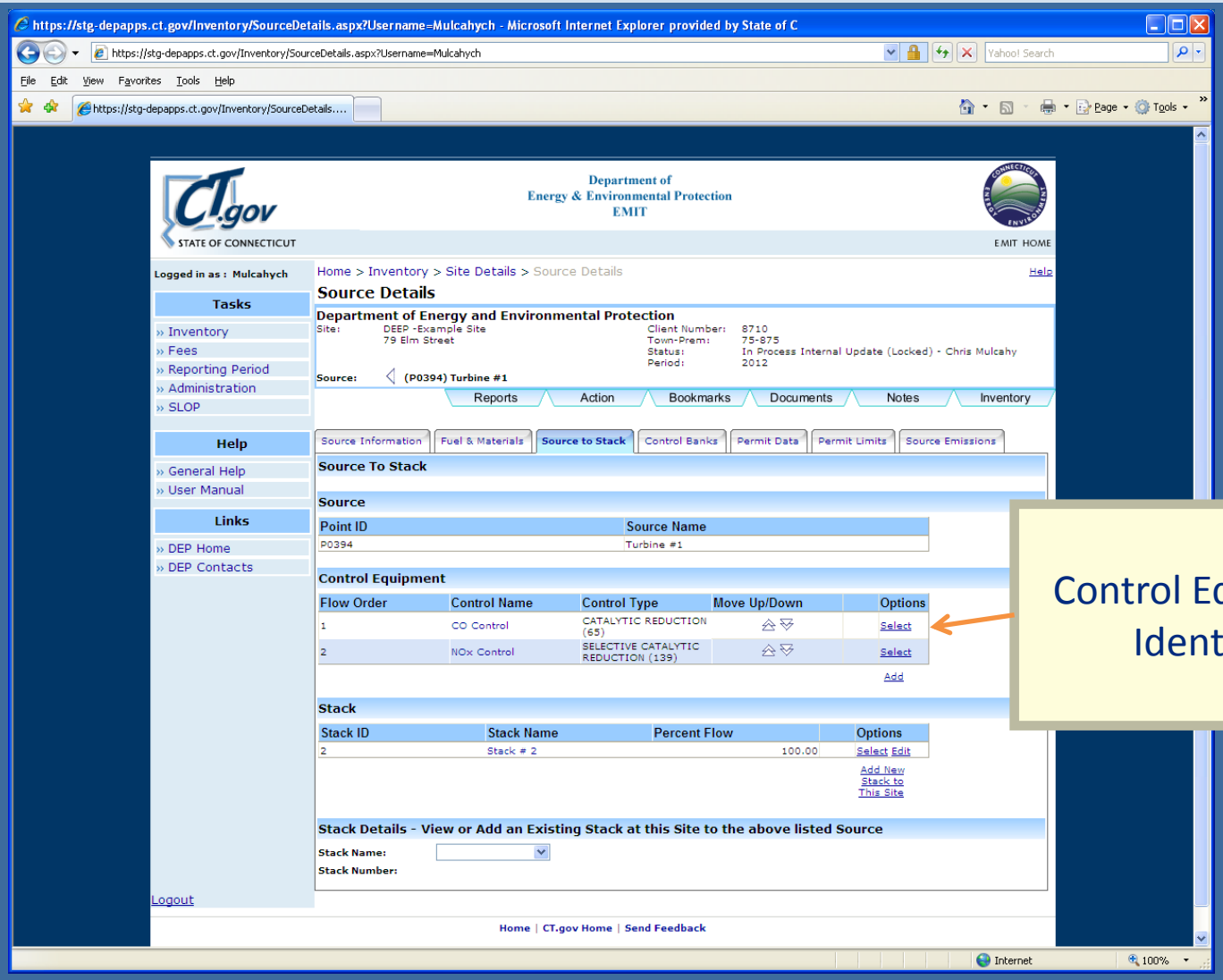
Stack Test Date



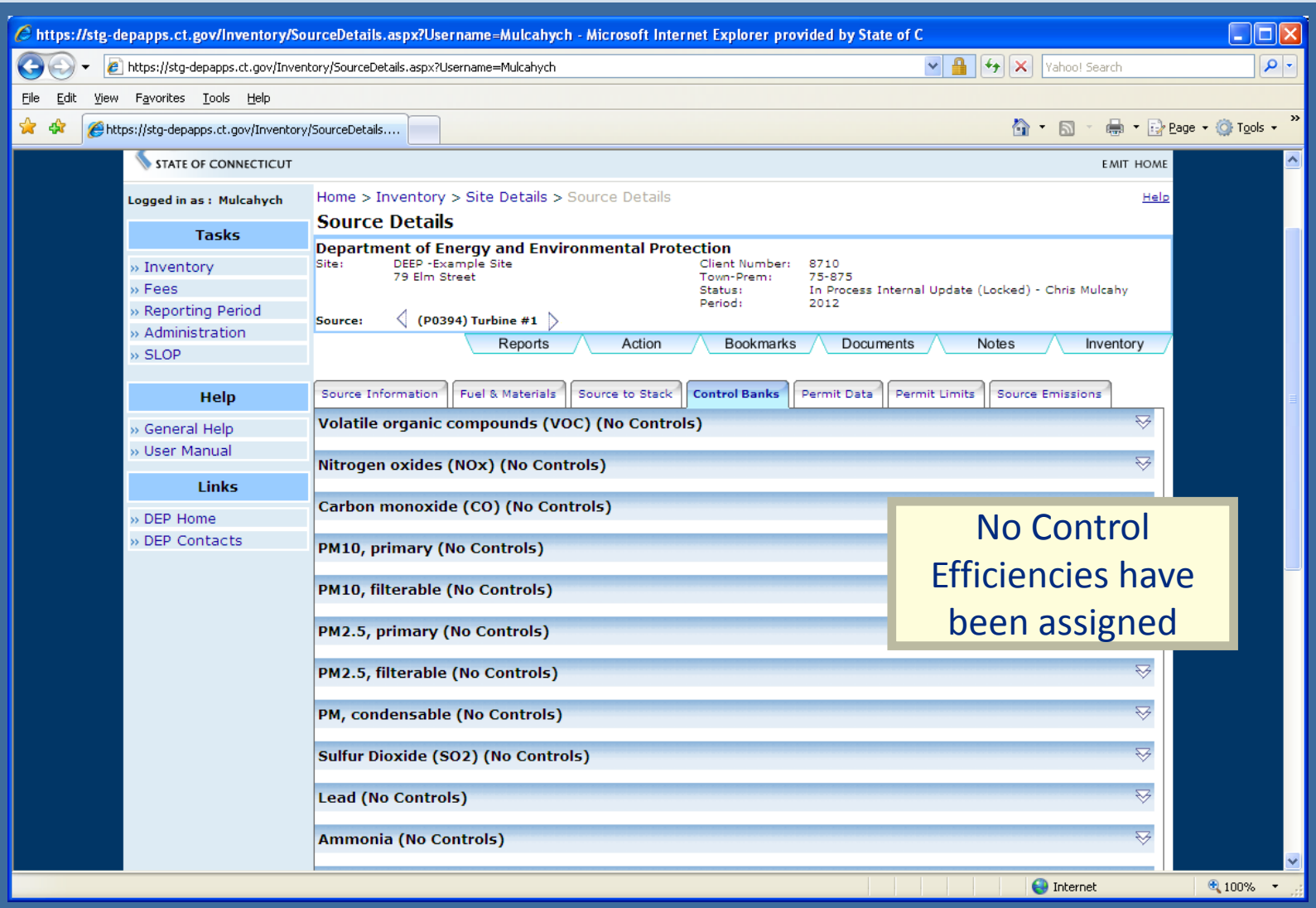
Identifying Control Devices



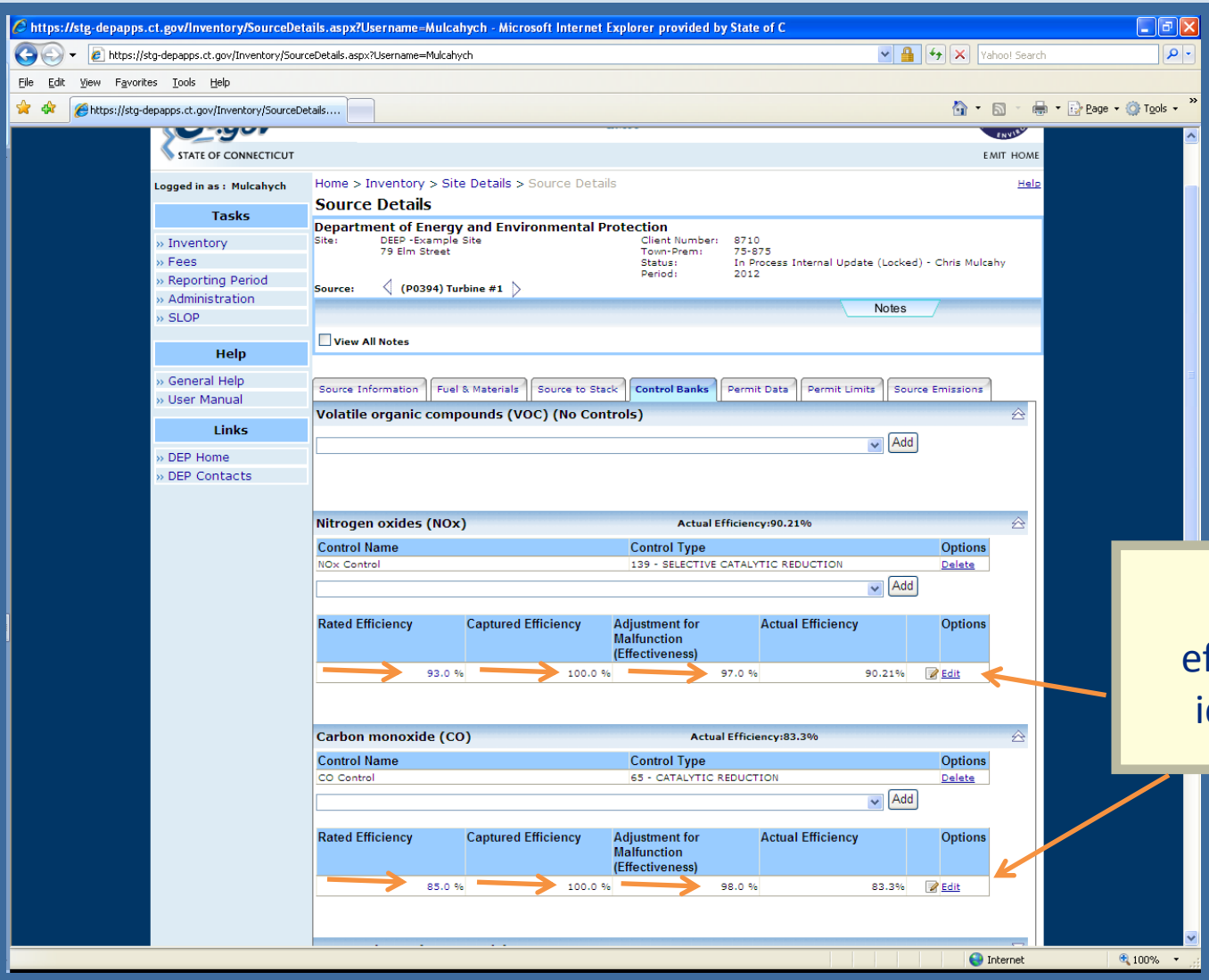
Control Devices Identified



Reporting Control Efficiencies



Reporting Control Efficiencies



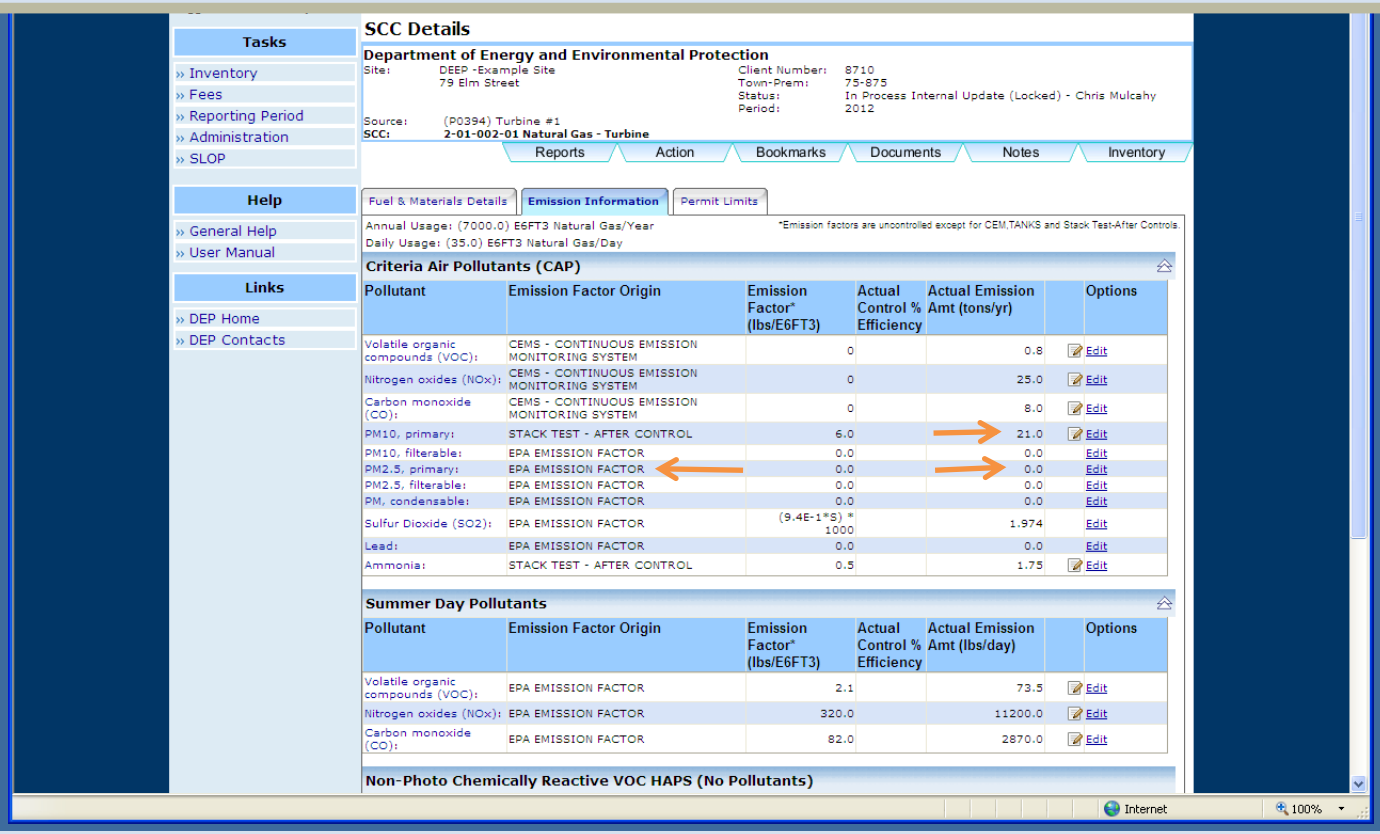
Control efficiencies identified

Reporting PM2.5 primary emissions

- If the emission factor origin 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 factor origin to another value such as “Engineering Judgment” and enter in the emission factor.

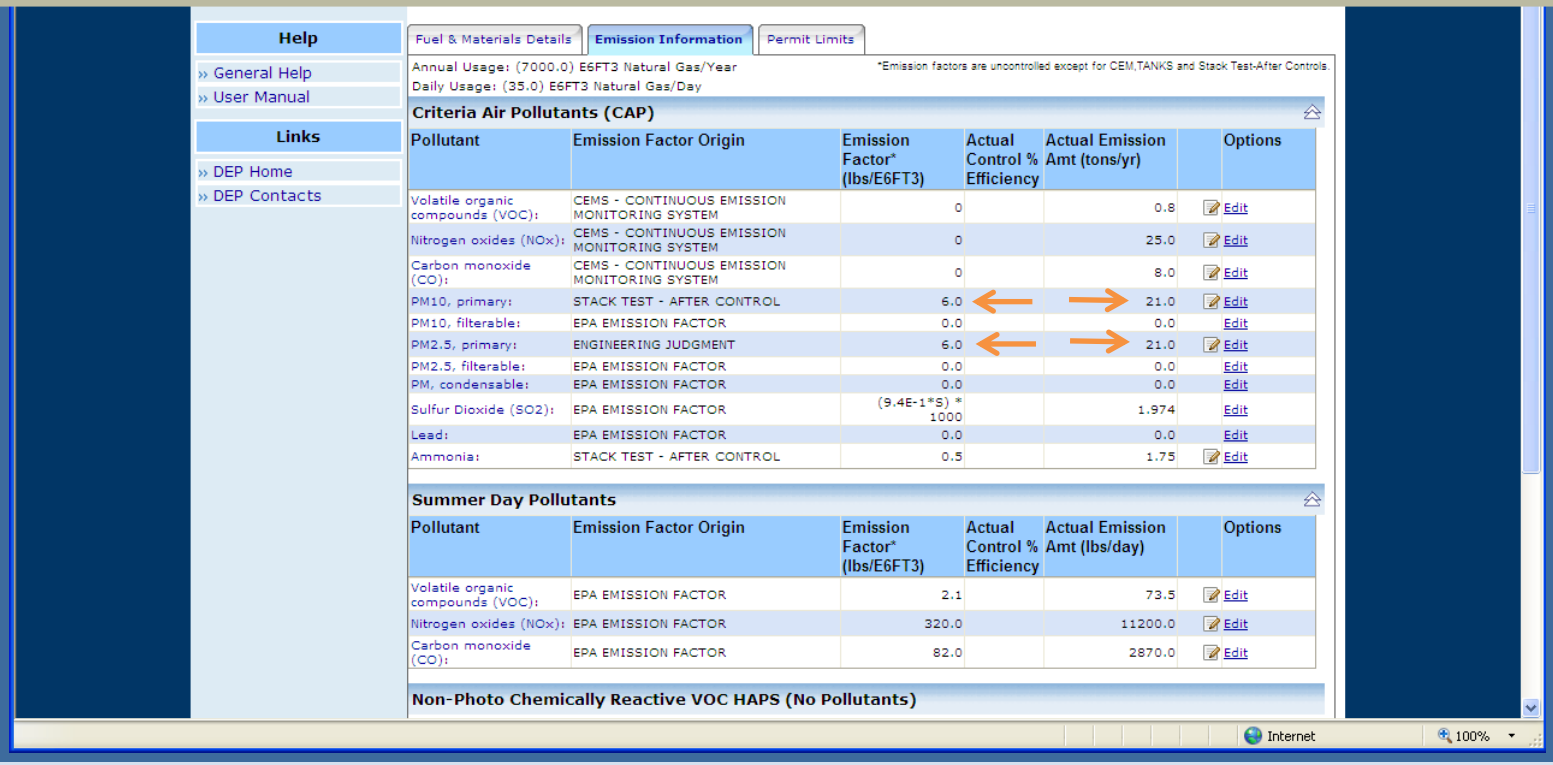
Reporting PM2.5 primary emissions

PM10, primary emissions are greater than zero and no PM2.5, primary emissions are being reported (PM2.5, primary emission factor origin defaults to “EPA Emission Factor” and the emission factor defaults to zero)

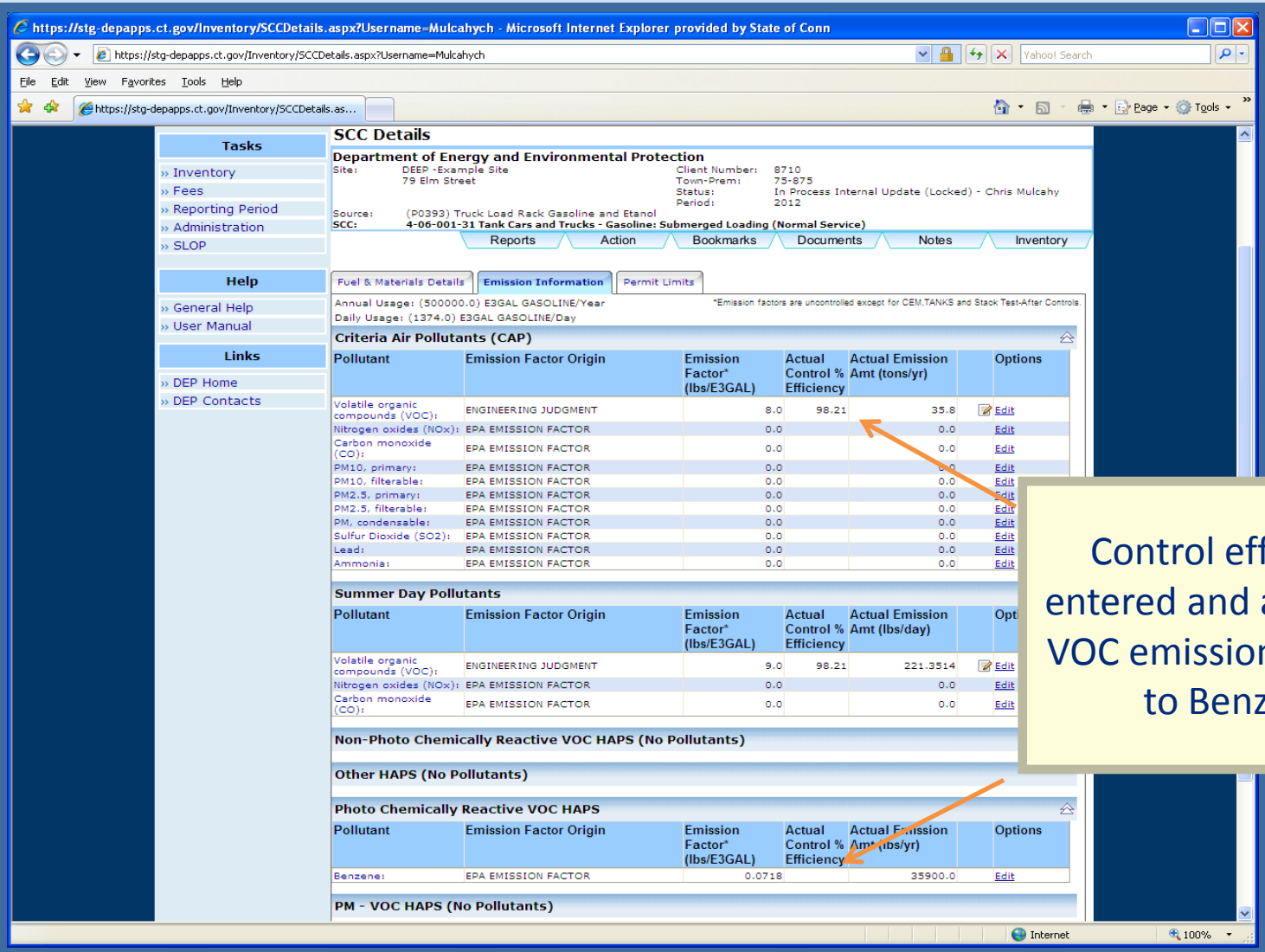


Reporting PM2.5 primary emissions

Two approaches for reporting PM2.5 emissions when a specific emission factor is not known, is to sum PM, Condensable and PM2.5, Filterable emissions if they are known or to set the PM2.5 primary emissions equal to the PM10 primary emissions by setting PM2.5 emission factor equal to the PM10, primary emission factor. Updated EMIT FAQ document on the DEEP website outlines other options, see http://www.ct.gov/dep/lib/dep/air/emit/frequently_asked_questions_emit.pdf

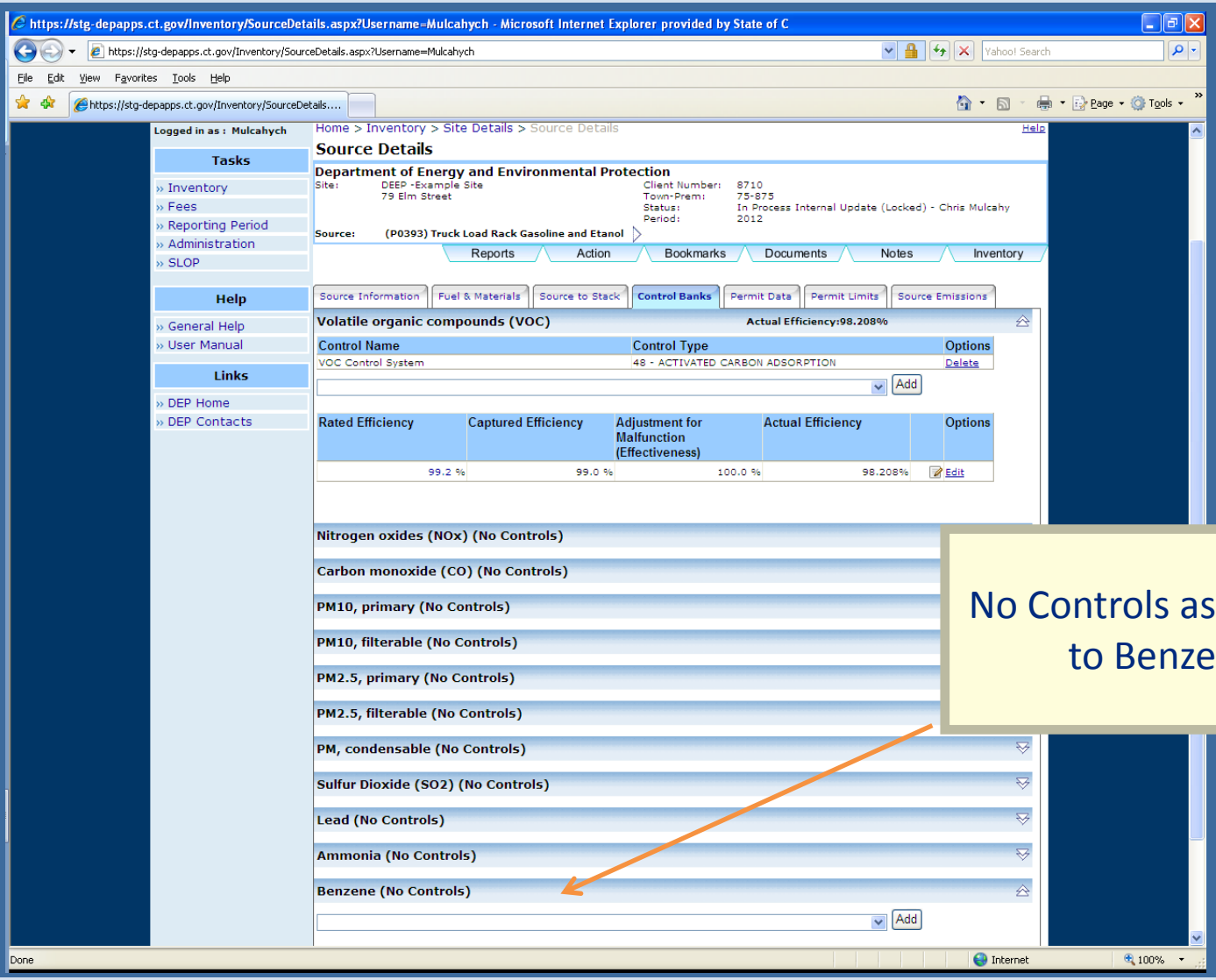


Accounting for Controls when estimating HAP Emissions



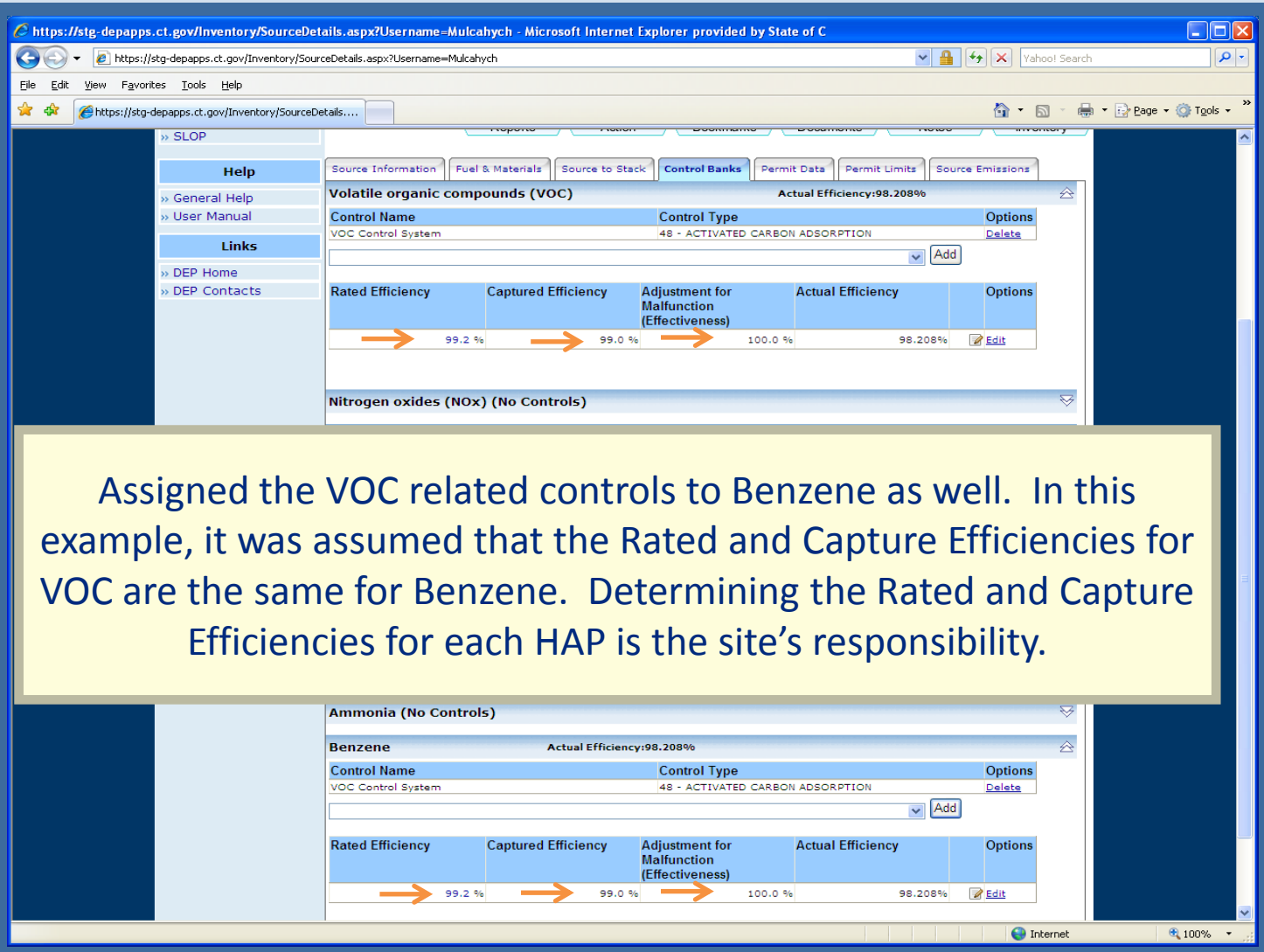
Control efficiency entered and applied to VOC emissions but not to Benzene

Accounting for Controls when estimating HAP Emissions



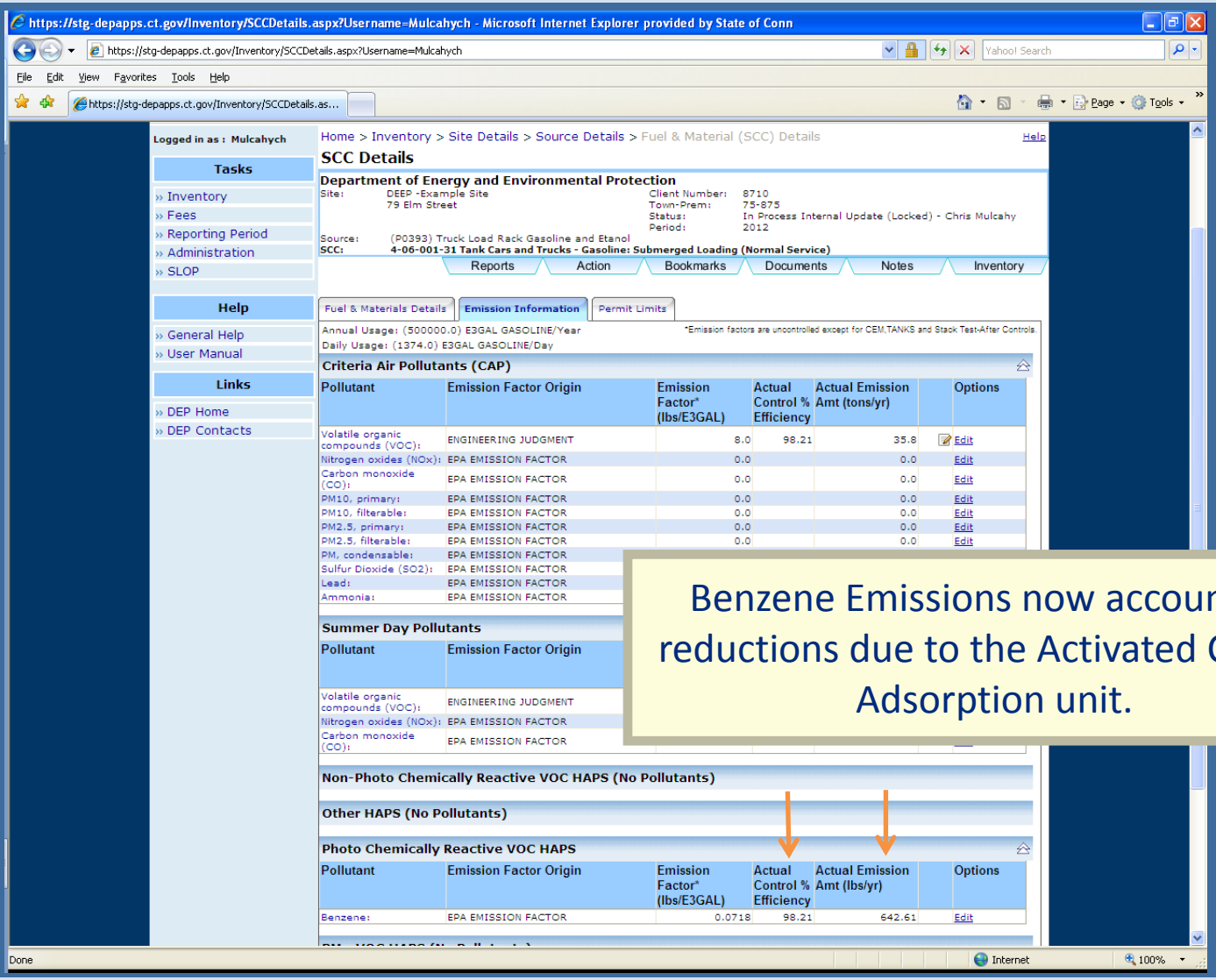
No Controls associated to Benzene

Accounting for Controls when estimating HAP Emissions



Assigned the VOC related controls to Benzene as well. In this example, it was assumed that the Rated and Capture Efficiencies for VOC are the same for Benzene. Determining the Rated and Capture Efficiencies for each HAP is the site's responsibility.

Accounting for Controls when estimating HAP Emissions

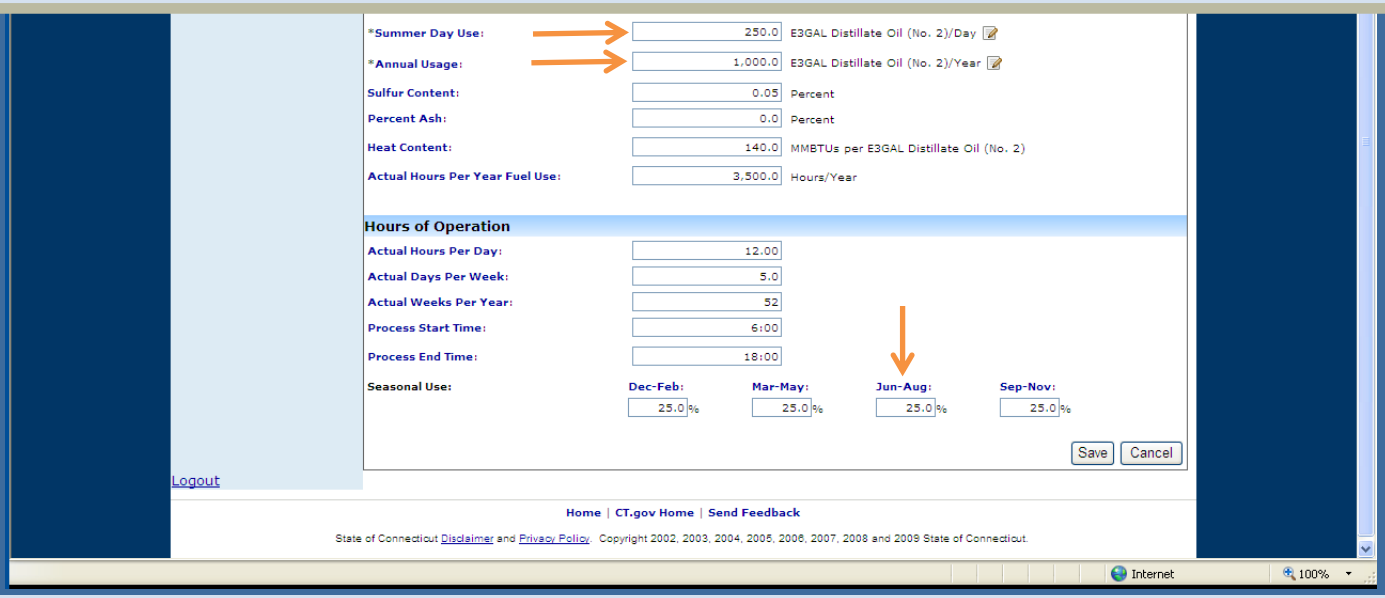


Benzene Emissions now account for reductions due to the Activated Carbon Adsorption unit.

It appears that the site incorrectly reported their summer usage instead of their summer day usage. The summer day usage is the average daily use on days the source is operated during the period of June 1 through August 31, inclusive. It should **not** be the entire summer usage, unless the source operated for only 1 day in the summer. It is expected that the summer day usage will be calculated as follows:

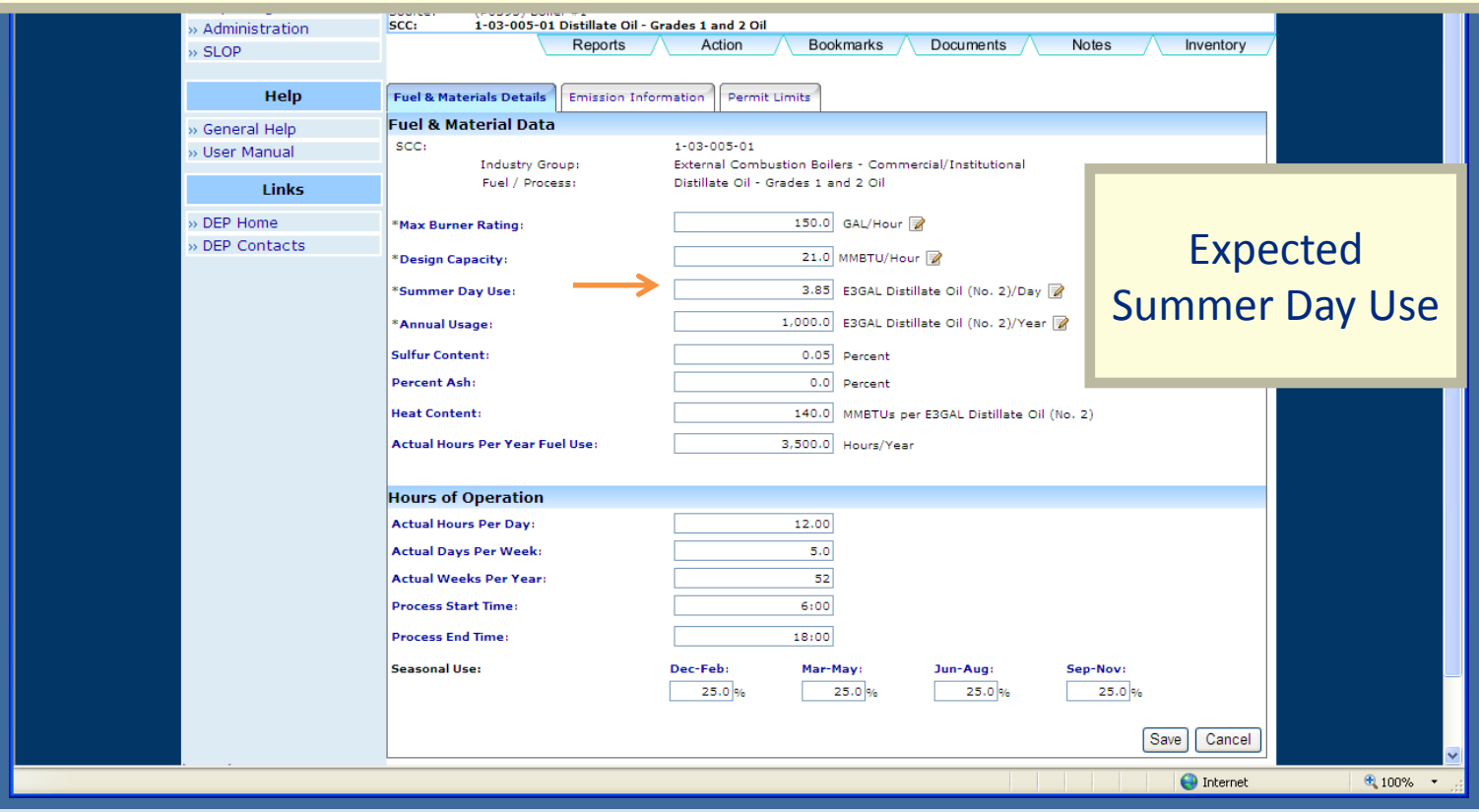
Annual Usage*(Jun-Aug/100)/(DaysPerWeekOperatedInSummer*WeeksOperatedInSummer)

Assuming the site operated 5 days per week for all 13 weeks in the summer then
The expected summer day use = 1,000 E3GAL/Year* 0.25 / (5 * 13)
= 3.85 E3GAL/Day



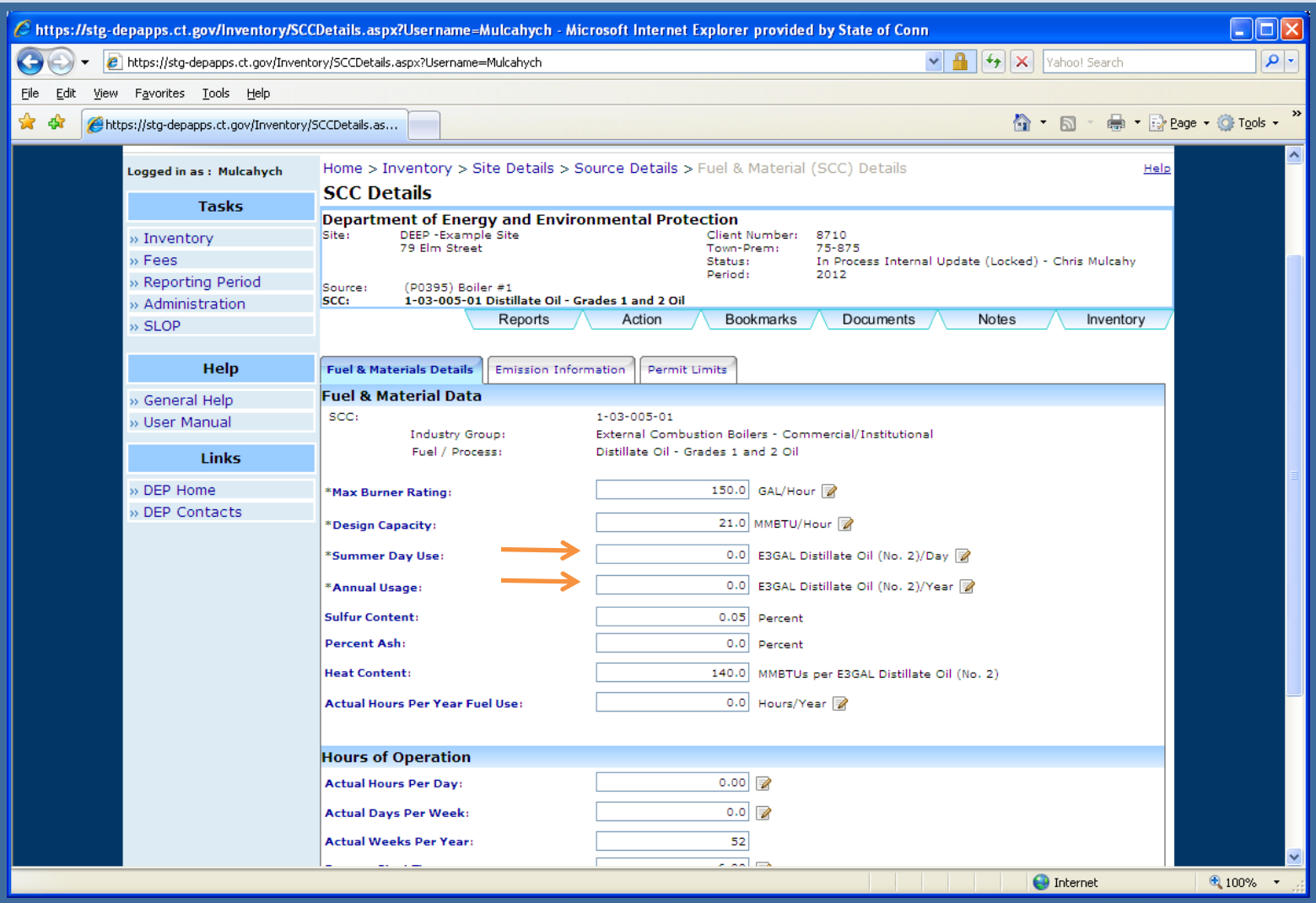
Calculating Summer Day Use

In this example, the summer day use of 250 E3Gal/Day results in NOx summer day emissions of 6,000 pounds, while the summer day use of 3.85 E3Gal/Day results in NOx summer day emissions of 92.4 pounds.



Expected Summer Day Use

Remember to Zero Out Summer Day Use When Unit Was Not Used.



Questions?

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