e-GGRT Training Webinar on Updates to Reporting GHG Data for Subpart HH

U.S. Environmental Protection Agency
Greenhouse Gas Reporting Program (GHGRP)
February 2013

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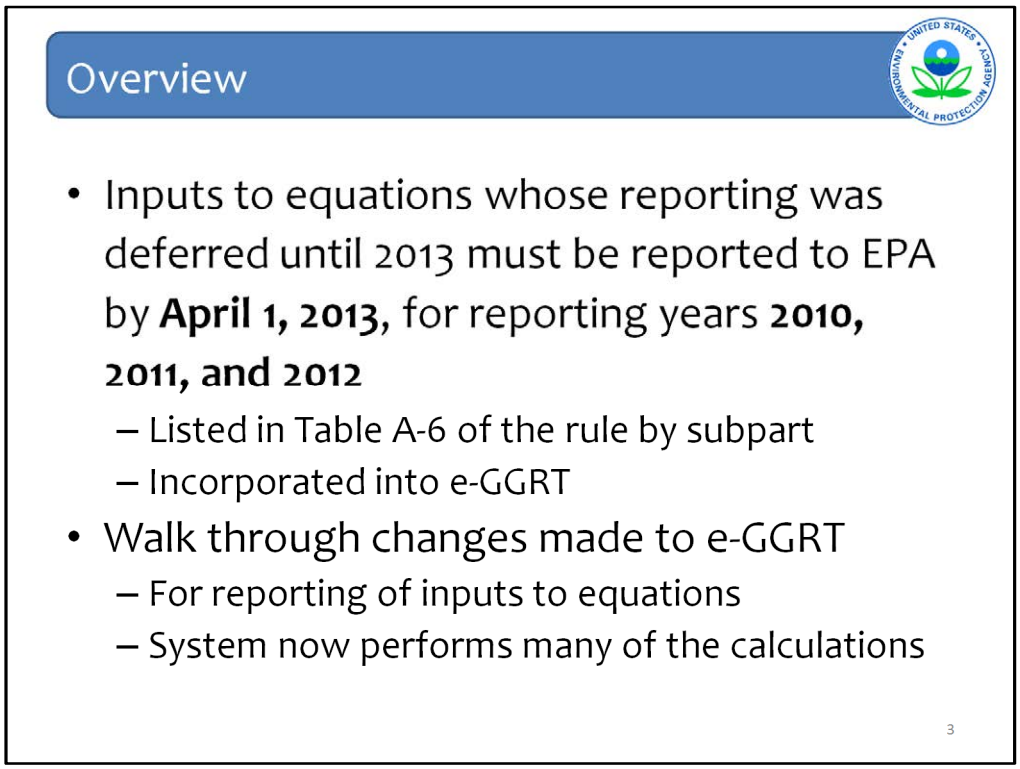
This training is provided by EPA solely for informational purposes. It does not provide legal advice, have legally binding effect or expressly or implicitly create, expand or limit any legal rights, obligations, responsibilities, expectations, or benefits in regard to any person.

For today's webinar please only submit questions regarding e-GGRT functionality, particularly on the updates covered in this webinar. Question on other topics (rule requirements, legal issues, etc.) should be submitted to GHGReporting@epa.gov.



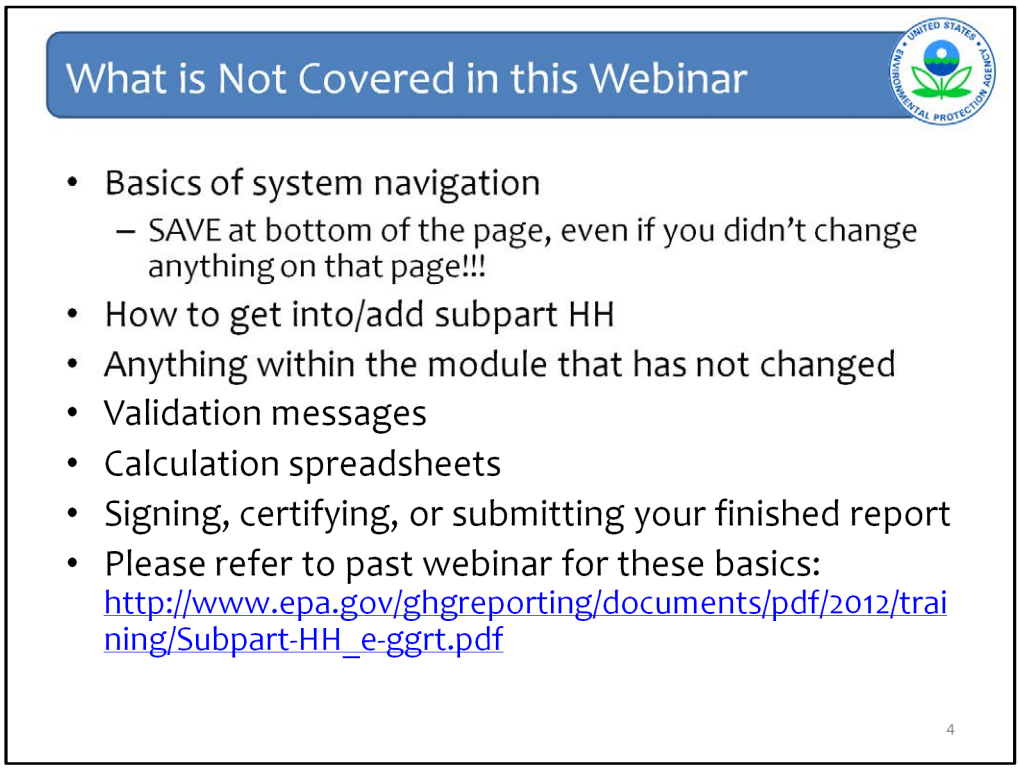
There are some substantial changes to the e-GGRT system for this reporting cycle.

The inputs to equations whose reporting was deferred until 2013 must be reported to EPA by April 1, 2013 for reporting years 2010, 2011, and 2012.

For the complete list of inputs that were deferred, refer to Table A-6 of the rule. The inputs are listed by subpart.

The inputs have been incorporated into e-GGRT.

The purpose of this webinar is to walk through e-GGRT to highlight the changes as a result of adding the inputs. Because these inputs are reported, the system can now do many of the calculations for reporters.



As was said, this webinar is going to focus on the changes to e-GGRT as a result of the equation inputs deferral having expired.

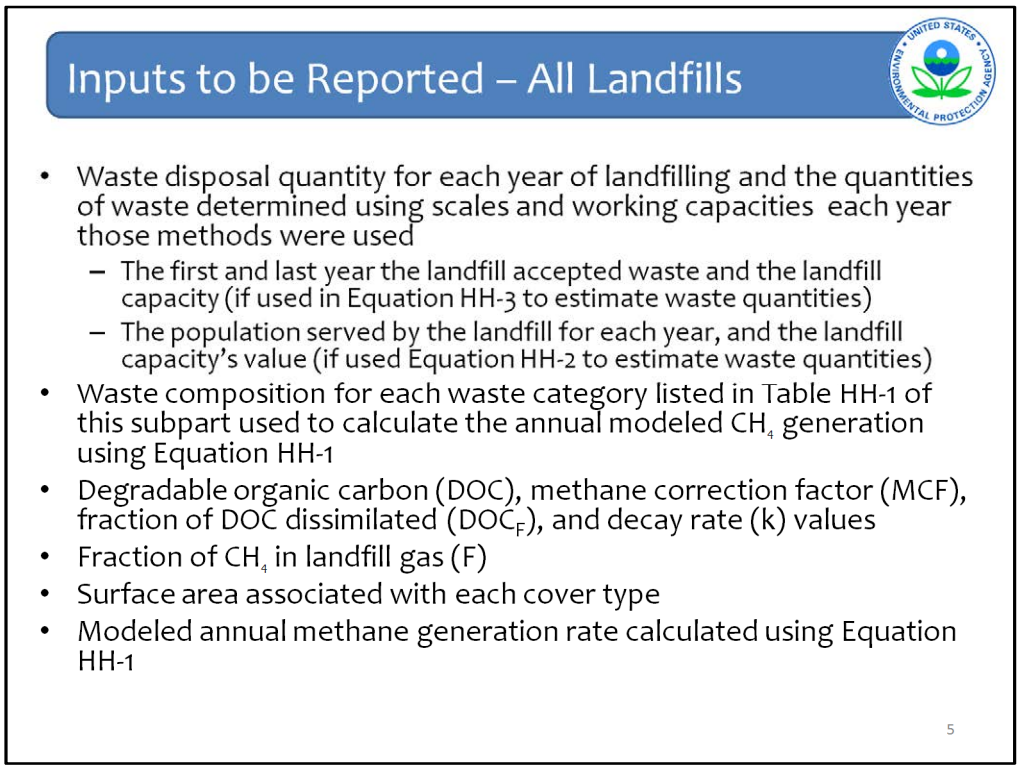
Therefore, there are a number of items this webinar will not cover that were covered in previous webinars. You can refer back to the previous webinar by going to the link on the last bullet of this slide.

What is not covered are the basic navigation of the system. However, it should be noted, that reporters should click SAVE a the bottom of all pages, where there is a SAVE button. This is even is you did not change anything on the page.

Also not covered is how to get into the subpart HH module or how to add or remove subparts, the validation messages, calculation spreadsheets that are still accessible from the Help link, how to sign, certify, and submit a report. Also not covered is anything that has not changes in the module, for example, the questions about active aeration at your facility if you used a number other than the default of 1 for MCF, have not changed, so this will not be covered.

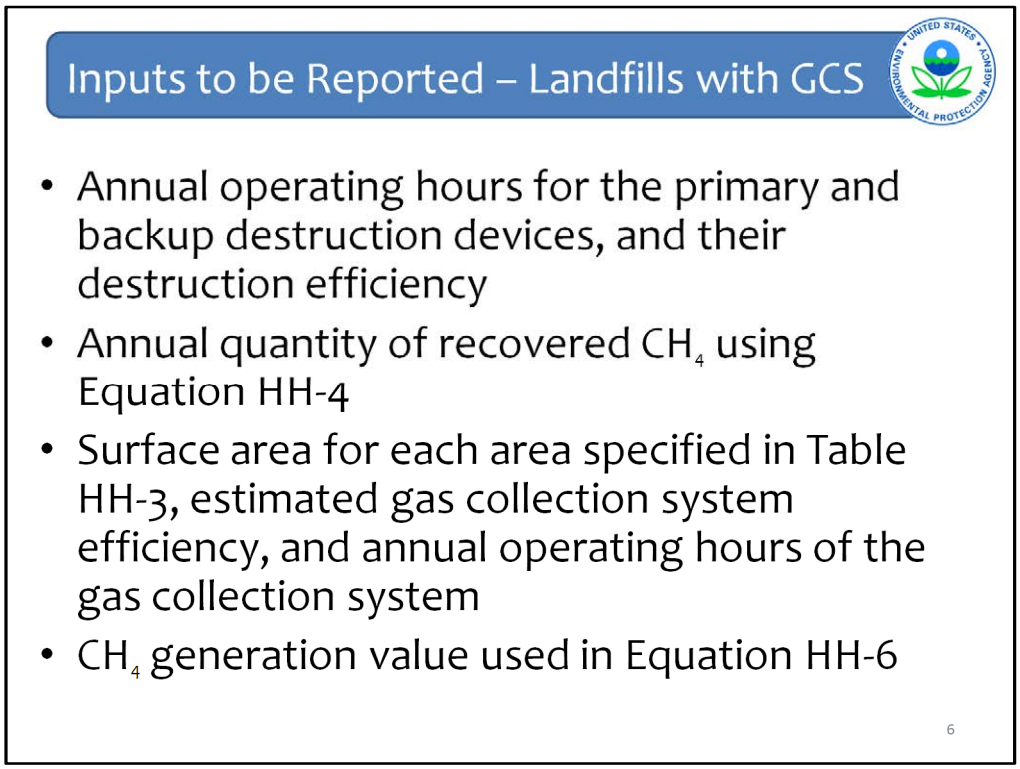
Please note that data entered in past years reports on items such as historical waste details will continue to carry over from past reports. For the inputs that are newly reported this year, you will have to enter that data and it will then be carried over into future reports.

For more information about update to e-GGRT in modules other than subpart HH, please go to the Training and Testing section of our website to download other webinars.

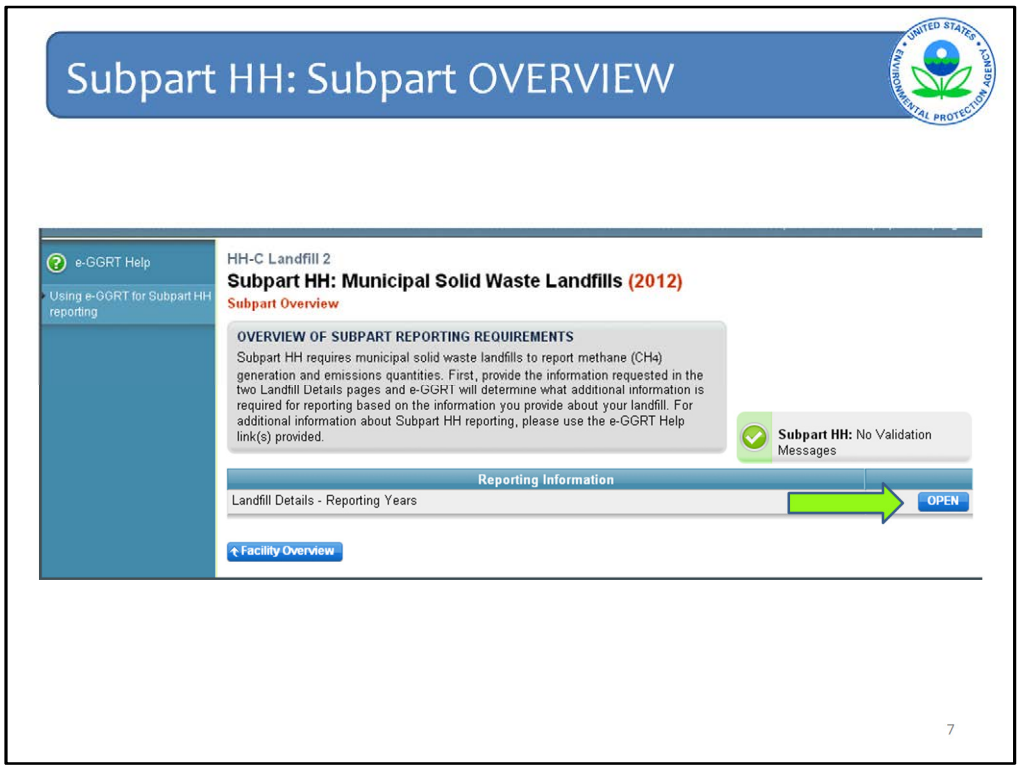


This is a detailed list of items whose deferral has expired for all landfills.

Just about all of the inputs on this list are inputs to Equation HH-1, the first order decay model, as you see waste quantities, DOC and k-values among other data elements on this list.



This is a detailed list of items whose deferral has expired for landfills with gas collection systems.



You can begin to see differences in the module for Subpart HH from the first look at the Subpart Overview page.

Landfill details are now broken up by time period: from the first reporting year to the current reporting year, aka Reporting Years; then all years prior to the first reporting year, aka Historical Years. For most landfills, Reporting Years encompass 2010, 2011, and now 2012. But there were a few facilities that reported in 2011 for the first time. For those facilities, Reporting Years just mean 2011 and now 2012.

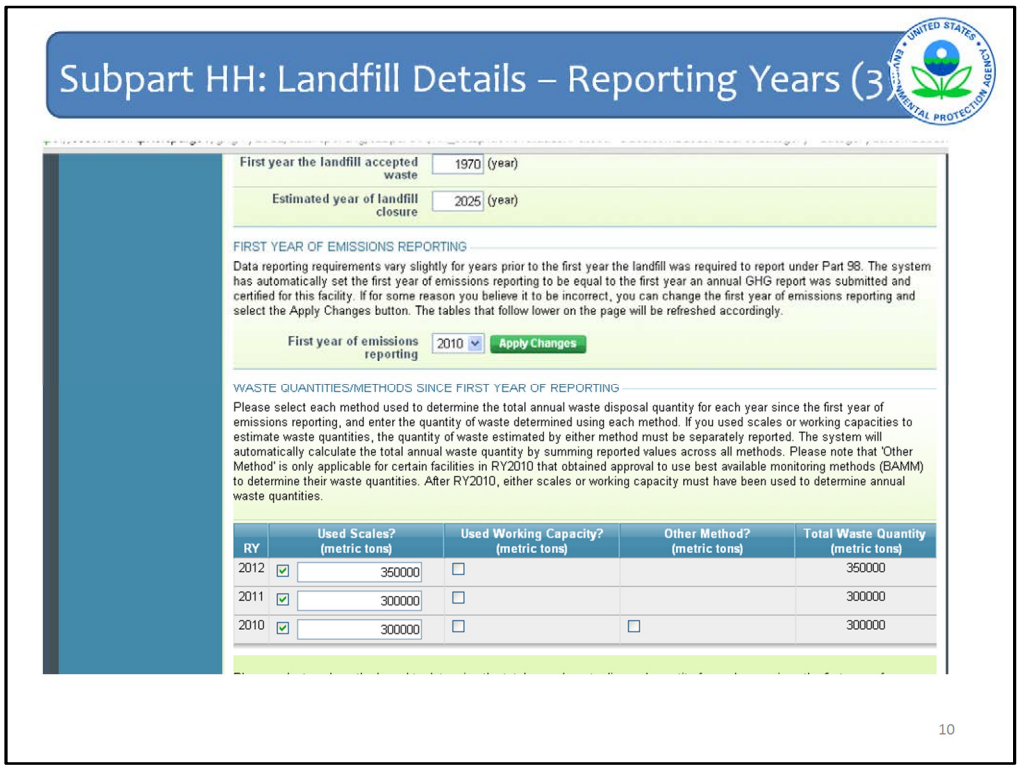
Click OPEN next to Landfill Details – Reporting Years to begin data entry.

This is the Landfill Details – Reporting Years page.

In this example, the landfill is open, so the next questions that need to be answered for all open landfills is when it first accepted waste and when it is expected to close. These are slightly different from past years' reporting.

Next e-GGRT asks for the first year that the landfill starting reporting to the Greenhouse Gas Reporting Program. As explained here, the data reporting requirements vary slightly for years prior to the first reporting year the landfill was required to report to the program. The system automatically sets the first reporting year to the first year an annual GHG report was submitted for this facility. But you are given the opportunity to change that value if you believe it is not correct. To correct it, select another year from the pull-down list and click Apply Changes and the rest of the page will refresh accordingly.

Back tracking a step, if the landfill is closed, then you must enter the first year the landfill accepted waste and the last year waste was accepted.
And then again you see the question about the first year of emissions reporting.



Next you are asked about the methods used to determine waste quantities for the first year of reporting and after. One change to the system is the tabular way in which some questions are asked. This grid appears covering all of the years that the facility reported starting with the first emission reporting year or RY (in the first column). If your first year of emission reporting was 2011, then only 2011 and 2012 would appear in the grid.

Note that after 2010 there are only two allowable options for how to determine waste quantities – scales or working capacities. The third option , Other, refers to best available monitoring methods or BAMM, and these were only available for those subpart HH facilities in 2010 that were approved by EPA to use BAMM. For 2011, and each year after, scales or working capacities must be used to determine waste quantities.

Also note that if you check the box that you used a method, a box appears in which you must enter the waste quantity measured using that method. Per the rule language, the quantities for scales and working capacities must be reported separately. The system will automatically add up the values entered in each row for a total which appears in the last column “Total Waste Quantity.”

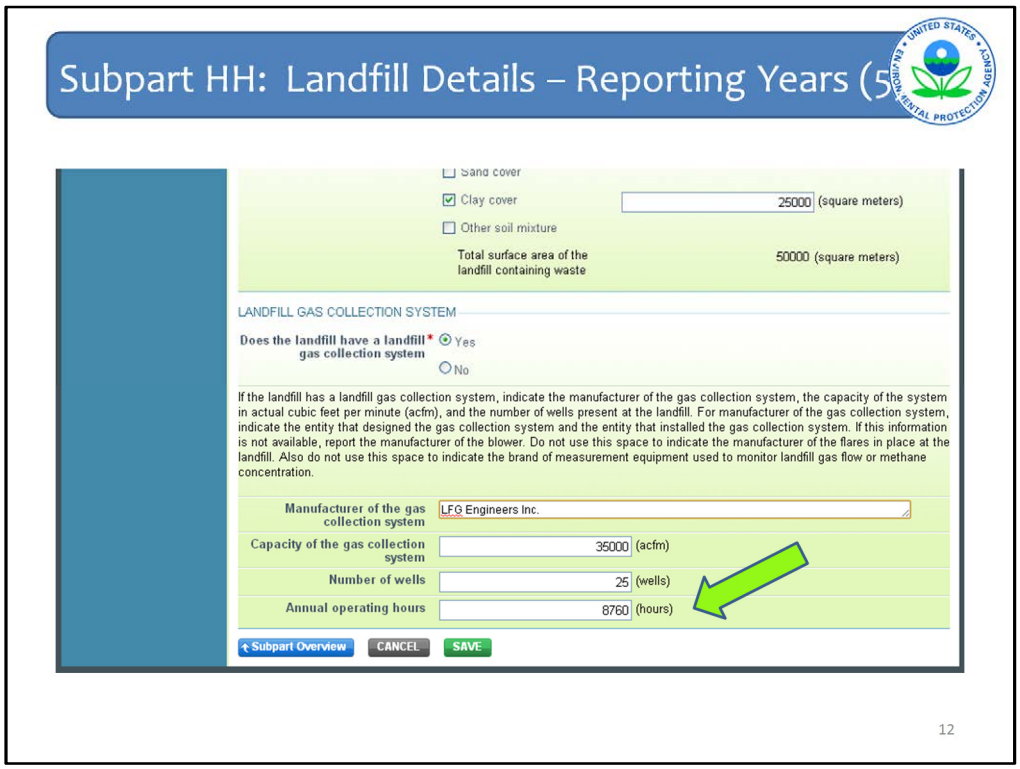
While similar questions were asked in previous versions of e-GGRT, the reporting of annual waste quantities by method is new, as is this grid structure and the automatic summing of values for total annual waste quantity.

Three additional changes down at the bottom of the Landfill Details page for Reporting Years.

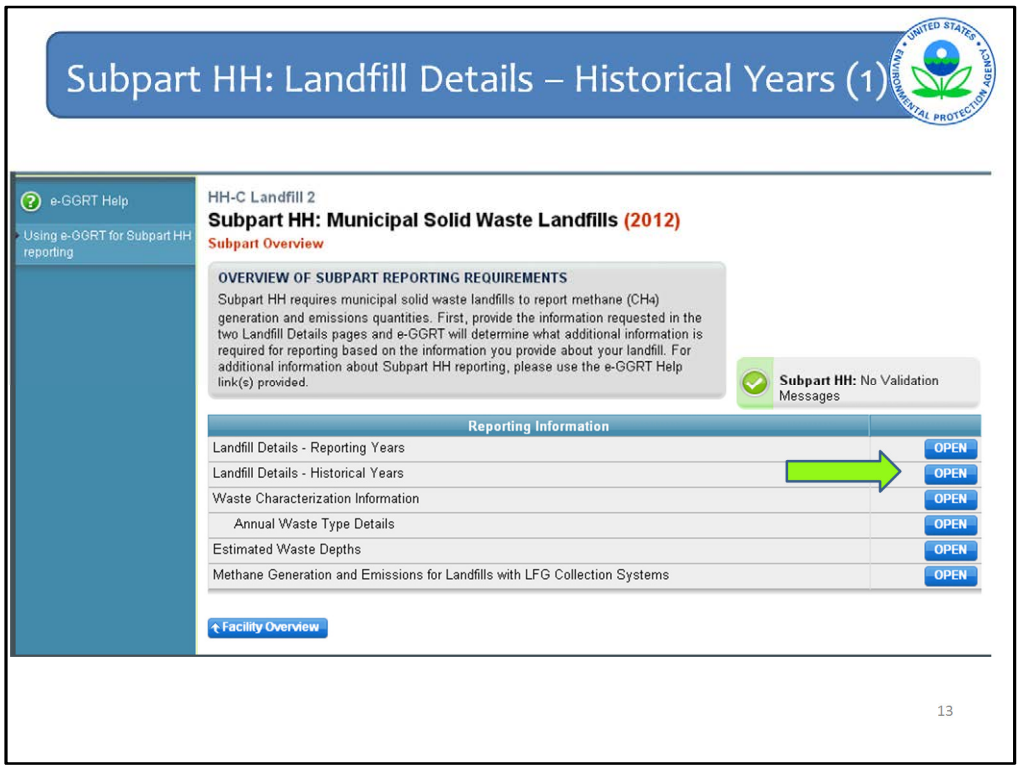
First, the landfill capacity must be reported for all landfills (Arrow #1), whereas before it was reported only if certain estimation methods were used.

Second, you must indicate the typical frequency of use for leachate recirculation at your landfill regardless of whether you used leachate recirculation during the reporting year. The list of possible frequencies has been expanded to include the possibility that leachate recirculation was “Not used for the past 10 years.” (Arrow #2)

Third, when you identify each cover material that is used, you must also report the surface area in square meters for each cover type selected (Arrow #3). The system will add them together for the total surface area of the landfill containing waste.

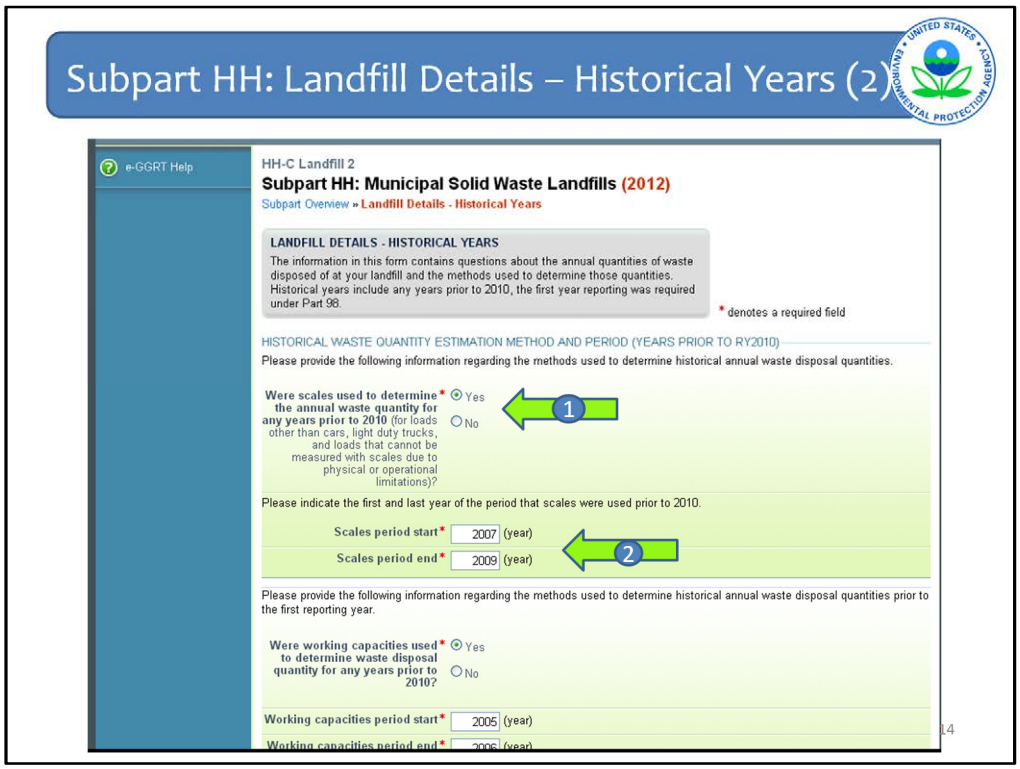


The last change on this landfill details page is an additional question that must be answered if you indicate that your landfill has a gas collection system. You must now report the annual operating hours of the gas collection system in addition to the information that was previously reported about the gas collection system.



After you clicked SAVE and returned to the subpart OVERVIEW page, you will see additional pages. As before, what you see here is based on how you answered the questions on the Landfill details page. For example, the last line is Methane Generation and Emissions for Landfills with LFG Collection Systems because the question on the Landfill Details-Reporting Years page about whether the landfill has gas collection was answered yes. If the answer was no, then a different page would be shown here.

As mentioned previously, Landfill Details is broken up into two parts, click OPEN next to Landfill Details – Historical Years to continue data entry for the second part.

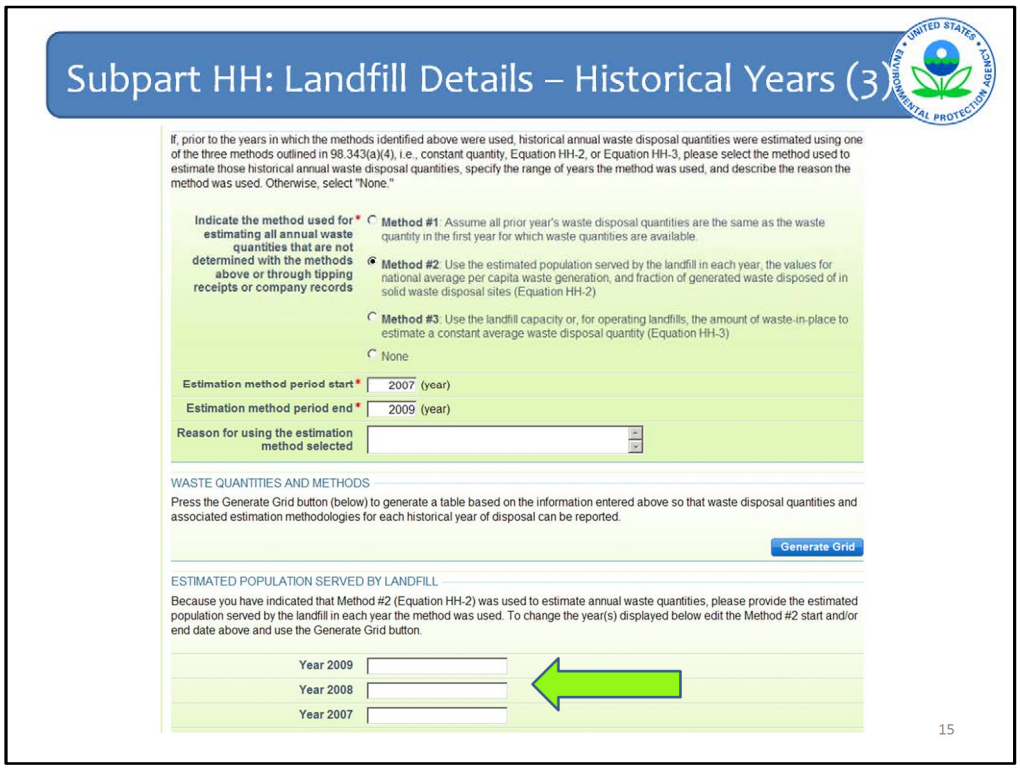


The Landfill Details-Historical Years page contains all of the questions about what methods were used to determine or estimate waste quantities for each year the landfill accepted waste up to the first year of emissions reporting under Part 98.

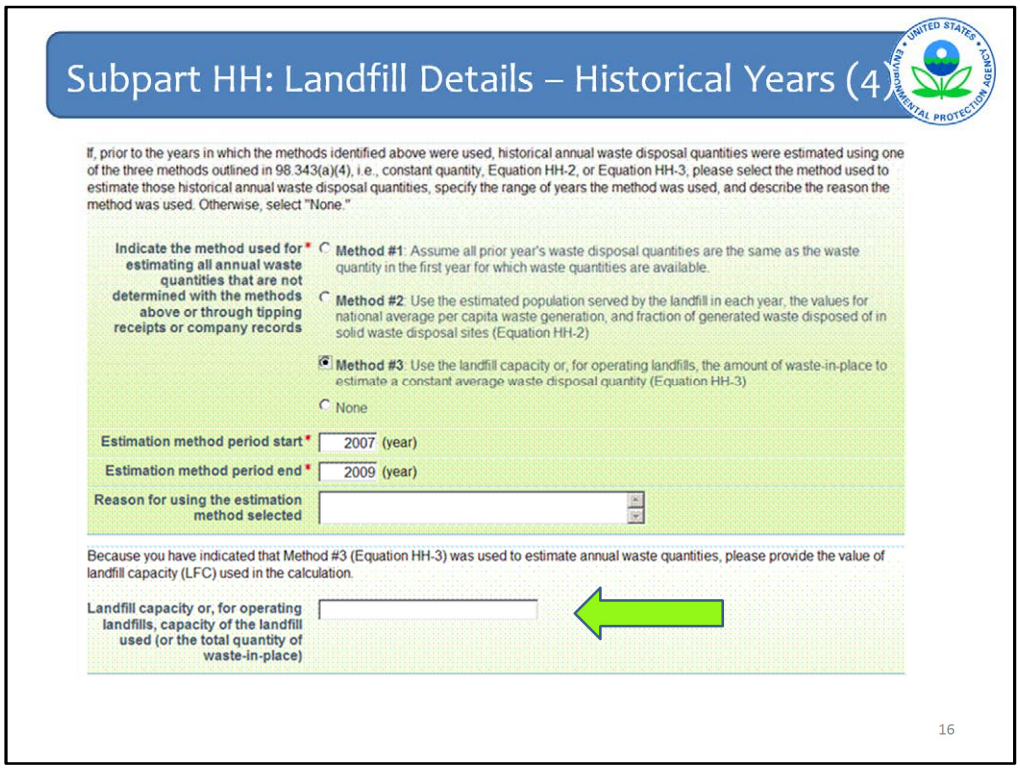
So first is the question about scales (Arrow #1). As before, if you click Yes that this method was used, then additional questions will pull down asking for the first and last year or start and end years for using this method (Arrow #2).

There are 4 series of these questions and they are broken out slightly differently from the last reporting cycle: 1) scales; 2) working capacities; 3) tipping receipts and other company records; and 4) the other estimation methods (Methods #1, #2, and #3 in the rule). For each click yes or no, and if yes, enter the first year the method was used and the last year it was used.

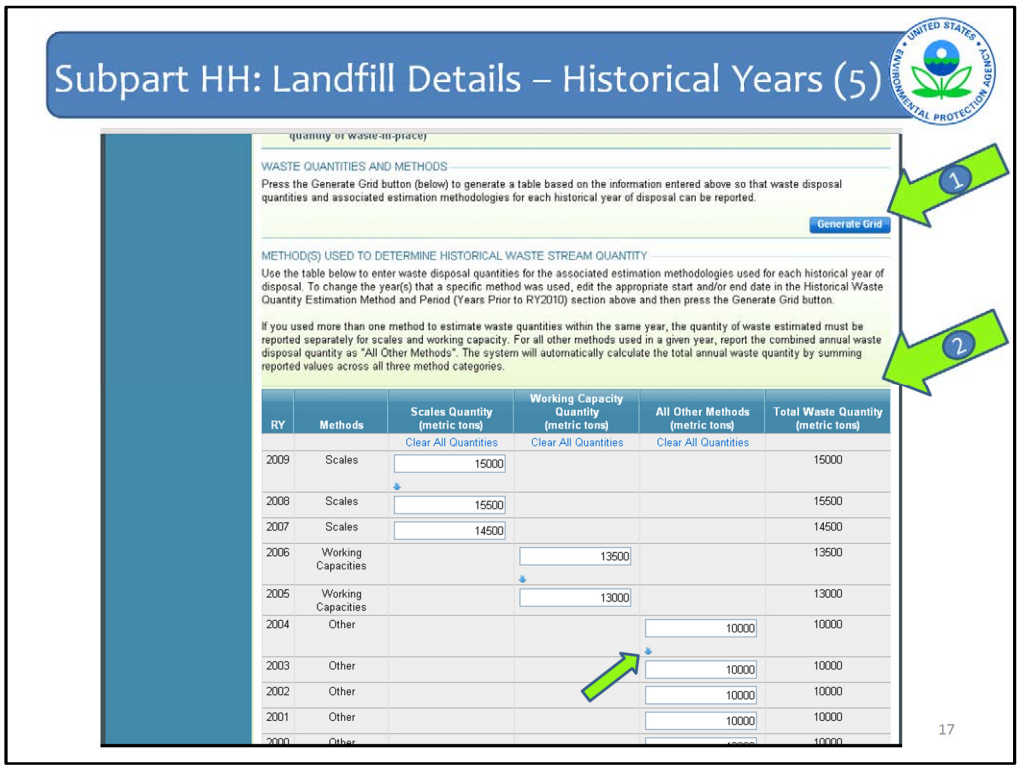
As can be seen at the bottom of this slide, the difference with this version of e-GGRT is that working capacities is asked separately, whereas before they were lumped together with tipping receipts. This will be explained more in a later slide.



If Method #2 is selected, you will need to enter the same information as was entered in previous versions of e-GGRT (e.g., start/end years and reason used), and will now have to enter the estimated population served by the landfill for each year Method 2 was used.



If Method #3 is selected, you will need to enter the same information as was entered in previous versions of e-GGRT (e.g., start/end years and reason used), and will now have to enter the landfill capacity term used in Equation HH-3.



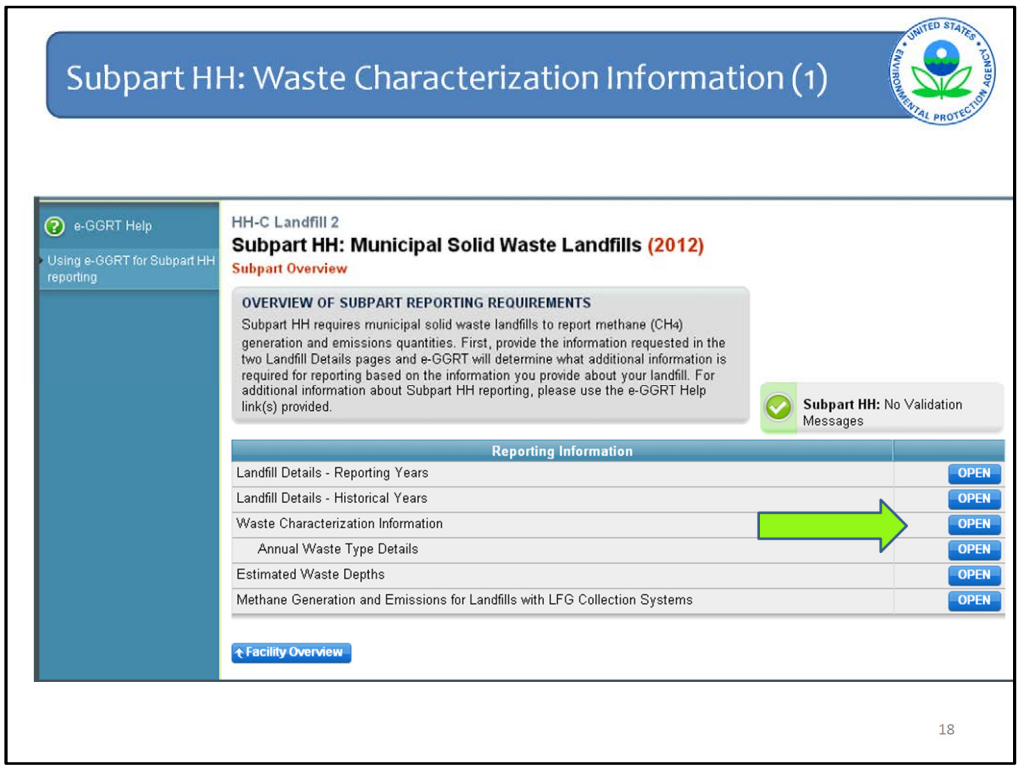
After all methods used have been indicated as well as the years those methods were used, click the Generate Grid button (Arrow #1) so that the corresponding waste quantities may be entered.

Once that button is clicked, the grid appears showing methods used by year broken out by scales, working capacities, and then all of the other estimation methods are lumped together (Arrow #2). This is per the rule language which requires waste quantities determined by scales or working capacities to be reported separately (98.346(b)). So if both scales and working capacities were used in a given year, those must be entered separately. The system will then sum across the row and the total waste quantity for that year is shown in the last column.

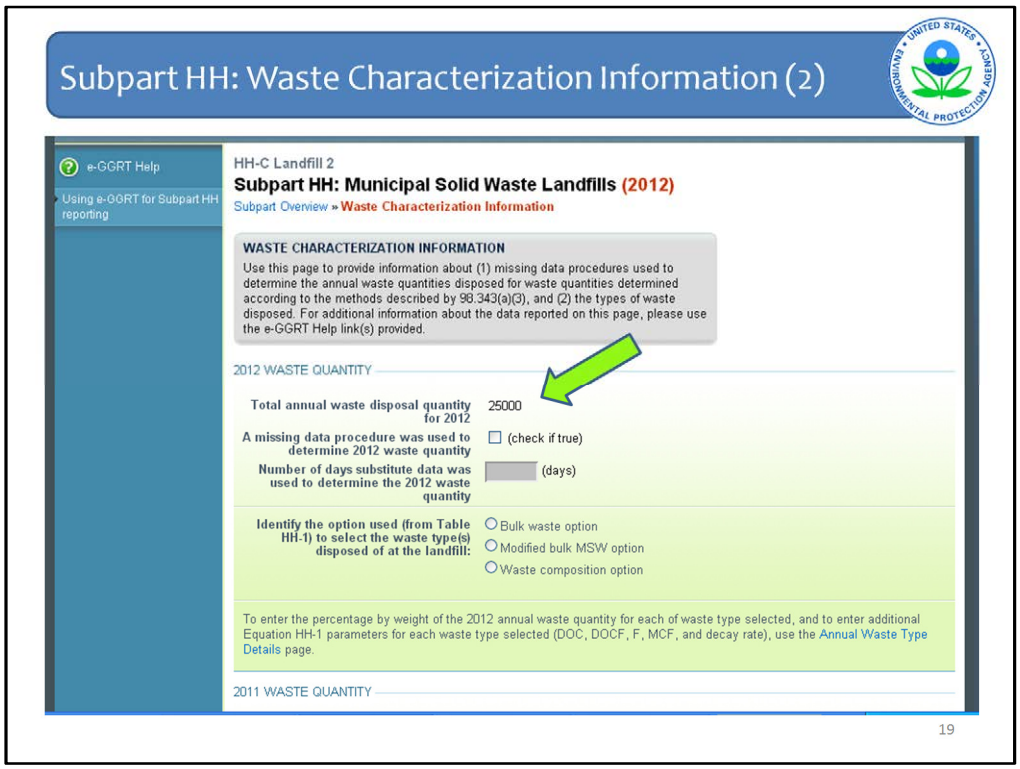
Two features to point out on the grid. First the Clear All Quantities feature under the title of each column. Second if the same value needs to be entered for all years that method was used, click the little blue arrow underneath the first box in that column to automatically populate all values in the column with the same number.

Multiple methods may be indicated in a particular year. In this case, two boxes will appear and you will have to enter separate values in each box, which will be summed across for the total.

If you enter waste quantities and then realize you made a mistake in the start and end years for a method, you should scroll up to change the start and end years for that particular method and then press the Generate Grid button again to re-generate the grid. The waste quantities already entered will remain, but the grid will be regenerated to show the revised range of years.

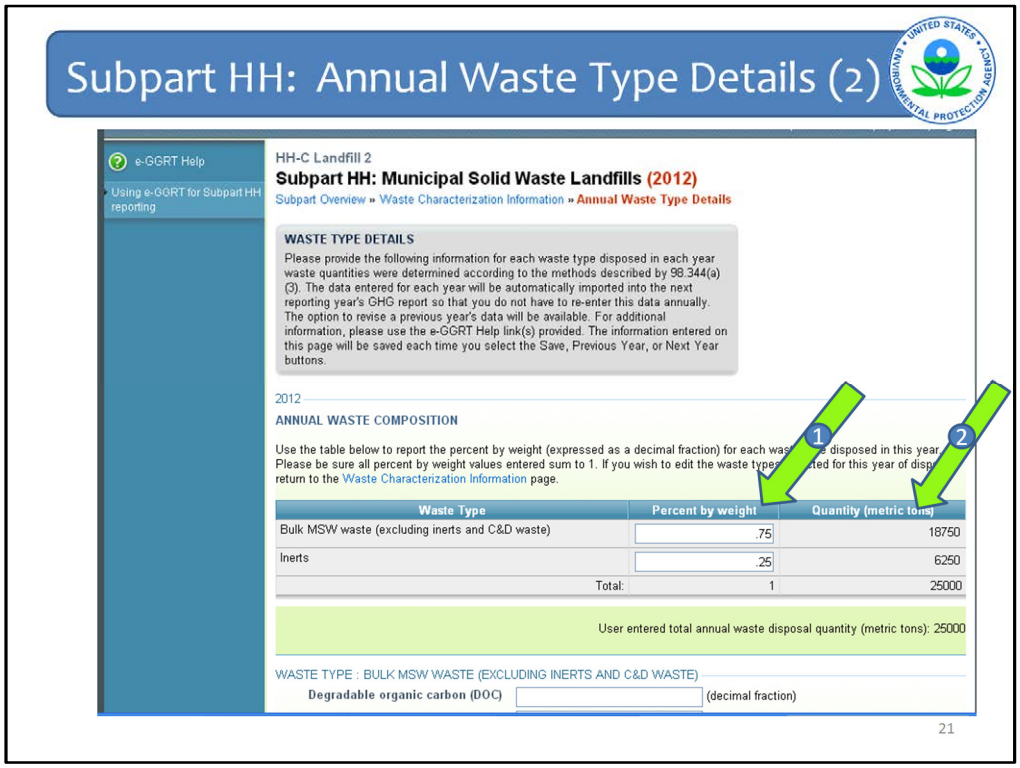


Back to Subpart Overview. The next page to go to is Waste Characterization Information



This page is very much like the Waste Disposal Information page from the previous iterations of e-GGRT. Information on each year in which scales were used must be entered here just as before. The one difference is that the waste disposal quantity for each year is displayed. It is the same value that was entered on either the Landfill Details – Reporting Years page for the years in which the facility reported to the GHGRP or the Landfill Details – Historical Years page for all years prior to the first year of emissions reporting.

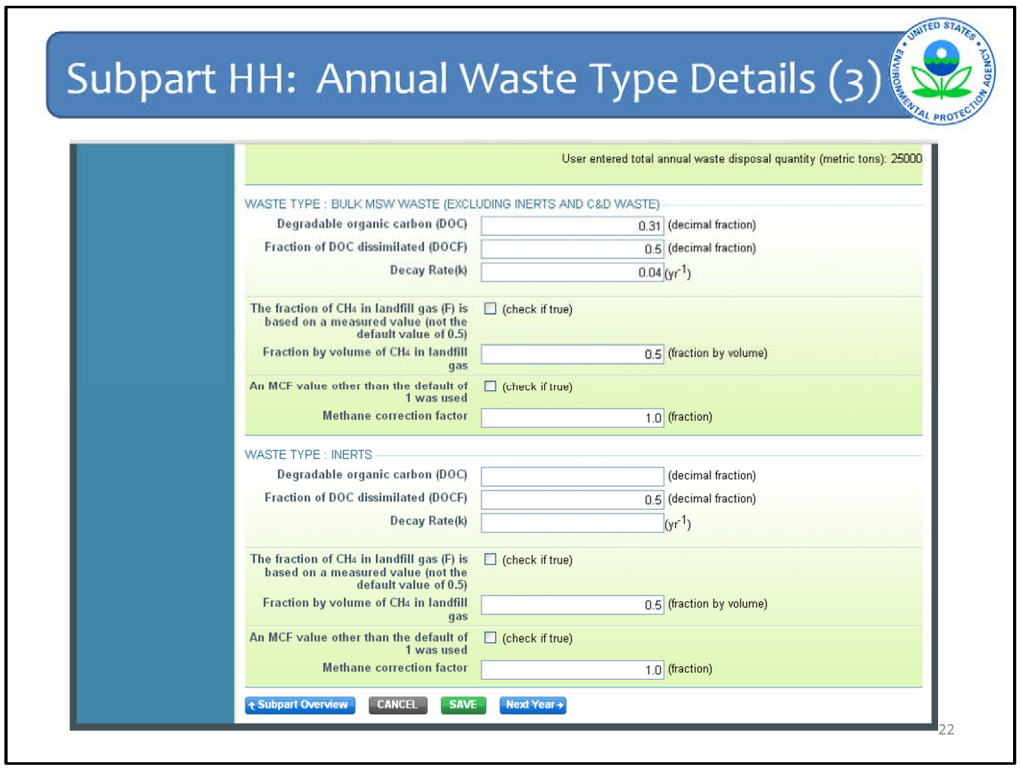
The next page is Annual Waste Type Details.



Per the rule, for each year required by Equation HH-1, you must enter the waste composition in percentage by weight (Arrow #1).

Enter the data expressed as a decimal fraction. If it is 100% be sure to enter 1.0 or you will get an error message.

The system does the math for the last column (Arrow #2) to get a quantity for each waste type and then totals it, so it matches the quantity entered on previous screens.



This next slide shows where you enter all of the inputs to Equation HH-1 by waste type. Recall that Equation HH-1 is the First Order Decay Model that is used to calculate methane generation from the landfill.

You must enter the values for DOC, DOC_F, and k. The values for DOC_F, is automatically entered as 0.5, since that is the default that must be used per the rule.

Next are the same check boxes as before for the values of F and MCF. However, this time the values used for these terms must also be reported. The defaults are automatically entered. But if you check either of the boxes for MCF or F to say that you used values other than the defaults, those numbers will go away and you must enter the values you used for the calculation.

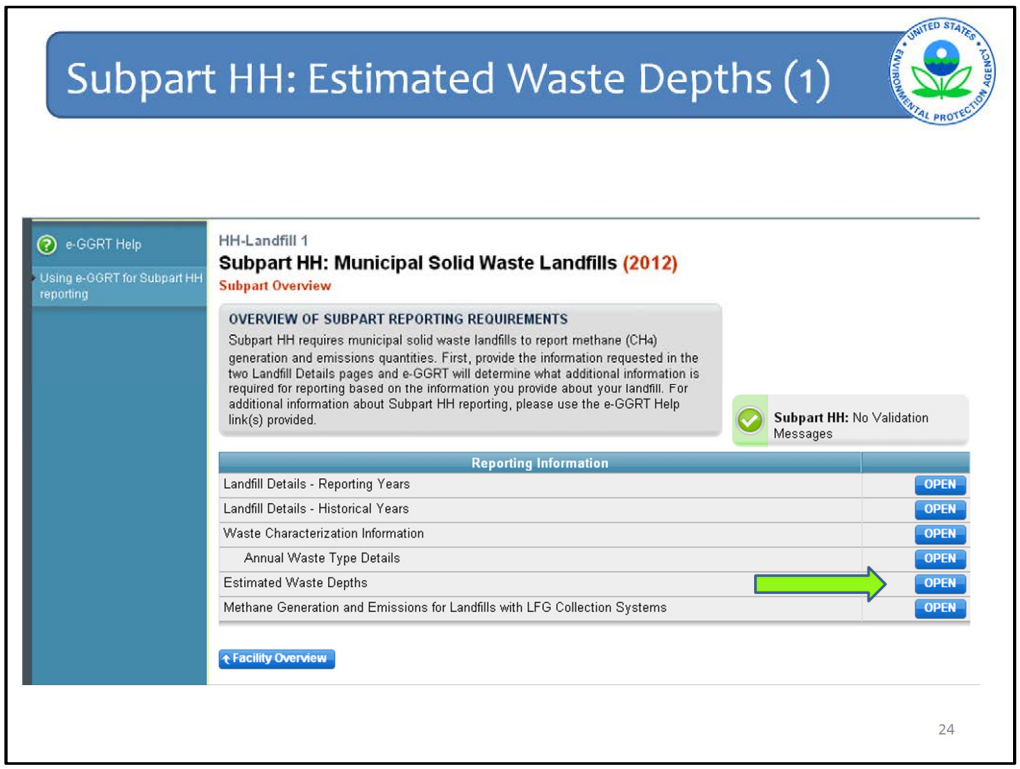
As before, if you say you used an MCF other than the default, you have to enter information about active aeration at your landfill. Again, this was covered in the previous webinars and has not changed so detail is not being provided here. The one difference is that the questions on aeration are shown on this page instead of on a separate page.

This data on this slide must be entered for each waste type. When you are done entering all the information, click SAVE at the bottom, then click Next Year.

This slide shows the data entry required for the year prior.

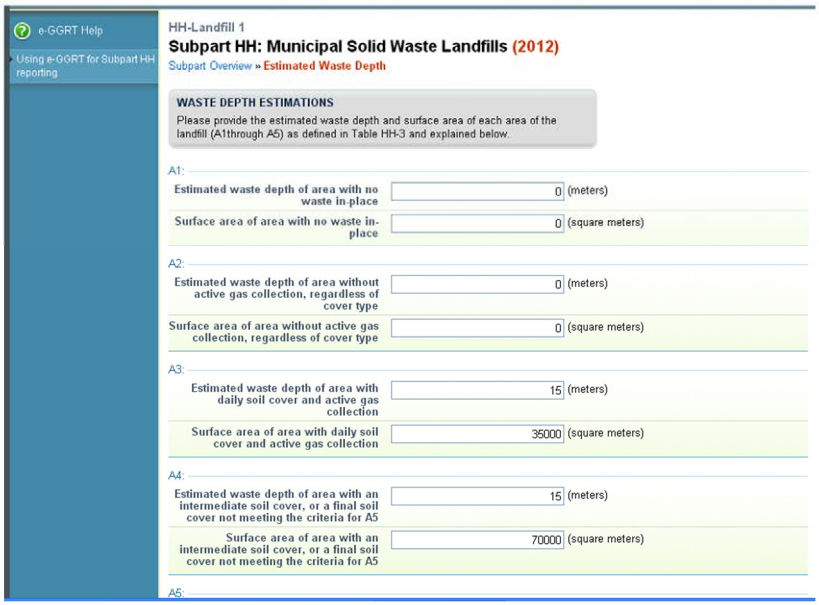
Now at the bottom, see buttons for both Next Year and Previous Year. Use those to navigate the system until data on the waste types for all years is complete.

When you are done entering data for all years required, the Next Year button will no longer appear at the bottom and so you will know to hit SAVE and then go back to Subpart Overview.

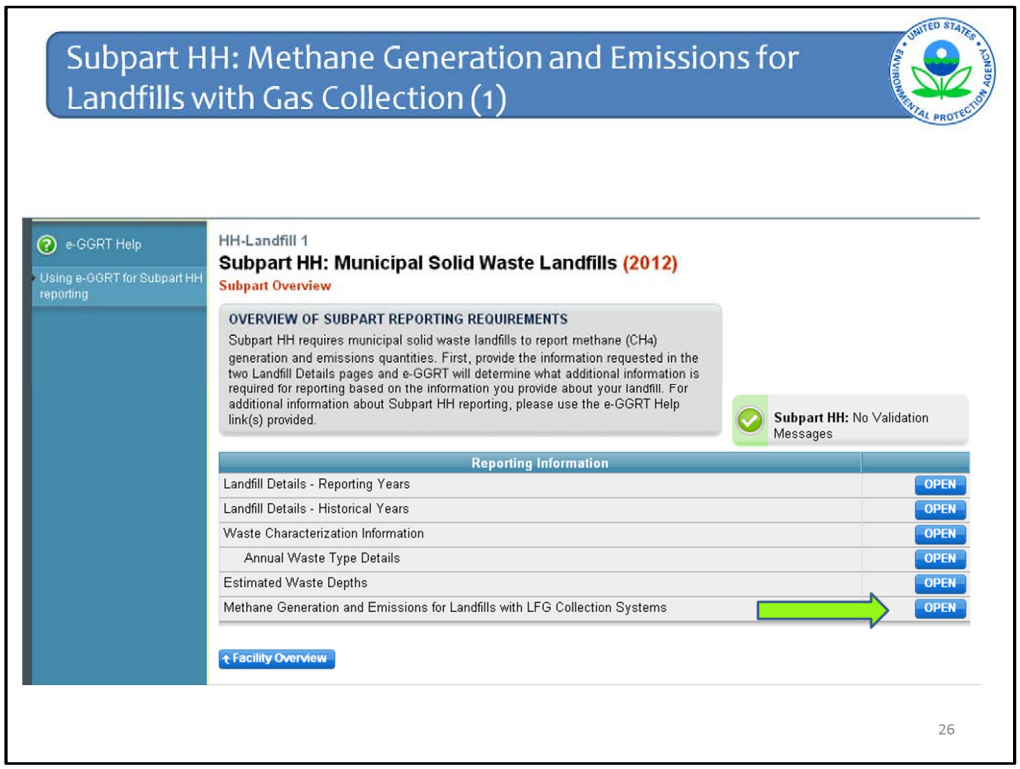


There are also changes on the screen regarding waste depths.
From the Subpart Overview page, click OPEN next to “Estimated Waste Depths.”

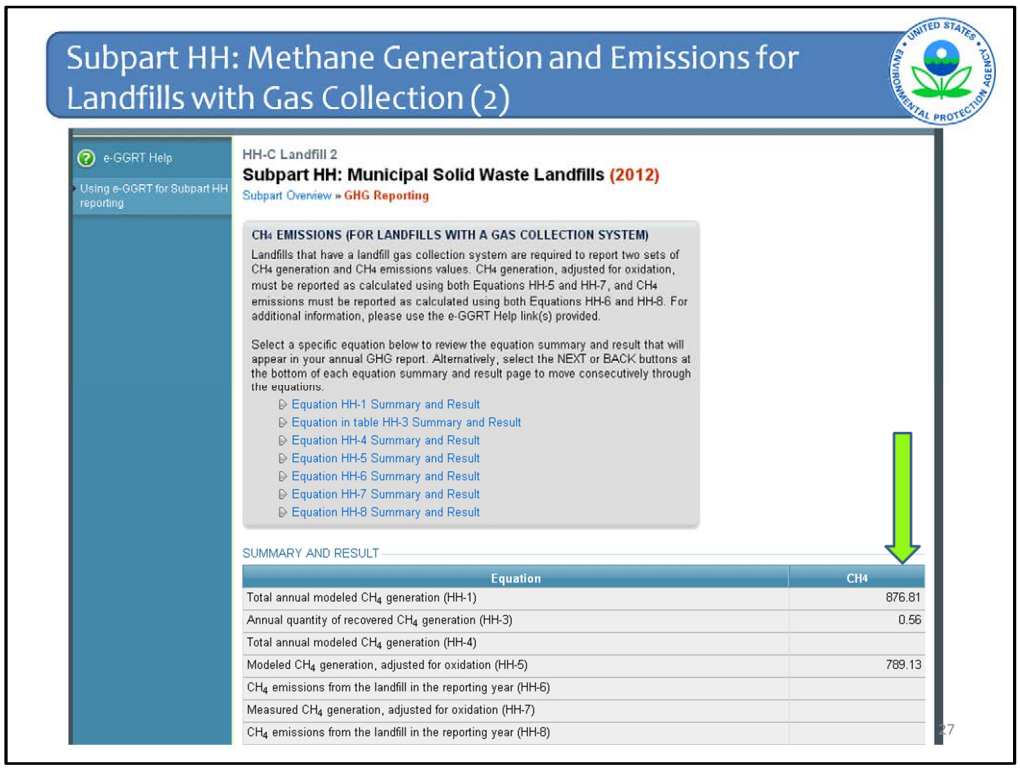
Subpart HH: Estimated Waste Depths (2)



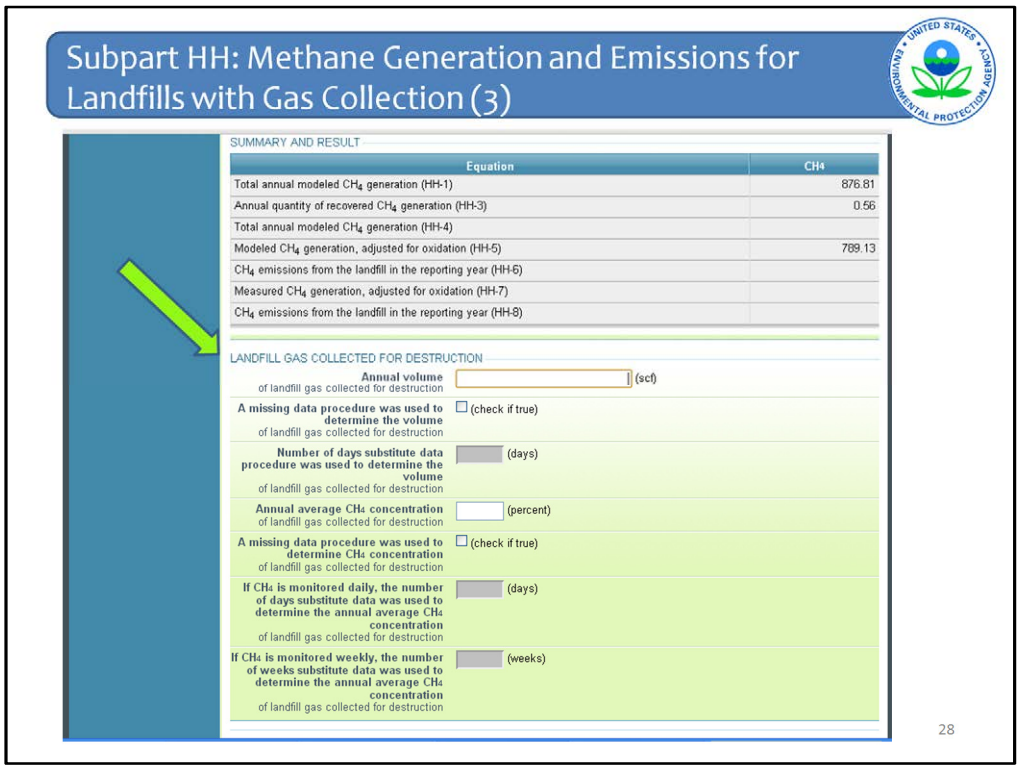
For landfills with gas collection, you must now enter the estimated waste depths (in meters) and the surface area (in square meters) for each of the areas listed in Table HH-3 of the rule for areas A1 through A5.



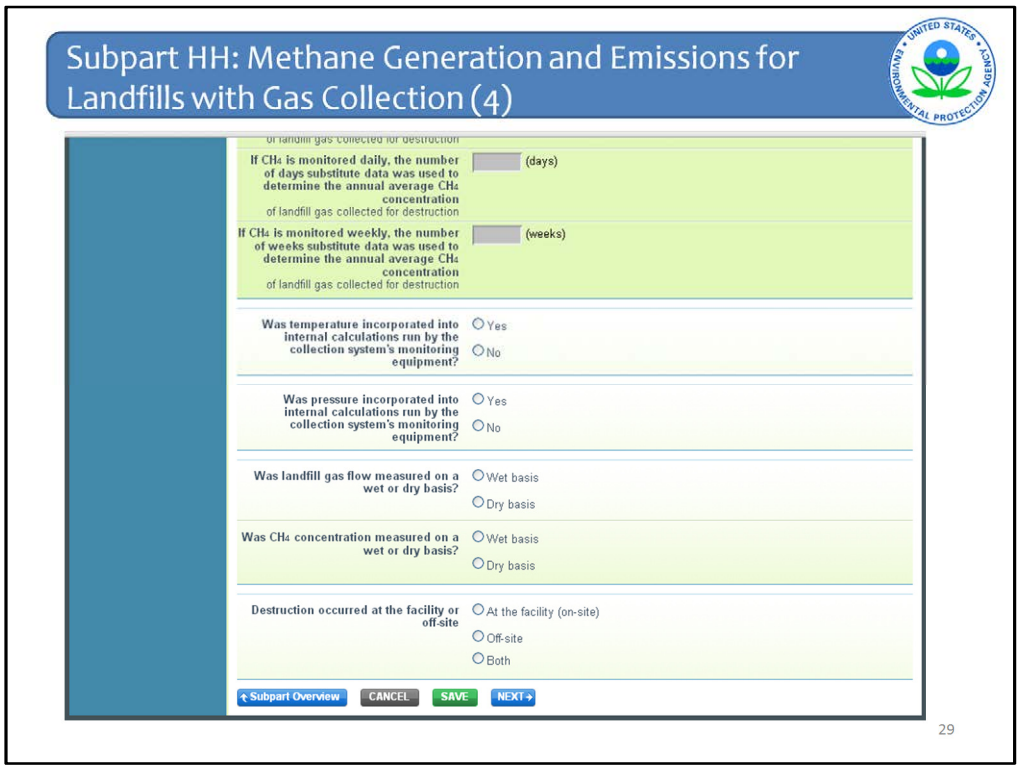
Back at Subpart Overview, next click OPEN next to Methane Generation and Emissions for Landfills with LFG Collection Systems



This section is all about the Subpart HH equations, all of which are listed here. The numbers in the Summary and Result section, under the column CH_4, are automatically calculated by e-GGRT based on previously entered data.

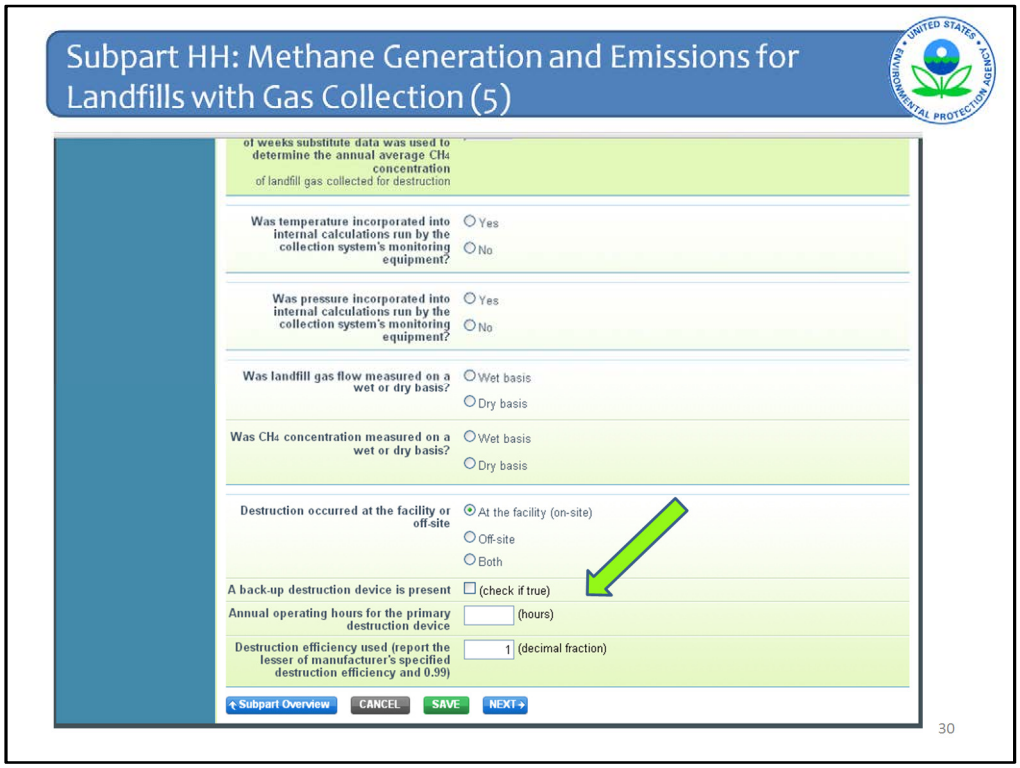


Underneath the Summary and Result table for the equations is a section that has been covered in previous webinars and has not changed. This is where you enter the annual volume of landfill gas collected, the annual average methane concentration and whether substitute data was used for either of those and how many times substitute data was used.

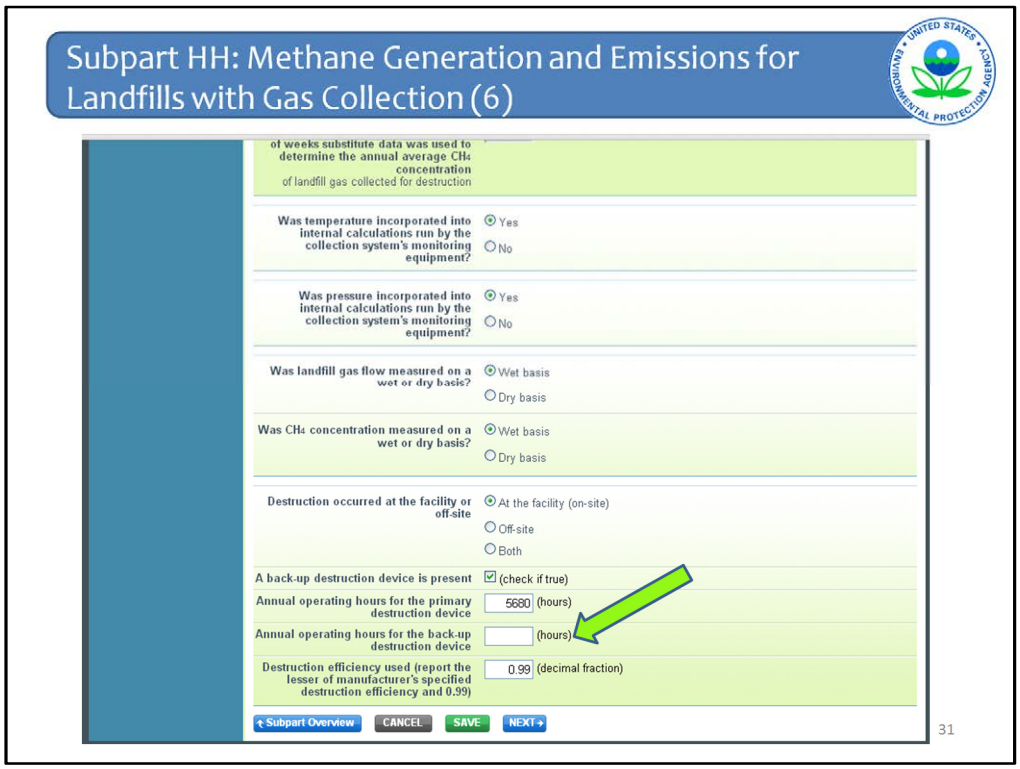


Below that is more that is similar to the structure in previous years in terms of entering information about temperature, pressure, and moisture. This functionality is as before.

What is new relates to where landfill gas destruction occurred. If all destruction occurs off-site then nothing has changed. If destruction occurred on-site at the facility or occurred both on-site and off-site, additional data must be entered.

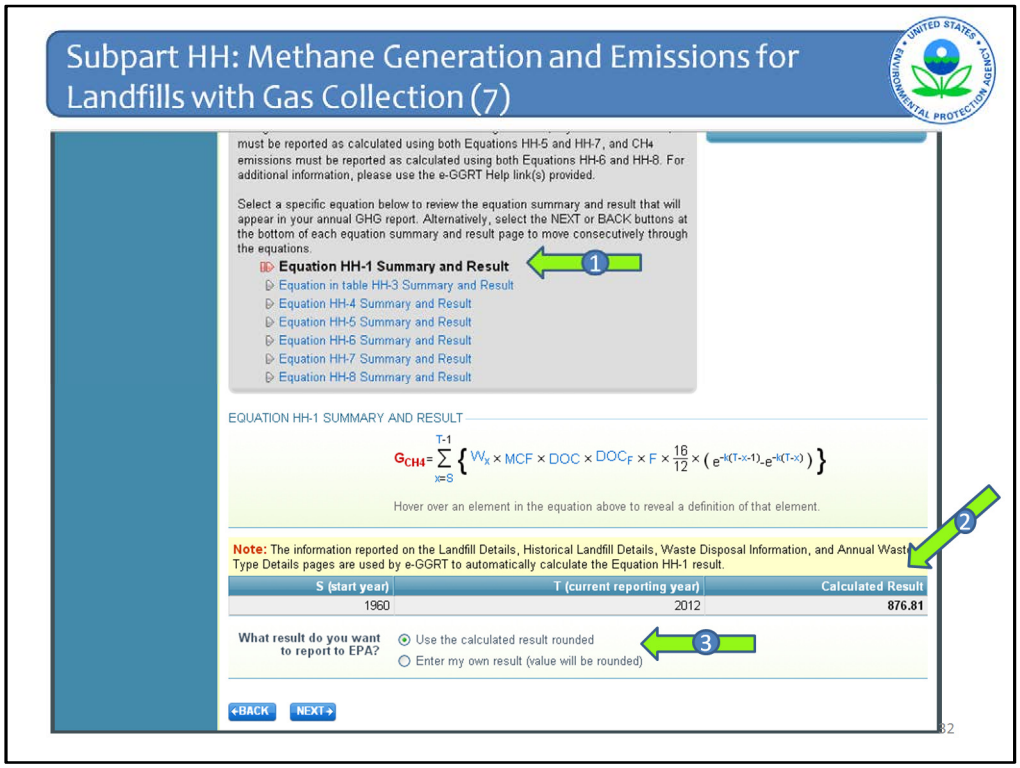


If destruction occurred either on-site or both on-site and off-site, in addition to entering whether a back-up device is present, you must also enter the annual operating hours of the primary destruction device and the destruction efficiency used.



Then if a back-up destruction device is present, enter annual operating hours of that back-up device.

Click SAVE and then NEXT



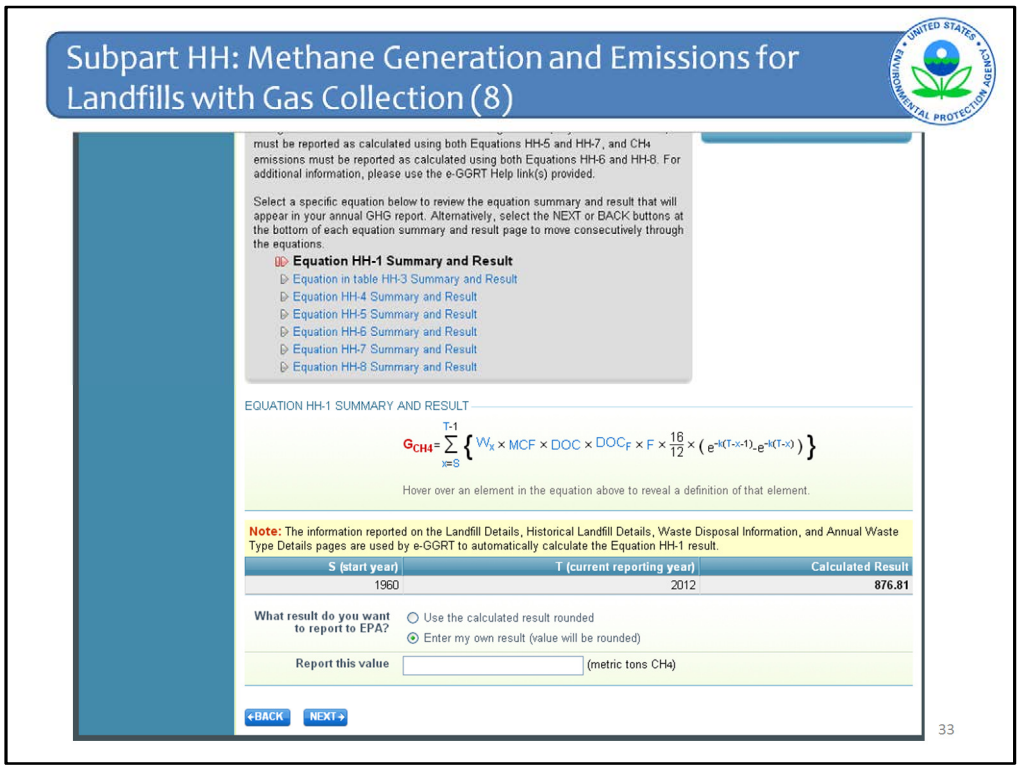
Then what happens, is e-GGRT walks you through the results of each of the equations, starting with Equation HH-1. You can see in the gray box that Equation HH-1 is bolded (Arrow #1).

As is stated in the yellow box, the information reported on the Landfill details pages, the Waste Disposal Information page, and the Annual Waste Type Details page are used by e-GGRT to calculate the Equation HH-1 result.

The calculated result is displayed in the table as well as some, if not all, of the inputs (Arrow #2).

You are then asked whether you want this calculated result reported or you want to instead report a different value. You may want a different value because you did the calculation separately and got a different result for some reason.

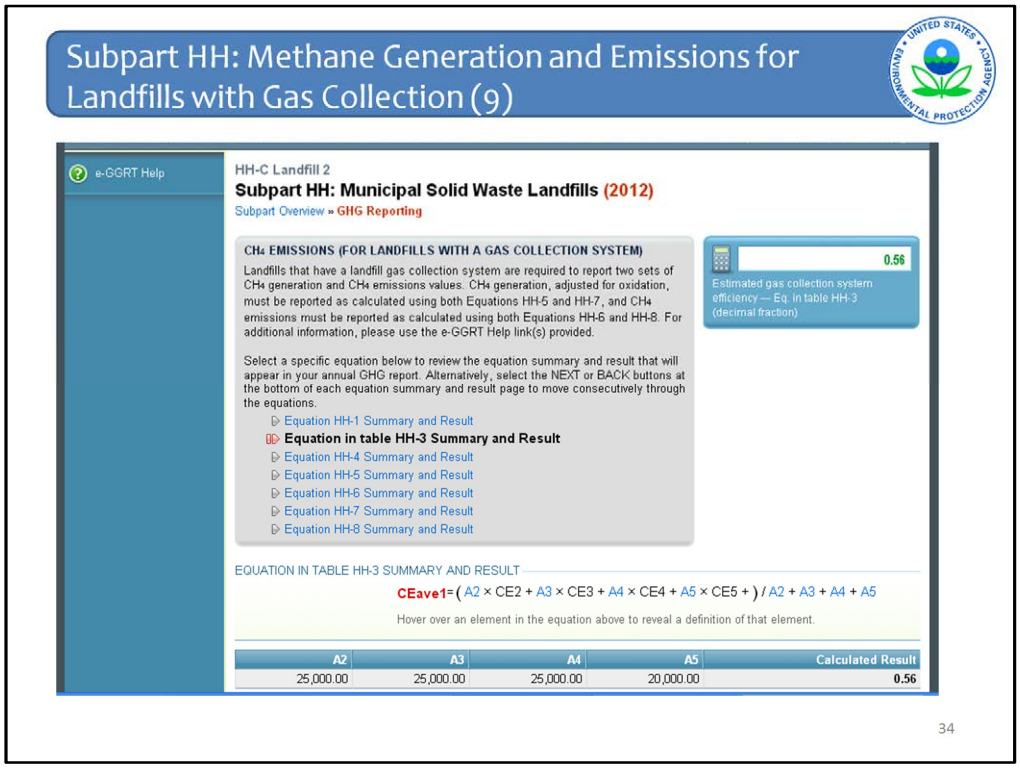
The page will default to using the calculated value but it is recommended that if you want the calculated value, you should still click the radio button to accept the calculated value, even though it is already checked. This will ensure that your response is registered in the system.



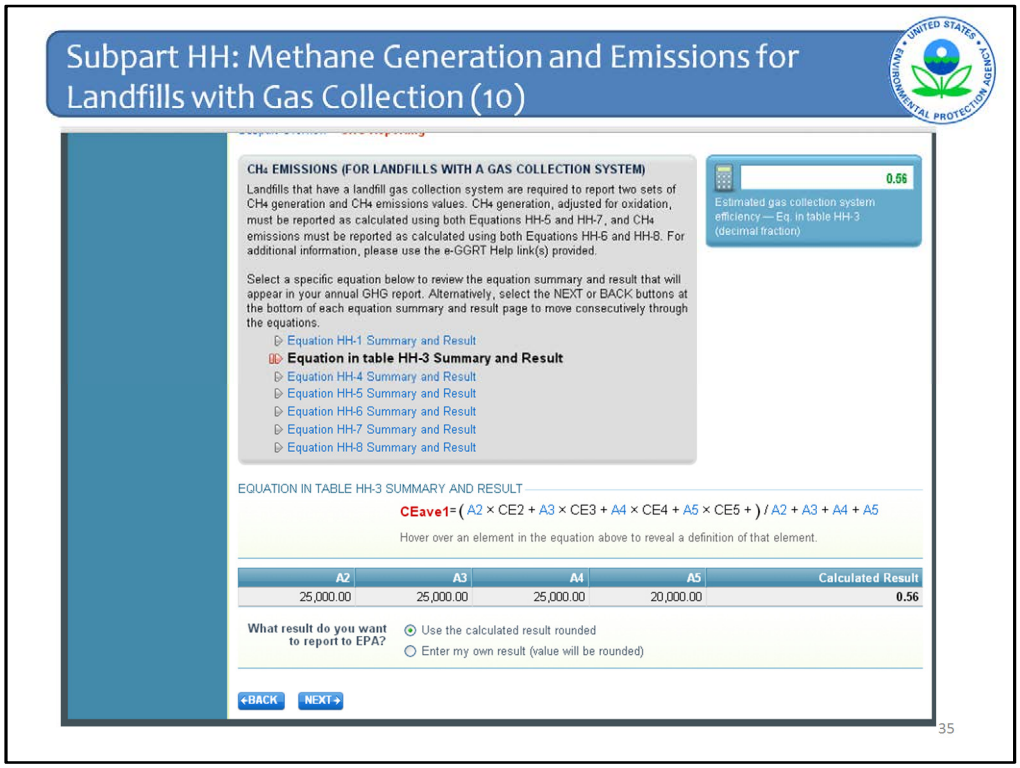
If you click to enter you own value, you are then provided a box in which to do so.

Keep in mind that it is likely if you do enter your own value, that EPA will follow up with you during the verification process with an e-GGRT message asking for an explanation as to why you used a different value.

After you enter your value, click NEXT

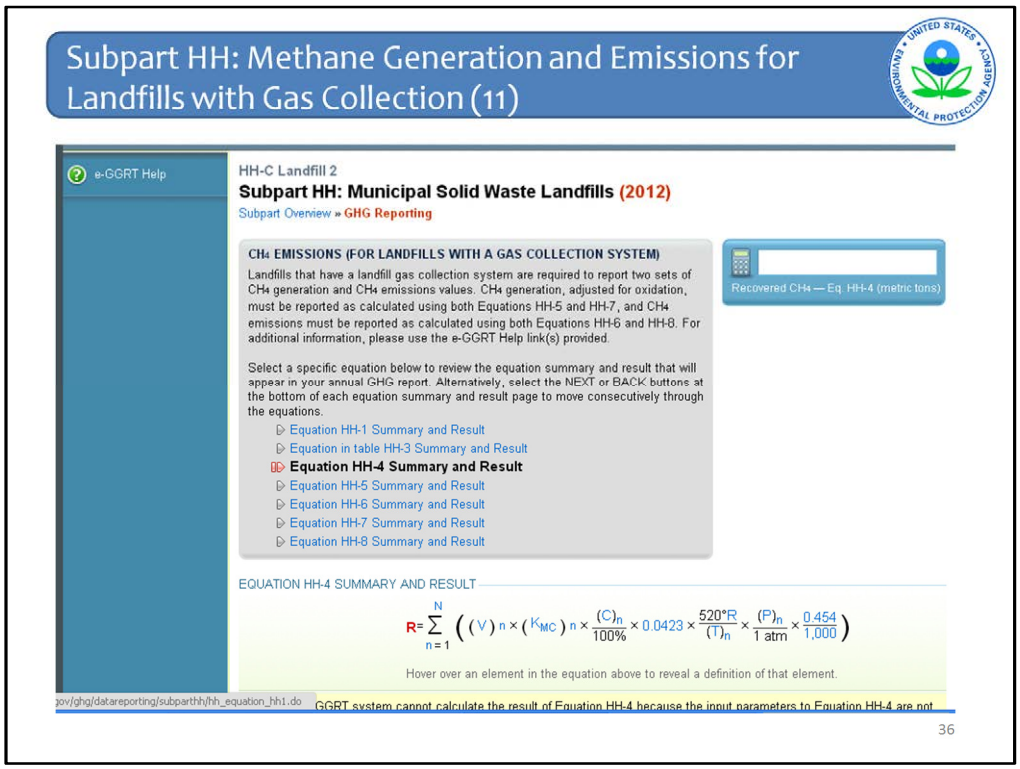


You are taken to the Equation in Table HH-3 which is for the average collection efficiency. This is also based on previously entered values on surface area by area type from the Estimated Waste Depths page.

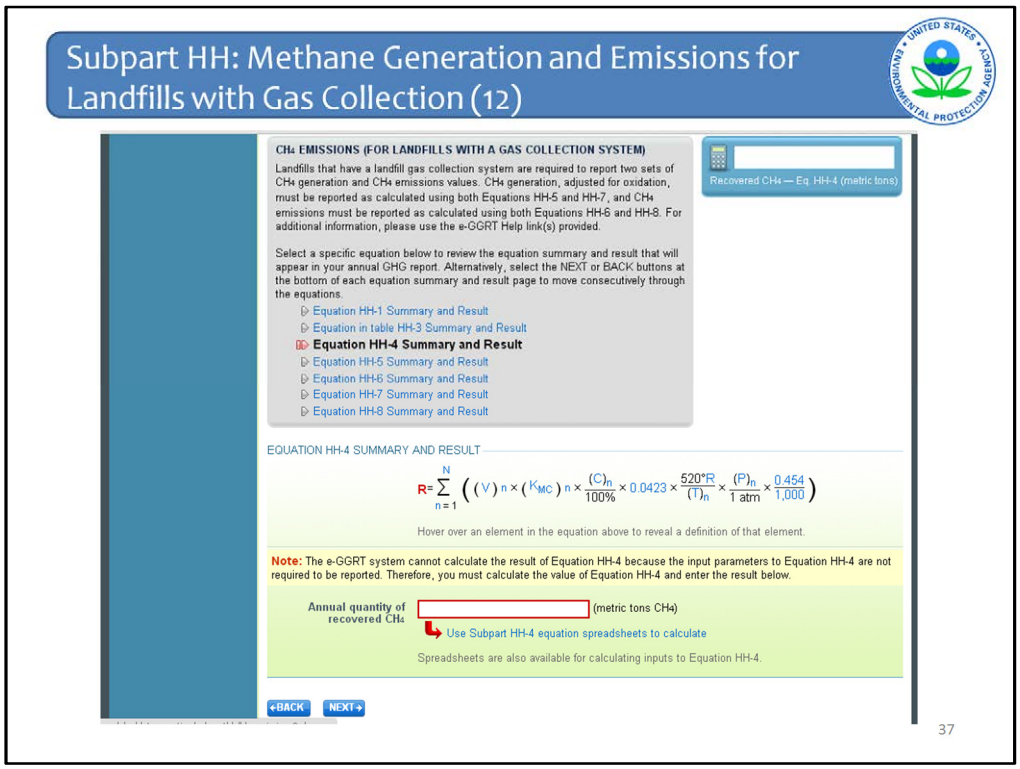


Again you can accept the calculated value or enter your own.

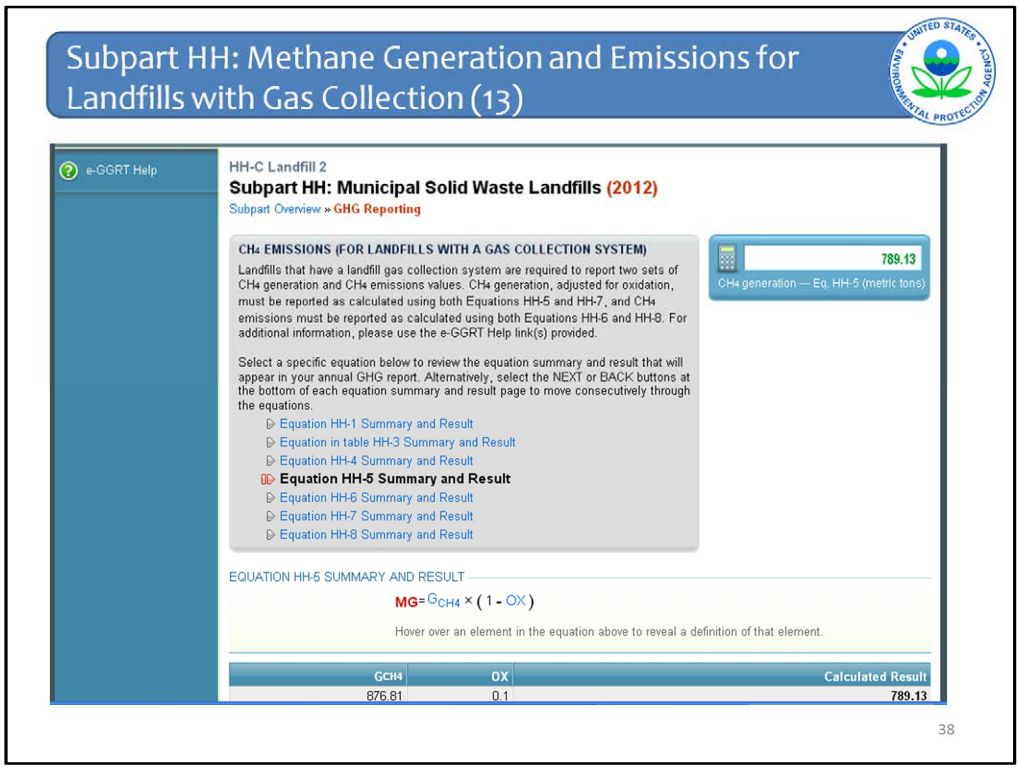
Then click NEXT



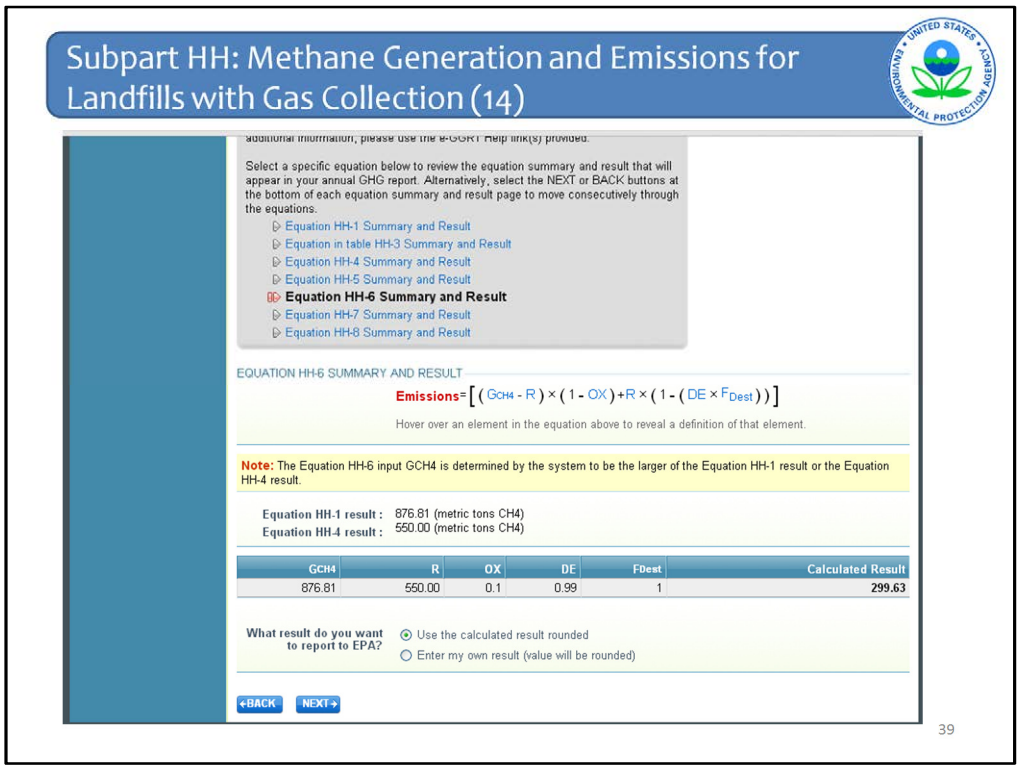
Next is the page for Eq HH-4. This is the one equation that is not automatically calculated because e-GGRT does not collect all of the inputs.



This Equation is handled similarly to the previous version of e-GGRT. You must calculate it yourself. You may use the calculation spreadsheet via the link on this page to calculate the result which you must then enter into the red box.



The system continues to walk through the rest of the calculations which are handled the same way as Equation HH-1. The system calculates the result and you can either accept the result or enter your own result. At the bottom of each page, click NEXT until you finish with Equation HH-8.

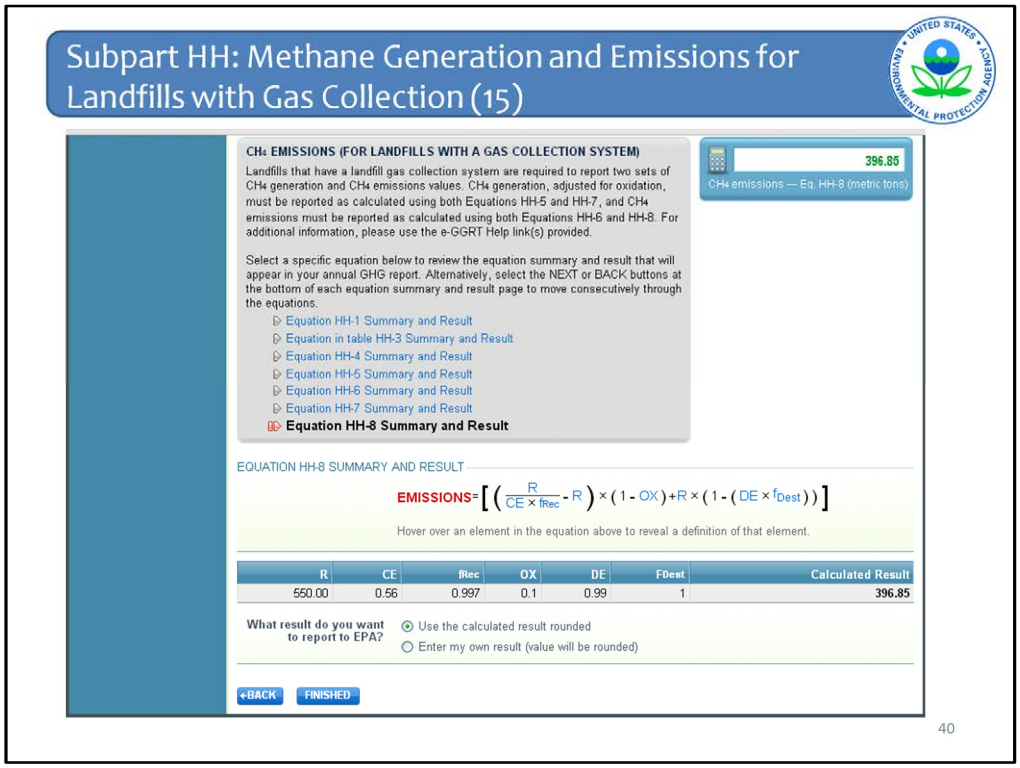


One note on the page displaying the result of Equation HH-6 for methane emissions.

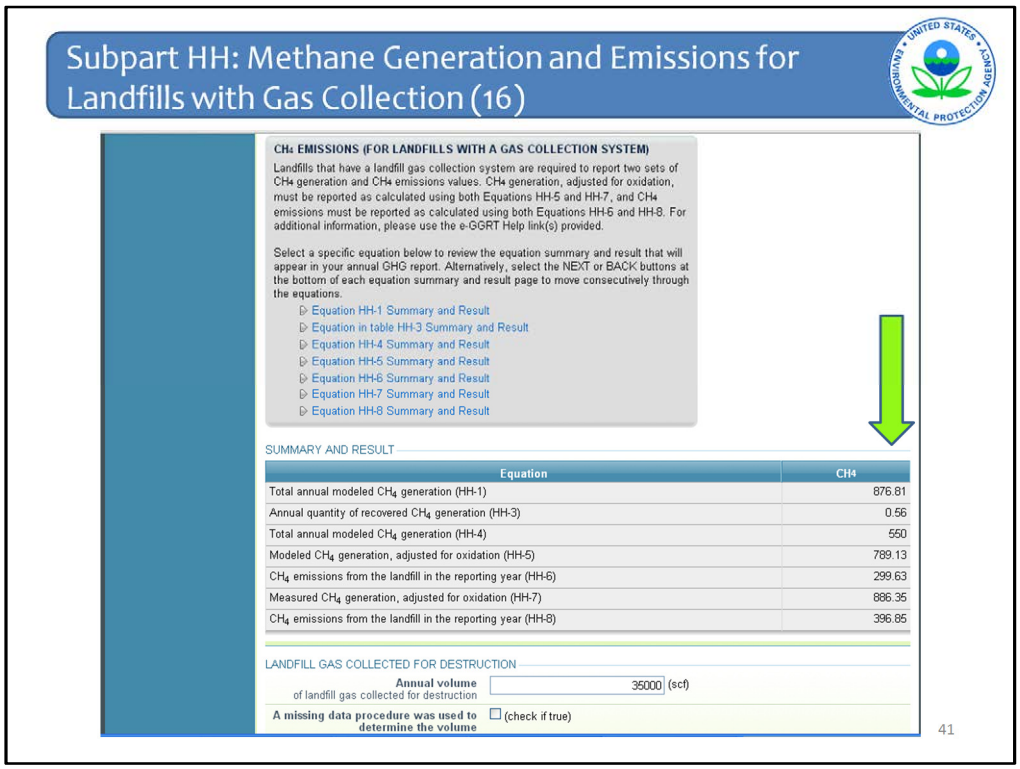
The page displays the results of both Equation HH-1 and Equation HH-4. Recall that Equation HH-6 is constructed so that you are required to use either with the modeled methane generation rate from Equation HH-1 or the quantity of recovered methane from Equation HH-4 for GCH4, whichever is greater. E-GGRT automatically chooses the larger of the two. This is so that the result of Equation HH-6 is not a negative value.

Again, you can accept the calculated result or enter your own.

Then click NEXT.



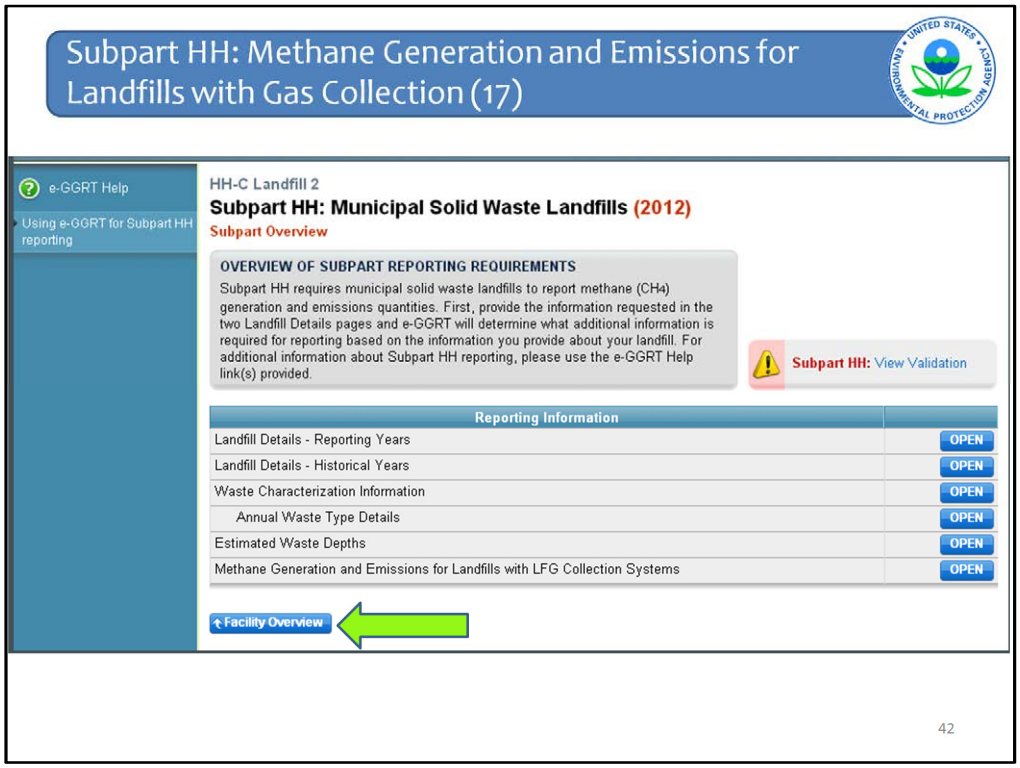
When you are done with the page for Equation HH-8, which is the last equation, click FINISHED



You are taken you back to this page to view all of your equation results.

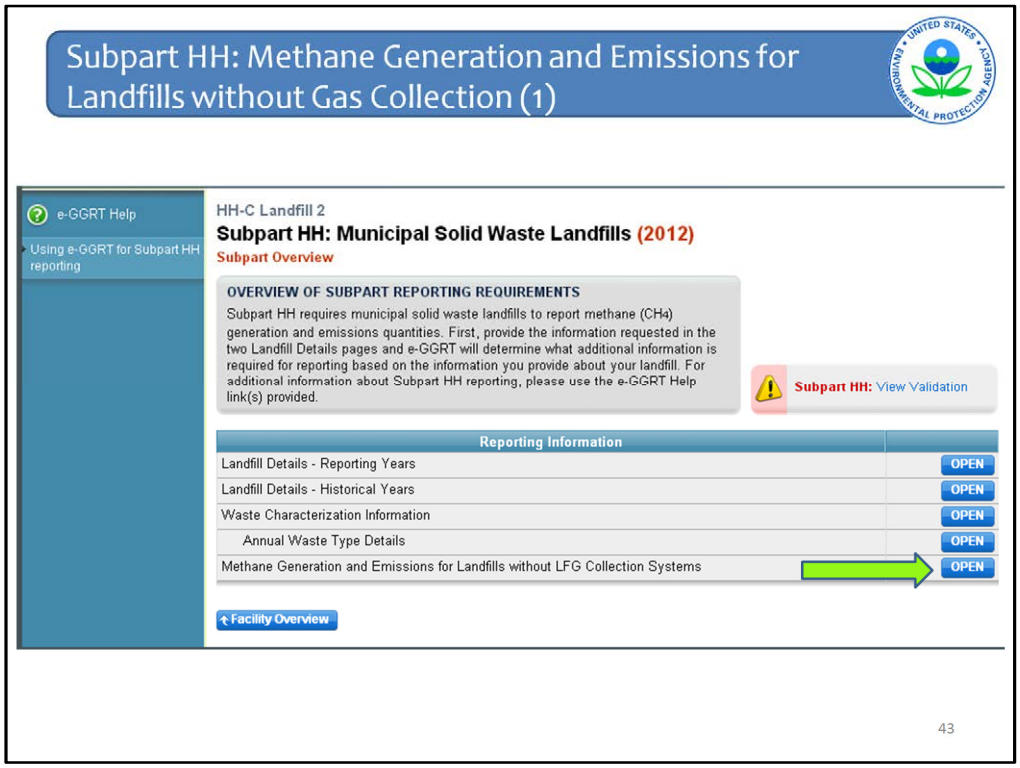
If you want, you can click on any of the Equation links in the top box to go back to the page for that Equation.

If all is OK, click SAVE and then Subpart Overview at the bottom of the page. There is still the NEXT button at the bottom of this page but if you keep clicking NEXT it will take you through all of the individual equation pages again.



That is all that is required for landfills with gas collection. You can view your validation messages, which is recommended, but has already been covered.

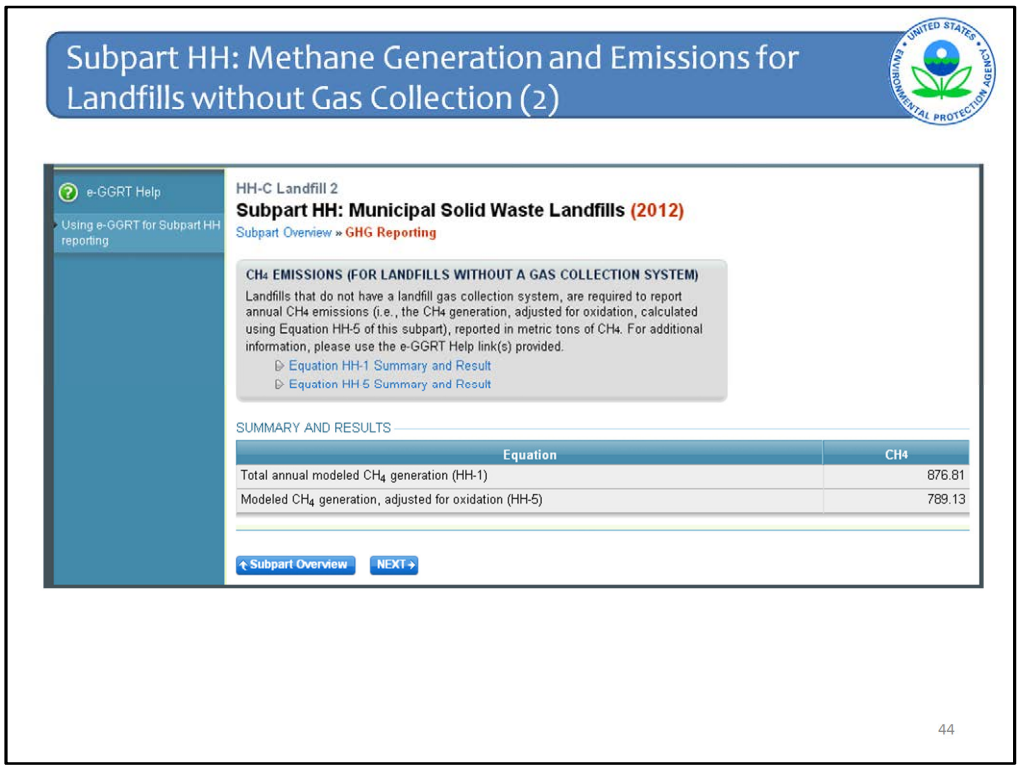
Then click Facility Overview to add another subpart as needed or take steps to submit your report.



Back track to show the steps for landfills without gas collection.

If on the Landfill Details – Reporting Years page you said that the landfill did not have gas collection, this is what the Subpart Overview page will look like. It is the same except there is no Estimated Waste Depths line and the last line says Methane Generation and Emissions for Landfills without LFG collection systems.

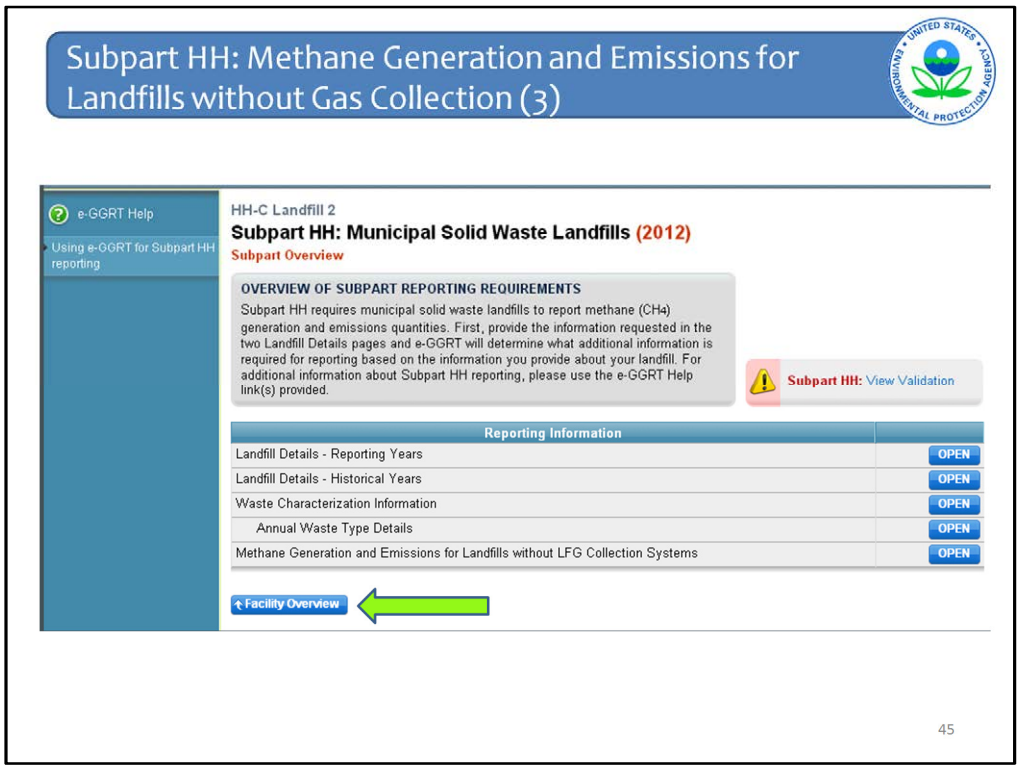
Click OPEN next to this last line to proceed.



The page has the same set up as for landfills with gas collection but is simplified because there are only two equations. Only Eq. HH-1 and HH-5 are required to be performed for landfills without gas collection. These will be automatically calculated because all of the inputs have already been entered.

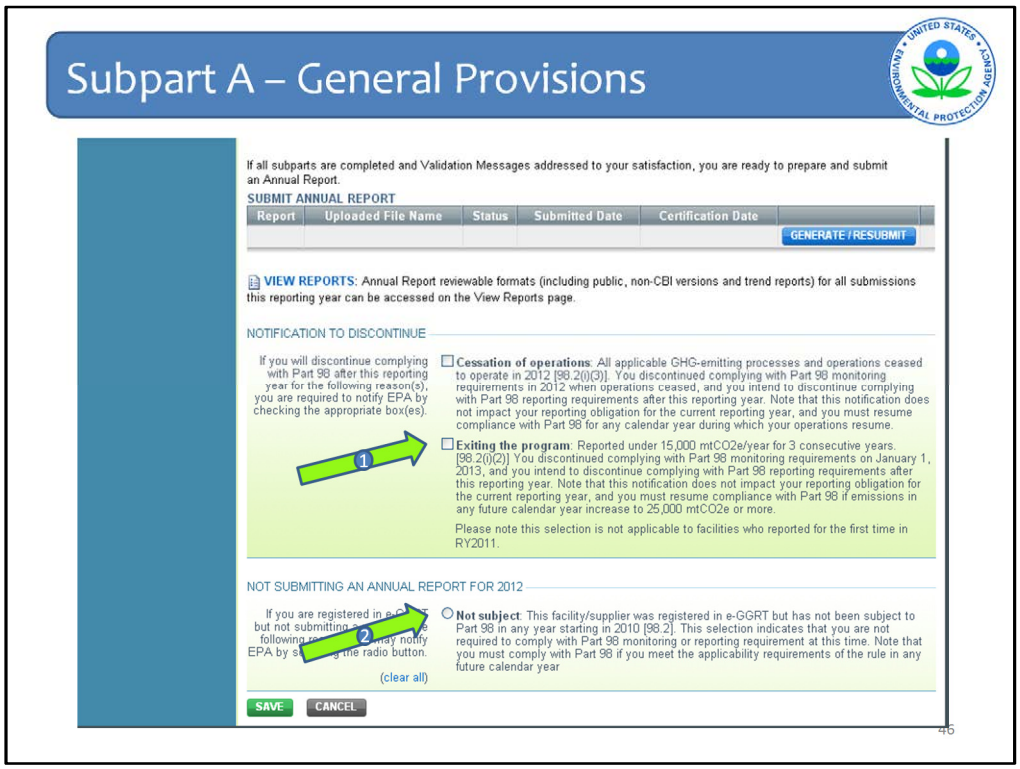
Click NEXT and the system will take you through the two equations. The pages for these two equations look the same as for landfills with GCS.

As before, you may accept the calculated values or enter your own. When you are done click Subpart Overview. If you keep clicking NEXT it will circle back through the calculations.



Then from the Subpart Overview page click Facility Overview to add a subpart or generate, review, and submit your report.

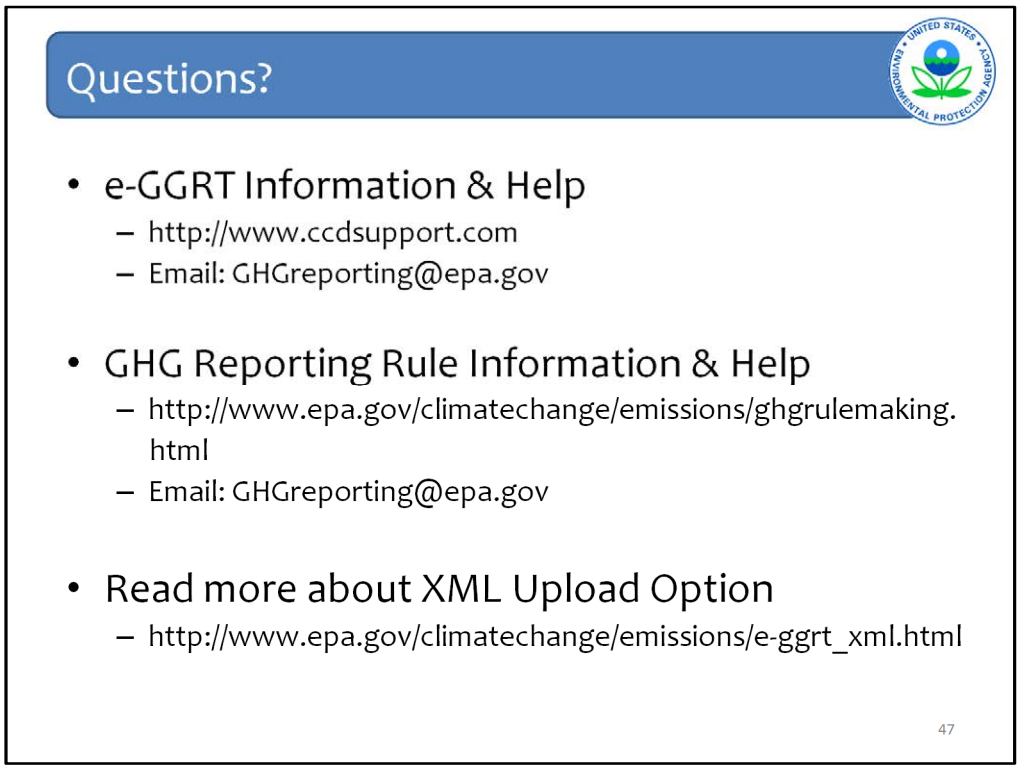
That is all that is required for landfills without gas collection.



There are two new items at the bottom of the Facility Overview page to note because they may impact subpart HH reporters specifically this year:

First, if you meet the "off-ramp" provisions in section 98.2 of the rule, that is your reported emissions have been less than 15,000 metric CO2e for three years in a row, 2012 being the third year, you may stop reporting to the program after this year. If this is the case, click the box next to "Exiting the Program" (Arrow #1)

Second, if you registered your facility in e-GGRT but have never had to report because this facility has not met the threshold for reporting, click the "Not subject" box (Arrow #2). As long as the facility continues to be below the reporting threshold, you will not need to go back into e-GGRT each year to do a negative declaration of reporting for it. If, in some future year, the facility does meet the reporting threshold, then you will be able to go back into this screen to un-click this box and then submit a report for this facility.



This last slide contains important websites at which you may find an enormous amount of information about the GHG Reporting Program, on e-GGRT, as well as the XML option for uploading GHG emissions reports. Also listed is the email address – for both questions or help requests for e-GGRT specifically and also for technical questions about the GHG Reporting Rule itself.

This concludes the update on the e-GGRT module for subpart HH.