

Air Permit Reviewer Reference Guide

APDG 6161

Qualified Facilities Guidance

**Air Permits Division
Texas Commission on Environmental Quality
February 2020**

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Modification of Existing Facilities Under §116.116(e)

I. Summary

This guidance document deals primarily with the flexibility and permitting options to make physical and operational changes to certain facilities (referred to as qualified facilities) without a requirement to obtain a permit amendment from the TCEQ pursuant to 30 TAC 116.116(e). These types of changes are referred to in this guidance document as the *qualified facility changes*. Prior to making changes to qualified facilities, an applicant must comply with the general requirements of 30 TAC 116.116(e).

A. Limits on Scope

Changes to qualified facilities is a “minor new source review” authorization which allows some changes to be made without a requirement to obtain a permit amendment. Section 116.116(e) does not supersede federal requirements such as Nonattainment (NA) review and Prevention of Significant Deterioration (PSD) review of new major sources and major modifications to existing sources, which are incorporated into Chapter 116.

Section 116.116(e) also does not supersede other TCEQ regulations which control emissions, such as 30 TAC Chapter 115 (for VOC) and 30 TAC Chapter 117 (for NO_x). Nor does §116.116(e) supersede the TCEQ’s general powers and duties to control the quality of the state’s air and to take action to control a condition of air pollution if the TCEQ finds that a condition of air pollution exists.

In making changes under §116.116(e), owners and operators must consider the potential for these other federal and state requirements to limit their ability to make a desired change. The owner/operator is responsible for ensuring that any change to a facility complies with all applicable regulations. It should be noted that construction authorizations (permits) do not supersede federal permitting rules and standards (e.g., New Source Performance Standards [NSPS], National Emission Standards for Hazardous Air Pollutants [NESHAPs], or Maximum Achievable Control Technology [MACT]).

B. Use and Accumulation of Reductions

The terms in this document should not be confused with the terms used under 30 TAC Chapter 101. None of the terms used for qualified facility changes are part of the Emissions Banking and Trading Programs and are not emissions credit reductions (ERCs). It is important to note that once a reduction is used for any purpose, it is no longer valid to be used again for any other purpose (i.e., reductions used for qualified facilities may not also be used to generate ERCs or vice versa).

A reduction in emissions remains valid until the facility loses its qualified status (i.e., no longer meets 10-year-old BACT). Once a reduction is used, it is not available for use again.

Facilities may accumulate emissions reductions over time in order to be used when other increases are made at a plant site. For verification purposes, it will be necessary for owners/operators to track these emission reductions associated with the facilities. The TCEQ will not review the quantification of reductions or the accumulation of reductions until they are to be used to negate an emissions increase.

II. Concepts and Boundaries

A qualified facility may make physical and operational changes without obtaining a permit amendment if the change will not result in:

- (1) A site-wide increase in allowable emissions of any air contaminant; or
- (2) The emission of any new air contaminant (i.e., one not previously emitted or allowed to be emitted).

To achieve the items above, the TCEQ will consider the facility's addition of air pollution control methods to reduce emissions.

A. Qualified Facility

To be a "qualified facility," a facility must be an existing facility authorized under 30 TAC Chapter 116 or 106 and must either:

1. Have received a preconstruction permit or permit amendment, or qualified for a PBR within 120 months (10 years) before the physical or operational change to the facility will occur, or
2. Use an air pollution control method that is at least as effective as the Best Available Control Technology (BACT) requirements for a permit issued for a similar facility 120 months before the change will occur.

To be a "qualified facility" when authorized under a PBR, the PBR must have been for the original construction of the facility and not just for a subsequent change to an existing facility. An applicant will need to include justification that the facility is using controls that would have been required as BACT within 120 months prior to the change.

If the original permit for a facility was issued more than 120 months before the change will occur, it is still possible for the facility to be a qualified facility on the basis of a permit review. If the facility has undergone a subsequent permit action (such as amendment) within the past 120 months, and as part of that action TCEQ had the opportunity to review and revise the air pollution control requirements for the facility, then the facility will be a qualified facility. It is not necessary that the TCEQ require any revision to the control requirements as a result of that review.

For facilities that have undergone permit renewal within 120 months of a change, qualification is not automatic unless the facility underwent a permit amendment review at time of permit renewal because 30 TAC §116.311(b)(2) does not require a BACT review. These facilities may be qualified by virtue of using controls that would have been required as BACT within 120 months prior to the change. This can be verified by consulting the list of qualifying Tier 1 [BACT](#). If a specific control method has not yet been approved by the TCEQ, the owner/operator must include a justification in the application.

If a facility is included in a permit that also includes other facilities, the permit action and control review must have involved the facility at which the change will occur.

For example: A permit was issued in 2000 for the construction of facilities A, B, C, D, and E. In 2010, the permit was amended for modifications to facilities A and B, but the amendment and control review did not involve the other three facilities. In 2015, only facilities A and B are qualified facilities on the basis of the permit action. Facilities C, D, and E will be qualified facilities if they have appropriate control

methods. Appropriate control methods for C, D and E would be that the three facilities each use an air pollution control method that is at least as effective as the BACT requirements for a permit issued 120 months before the change will occur.

For example, if a facility obtained a permit on January 15, 2001, it would be a qualified facility on the basis of the permit until January 14, 2011 and would be eligible to have changes made under the qualified facility changes. After that date, the facility would no longer be eligible to have changes made under the qualified facility changes unless the status as a qualified facility is continued or regained by a subsequent permit action or appropriate control methods, or if the facility still meets BACT requirement that is as effective as 120-month BACT.

B. Facility

Section 116.116(e) allows physical or operational changes to an existing facility but does not allow the construction of a new facility.

C. Allowable and Actual Emissions

1. To meet §116.116(e), when implementing qualified facility changes, increases and decreases in allowable emissions at qualified facilities at the same TCEQ air quality account number (equivalent to the current Regulated Entity Number (RN) in Central Registry) which are authorized under 30 TAC 116 may be used to demonstrate no net increase in allowable emissions across the project.
2. If the qualified facility changes are authorized under 30 TAC 106 (Permits by Rule (PBR)), increases and decreases in actual emissions at qualified facilities at the same RN may be used, to demonstrate no net increase in actual or certified emissions across the project.

For facilities authorized by PBR, actual emissions will be the highest rates actually achieved over the relevant time periods (e.g., hour or year) at any time during the 120 months before the change will occur. Annual emissions may be determined over any consecutive period of one year; the use of a calendar year is not required.

For facilities that have received a permit or permit amendment in the last 120 months but have increased emissions using a PBR, the amount of emissions used in emissions calculations is the permit allowable plus the actual certified emissions authorized by the PBR.

3. Emissions from facilities which have been shut down may be used only if the shutdown facility would be a qualified facility at the time of the change and is still listed on the permit MAERT. For shutdown facilities that have received a permit or permit amendment within 120 months prior to the change, emissions are based on allowable emissions. If the shutdown facility has not received a permit or permit amendment within 120 months prior to the change, the emission reductions are based on actual emissions.

4. For potential federal permitting applicability, sites which are major sources must also confirm that, for each air contaminant affected, the change will not trigger a PSD or NNSR permit review. This shall be demonstrated through a netting analysis for each proposed change consistent with the procedures for netting elsewhere in Chapter 116.
5. The emission rate units must be the same unit time frame (lb/hr or tons/year) for any air contaminant affected by the project.
6. The emission calculation methodologies must be the same for actual emissions and allowable emissions and be consistent with the methods used in the authorization application.
7. If actual emissions are greater than a permit allowable rate or a certified PBR limit, then only the permitted or certified maximum may be used in the calculations.
8. If a federal (e.g., NSPS, MACT) or state (e.g., a reasonably available control technology [RACT]) emission limitation has resulted in a reduction in actual emissions during the 120 months, the actual emissions used for the qualified facility change cannot be greater than such limitations.

D. Interchanges

In determining whether a physical or operational change results in no increase in allowable emissions of any air contaminant or any emissions of a new air contaminant, a decrease in emissions of one compound may be interchanged with an increase in emissions of another, different compound, provided both compounds are within the same air contaminant category (see interchanges examples found in Section VI, "Interchanges and Intraplant Trading"). In evaluating interchanges, the evaluation must demonstrate no adverse ambient air impacts.

E. Intraplant Trading

Intraplant trading is the consideration of decreases in allowable and actual emissions from other qualified facilities to achieve no increase in allowable emissions at the qualified facility making the change.

Note that §116.116(e)(9)(B) specifies that allowable emissions from facilities that were never constructed shall not be used in intraplant trading.

F. Modification of Existing Facility

A permit issued under §116.111 can either be "amended" or "altered." Neither term applies to changes made to qualified facilities. An amended permit requires current BACT and public notice. An altered permit cannot authorize emission increases. For these reasons, changes to a permit under changes to qualified facilities are "revisions."

For all changes made under the qualified facility rules, the owner or operator of the facility must maintain records that demonstrate the change is allowed under the qualified facility changes. Therefore, the owner/operator is responsible for ensuring that changes conform to applicable requirements. Only a qualified facility will be able to use the additional flexibility provided by §116.116(e). Facilities that do not satisfy the criteria to be a qualified facility will continue to be subject to the definition of "modification".

G. The Time the Change Will Occur

The determination of the time “the change will occur” at a facility is important under §116.116(e). The facility at which the change will occur (and any other facility from which emission reductions will be used) must be a qualified facility at the time the change will occur. The change to the facility must occur no earlier than the 120-month period used to determine whether a facility has the required authorization or equivalent BACT determination. If any emission reductions are required in order to make a change under qualified facility changes, the reduction in allowable or actual emissions must occur no later than the time the project is implemented.

For purposes of §116.116(e) and maintaining consistency in the chapter, the time the change will occur will be the same as “start of construction” used elsewhere in 30 TAC Chapter 116. What is and is not “start of construction” is discussed in more detail on the web at [Air Permits to Construct: Before You Build](#).

It is important to note that a facility may be a qualified facility at the time of the decision to make a change but may not be a qualified facility later at the time the change will occur. If the change does not involve construction, but only process changes, the implementation of those changes must also occur in the time period that the facility is qualified. If the facility is not a qualified facility at the time the change will occur the change cannot be made under §116.116(e).

III. Procedure for Making Changes

The procedure for making changes under §116.116(e) has several components (each discussed in detail below):

- Determination that all facilities involved in the change have an active authorization (permit or PBR). §116.116(e)(1)(A)
- Determination that all facilities involved in the change will be qualified facilities at the time the change will occur. §116.116(e)(2)(E)
- If the site is an existing minor NSR source, determination that the proposed emission increase is not a major project by itself, requiring major NSR review. If the site is an existing major NSR source, determination that any emission increases will not require major NSR review, based on the requirements in Chapter 116. §116.116(e)(1)(B)
- Determination that the change will not result in an increase in allowable emissions for permitted facilities and using actual emission changes for facilities under PBR. §116.116(e)(3)(A)
- Determination that there will not be the emission of a new air contaminant not previously authorized by the permit or PBR. §116.116(e)(3)(B)
- Submittal of application(s) for permit or standard permit revision(s), pollution control project (PCP) standard permits, or PBR certifications (as applicable). §116.116(e)(2)
- Once all the permit/PBR actions associated with the qualified facility changes have been approved or accepted by the TCEQ, the project may be initiated at the same time the PI-E and supporting documentation is submitted to the TCEQ.

A. Determination of Authorization - §116.116(e)(1)(A)

Prior to initiating action under the qualified facility changes, the owner or operator must determine that all facilities affected by the project have an active authorization. [Current permits and PBRs](#) and the [public documents](#) are available through the agency's website. Guidance documents for conducting air permit related searches for public documents are at www.tceq.texas.gov/permitting/air/nav/air_status_permits.html.

Please remember that no new facilities can be authorized under the qualified facility changes.

B. Determination of Qualified Facilities - §116.116(e)(2)(E)

The initial step in qualified facility changes is for the owner or operator to determine whether the facility at which the change will occur, and all other facilities from which emissions reductions will be used, will be qualified facilities at the time the change will occur. Any facility that is not a qualified facility at the time of the change will occur cannot use the qualified facility changes mechanism.

Example: On February 1 the owner or operator decides to make a change to a facility, but the change will not occur (i.e., start of construction) until October 1. Assuming the facility is a qualified facility solely on the basis of a permit, and the 120-month anniversary of permit issuance occurs on July 1, the facility would be a qualified facility when the decision is made to make the change, but would not be a qualified facility because October 1 is not in the 120 month time period.

C. Determination of Major NSR Applicability - §116.116(e)(1)(B)

Changes to qualified facilities is for minor NSR permitting actions only. Proposed changes that exceed the major modification threshold cannot be authorized under this subsection. A separate major NSR applicability determination must be made for each facility where actual emissions will be increased.

D. Determination of No Increase in Allowable Emissions - §116.116(e)(3)(A)

If all facilities will be qualified at the time the change will occur, the owner or operator must then determine the effect on emissions (i.e., increases and decreases) that will result from the change. Emission increases and decreases will be determined using the same procedures as for other parts of Chapter 116.

The owner or operator may implement additional controls to prevent or reduce any increase in emissions from the change. Please note that addition of control devices may require an amendment, pollution control standard permit, PBR, or permit revision.

Any decrease in allowable or actual emissions that will be used to show no emissions increase at another facility must be effective or occur by the time the change will occur.

The determination of total change must be made for each individual compound and air contaminant category relevant to the change, and for each allowable emission for the relevant individual compounds and air contaminant categories. In making this determination, the procedures under Section VI, "Interchanges and Intraplant Trading," will be used to evaluate emissions changes at the facility and any emission reductions from other qualified facilities.

Example: A qualified facility has allowable emissions for VOC, benzene, and hexane. The allowable emissions for all three are in terms of hourly and annual rates. A desired change would increase the emissions of hexane. The owner or operator must determine whether the potential hexane increase would result in total hexane emissions exceeding the hourly or annual allowable emissions for hexane and, since hexane is a VOC, also whether the hexane increase would result in total VOC emissions exceeding the hourly and annual allowable emissions for VOC. Since benzene emissions would not be affected by the change, no determination for benzene is required. If the hexane increase would result in an exceedance of any of the allowable emissions, the owner or operator could implement additional control methods at the facility or could offset the increase above the allowable emissions by reducing emissions at the same facility or at other qualified facilities, to achieve no increase in allowable emissions.

If the owner or operator determines that all the facilities involved in the change will be qualified facilities at the time the change will occur, and that there will be no overall increase in emissions, then the change may be made under the qualified facility changes.

E. Determination of No New Air Contaminants - §116.116(e)(3)(B)

The qualified facilities change cannot authorize the emissions of a chemical or compound which has not been previously authorized. The release of such chemicals or compounds must be authorized under §116.116(b) or Chapter 106.

F. Notification of the Change - §116.116(e)(2)

A permit or PBR action is required for changes in allowable emissions rates and for changes to permit conditions or representations (such as firing rates, throughput limitations, or emission controls).

Permits generally contain Special Conditions that may limit operational flexibility (e.g., limits on the throughput, production levels, or fuel usage). If a change made under the qualified facility rules would result in the violation of a permit special condition, the permit holder must revise the permit special condition. If a change would require that a condition in a permit be made more stringent to ensure compliance with a reduction, the permit holder must make the appropriate revision to the special condition. A revised permit, containing the new conditions, will be issued to the permit holder. Where the permit condition relates to the method of demonstrating compliance with the permit's allowable emission rate, as when a special condition requires recordkeeping in place of direct measurement of emissions, a new or revised method must be provided with the notification. The revised permit will incorporate the new method for determining compliance.

Please note that the qualified facility changes cannot be used to make changes to procedures regarding monitoring, determination of emissions, and recordkeeping that are required by a permit (§116.116(e)(7)(B)).

If a facility is authorized by standard permit, the representations made are limitations under which the authorization was granted (§116.615(2)). Any change (e.g., limits on the throughput, production levels, or fuel usage) requires a permit revision showing how the change affects emissions, continues to meet the conditions of the standard permit, and does not make changes to procedures regarding monitoring, determination of emissions, and recordkeeping that are required by the standard permit.

If a facility is authorized by a PBR, any changes must be made enforceable through a certification. The supporting documentation must show the emission rates affected, that the facility continues to meet the conditions of the PBR, and that the facility does not make changes to procedures regarding monitoring, determination of emissions, and recordkeeping that are required by the PBR. Certifications to PBRs are made through the [ePermits system](#) and are effective once a complete certification is submitted.

In some cases, control equipment will be added to sites to meet the requirements of a qualified facility. Pollution control devices may be authorized under the [PCP standard permit](#) if all requirements are met.

There has been no change to the permit or standard permit revision process, the PBR certification process, or the PCP standard permit review process as a result of §116.116(e). These requests may be submitted individually prior to the qualified facility change project, but at a minimum must be submitted no later than in conjunction with submittal of the Form PI-E.

The rules under §116.116(e) require determinations on the permit actions, but do not specifically require action on the qualified facility change. Once the application for the qualified facility change is submitted, the changes can be implemented; however, an approval/disapproval letter is issued following agency review.

In summary, the following notification and application procedures apply:

1. Owner or operators of facilities authorized by PBR shall submit or update certain facility emission limits and make them enforceable through submission of an APD-CERT form and supporting documentation.
2. Owners or operators of facilities authorized by standard permit shall submit an update with new emissions rates for the representations in the standard permit registration.
3. Owners or operators of facilities authorized under a permit shall submit an application for permit revision and obtain approval before the qualified facility change occurs.
4. Owners or operators of facilities which are adding control devices shall submit an application for a [PCP Standard Permit](#) or other appropriate authorization application.
5. A Form PI-E must be submitted for all regulatory claims under §116.116(e). Documentation supplied with the form must include demonstrations that the change will not adversely affect ambient air quality.

IV. Qualifying BACT

A. Determination

For a facility to be a qualified facility on the basis of using BACT, the facility must use a control method that is at least as effective as the BACT that would have been required in a permit review 120 months before the change occurs. To facilitate the determination of whether a facility is using qualifying BACT, the agency has developed and maintained a list of [historical and current BACT requirements](#) for different facility types. It is also recommended that owners and operators contact APD to confirm the appropriate level of qualifying BACT.

If a facility uses a control method that is not listed, the TCEQ must make a case-by-case determination as to whether the control method is qualifying BACT. The

owner or operator will be required to demonstrate that the control method used achieves an emission rate or level that is at least equivalent to the BACT on the historical list. If there is no BACT on the list for comparison, then the owner/operator should conduct a file search of permits for facilities similar to the facility for which the determination is sought and seek agency concurrence. In some occasions, the owner/operator could be asked to prepare a historical BACT analysis equivalent to what would be required for a permit.

B. Installation of Qualifying BACT

If a facility does not satisfy either the permit or BACT criteria to be a qualified facility, and additional controls are installed for the purpose of making the facility a qualified facility, the additional controls must be equivalent to BACT requirements in effect at the time the new controls are added.

If additional controls were installed for reasons other than to make a facility a qualified facility (e.g., to comply with RACT requirements or to comply with a Commission order), it is not necessary that the controls were current BACT at the time of installation in order to make the facility a qualified facility. It is only necessary that the controls are equivalent to the BACT required 120 months before the change. The owner or operator must demonstrate that the additional controls were installed for reasons other than to make the facility a qualified facility.

The installation of additional controls is subject to Chapter 116 and, depending on the nature of the control method, may require a permit, a standard permit, or PBR.

V. Acceptable Emissions

Under §116.116(e), the allowable or actual emissions for a qualified facility determines whether a physical or operational change is a modification, and the rules define which must be used based on the type of authorization.

A. Facilities Permitted Under §116.111

For a facility that has a permit, the allowable emissions are the rates contained in the MAERT.

For all qualified facility project purposes, any emission rate under a permit must be an allowable value, and the permit revised for representation and emission changes. (§116.116(e)(2)(B)).

B. Facilities Constructed under Permits by Rule

For a facility constructed under PBR, the allowable is the lesser of any one of the following:

1. The emission rates allowed in 30 TAC §106.4(a).
2. An emission rate established by a condition in a specific PBR.
3. An enforceable emission rate established on an APD-CERT form under §106.6 (certification).

For all qualified facility project purposes, any emission rate under a PBR must be an actual value, and the PBR updated with certified emission changes (§116.116(e)(2)(C)).

C. Facilities Authorized by Standard Permits

For a facility authorized by standard permit, the allowable emission rate is the rate

represented in the registration. In accordance with §116.615 make the emission allowable calculated using the representations in the standard permit registration are binding.

For all qualified facility project purposes, any emission rate change must be an allowable value, and the standard permit revised for representation and emission changes (§116.116(e)(2)(B)).

VI. Interchanges and Intraplant Trading

A. Interchanges

In determining whether a physical or operational change results in a net increase in allowable emissions of any air contaminant or the emissions of a new air contaminant, a decrease in emissions of one compound may be interchanged with an increase in emissions of another compound, provided both compounds are within the same air contaminant category. An air contaminant category is a group of related compounds such as VOC, PM, NO_x, or sulfur compounds. Please note that compounds from different categories may not be interchanged (e.g., VOCs cannot be used to interchange with PM).

The method of interchange will depend on whether the allowable emissions relevant to the change are for an individual compound or are for an air contaminant category. For some changes there will be allowable emissions for both individual compounds and air contaminant categories. In these situations, the change will have to satisfy the criteria for each type of allowable emission.

A compound will be determined as a VOC according to the definition in 30 TAC §101.1, which is an incorporation of the EPA definition of VOC. Rule §116.116(e) provides an exception. Compounds that were once listed by EPA as a VOC but were removed from the definition based on their low photo reactivity can be interchanged with compounds currently listed. This is a one-way transaction, and current VOCs may not be interchanged with lower reactivity VOCs (commonly known as Exempt Solvents).

1. Individual Compounds

If a change will increase the emissions of an individual compound above the allowable emissions for that compound, the increase can be mitigated by an equivalent decrease in emissions of the same compound to achieve the result of no increase in allowable emissions.

If, instead, a decrease in emissions of another compound will be interchanged to mitigate the increase, the decrease in emissions of the other compound must be adjusted by the ratio of the effects screening levels (ESL) of the two compounds to ensure that the environmental effects are relatively equivalent. In essence, if the ESL for compound B is two times the ESL for compound A, then a decrease of two pounds of compound B will be required to offset every one-pound increase of compound A.

The formula for making this interchange is as follows:

$$E_B = \left(\frac{ESL_B}{ESL_A} \right) E_A$$

Where:

E_A = Increase in emissions of compound A above the allowable emissions for compound A

E_B = Decrease in emissions of compound B required to interchange with E_A

ESL_A = Effects Screening Level value for compound A

ESL_B = Effects Screening Level value for compound B

If an increase in emissions of a compound will be mitigated by decreases of the same compound, the formula results in $E_B = E_A$ because the ESL values will be the same.

The ESL values must be for the same time period as the relevant allowable emissions (hourly or annual). The [ESL values](#) may be obtained from the TCEQ website.

Example 1: A facility has allowable emissions for hexane of 100 pounds per hour. Hexane has an hourly ESL value of $6200 \mu\text{g}/\text{m}^3$. A change to the facility will increase emissions of hexane from 80 pounds per hour to 125 pounds per hour, which would be 25 pounds per hour above the allowable emissions. To achieve the result of no increase in allowable emissions, a decrease in hexane emissions at the same or other facilities that total 25 pounds per hour could be used.

Hexane current allowable rate = 100 lb/hr

Hexane proposed allowable rate = 125 lb/hr

Change in hexane allowable rate = 25 lb/hr

No increase in allowable emissions is allowed, so a reduction of 25 lb/hr is required at the same or other facilities.

Example 2: Instead of hexane decreases, the owner or operator wishes to decrease benzene emissions to balance the hexane increase. Benzene has an hourly ESL of $170 \mu\text{g}/\text{m}^3$. The required decrease in benzene to mitigate the hexane increase can be determined using the formula.

$$E_B = \left(\frac{ESL_B}{ESL_A} \right) E_A$$

Hexane current allowable rate = 100 lb/hr

Hexane proposed allowable rate = 125 lb/hr

Change in hexane allowable rate = 25 lb/hr

Short term hexane ESL = $6200 \mu\text{g}/\text{m}^3$

Short term benzene ESL = $170 \mu\text{g}/\text{m}^3$

The required benzene emission rate reduction would be

$$E_{benzene} = \left(\frac{ESL_{benzene}}{ESL_{hexane}} \right) E_{hexane}$$

$$E_{benzene} = \left(\frac{170 \frac{\mu g}{m^3}}{6200 \frac{\mu g}{m^3}} \right) 25 \frac{lb}{hr}$$

$$E_{benzene} = 0.69 \text{ lb/hr}$$

The equation shows that a decrease of 0.69 pounds per hour benzene is needed for the 25 lb/hr increase in hexane. Note, however, that there can be no increase in allowable emissions for the air contaminant category. This is addressed in the next example.

2. Air Contaminant Categories

If a change will increase the emissions of an air contaminant category above the allowable emissions for that category, the increase can be balanced by a decrease in emissions of the same individual compound that will increase as a result of the change, or by decreases in one or more other individual compounds within the same air contaminant category.

Example: The facility in the example above also has allowable emissions for VOC of 1,000 pounds per hour. Since there is no adjustment based on ESL values, if a decrease in benzene emissions will be used to balance the increase, it will require a decrease of 25 pounds per hour and not just the 0.69 pounds per hour decrease required to achieve no increase in the allowable emissions for hexane.

VOC current allowable rate = 1,000 lb/hr

VOC proposed allowable rate = 1,025 lb/hr

Change in VOC allowable rate = 25 lb/hr

No increase in allowable emissions is allowed, so a reduction of 25 lb/hr VOC (benzene or another species) is required at the same or other facilities.

B. Intraplant Trading

To achieve the result of no increase in allowable emissions, the owner or operator can make emission reductions at the same facility at which the change will occur. The owner or operator also has the option to make emission reductions at another qualified facility at the same RN and exchange these reductions with the facility to be changed (i.e., make an intraplant trade).

If the intraplant trade involves a different individual compound than the individual compound for which an offset is required, this is also an interchange and the procedure discussed above must be used to determine the required reduction.

In accordance with §116.116(e)(5)(E), the qualified facility changes must demonstrate no adverse effect on ambient air quality. This justification must be included in the documentation submitted with the Form PI-E. Depending on the location of the facilities at the site, additional information and demonstration may be required by the TCEQ during the review.