

# Permit to Install Determining Applicability Flowcharts

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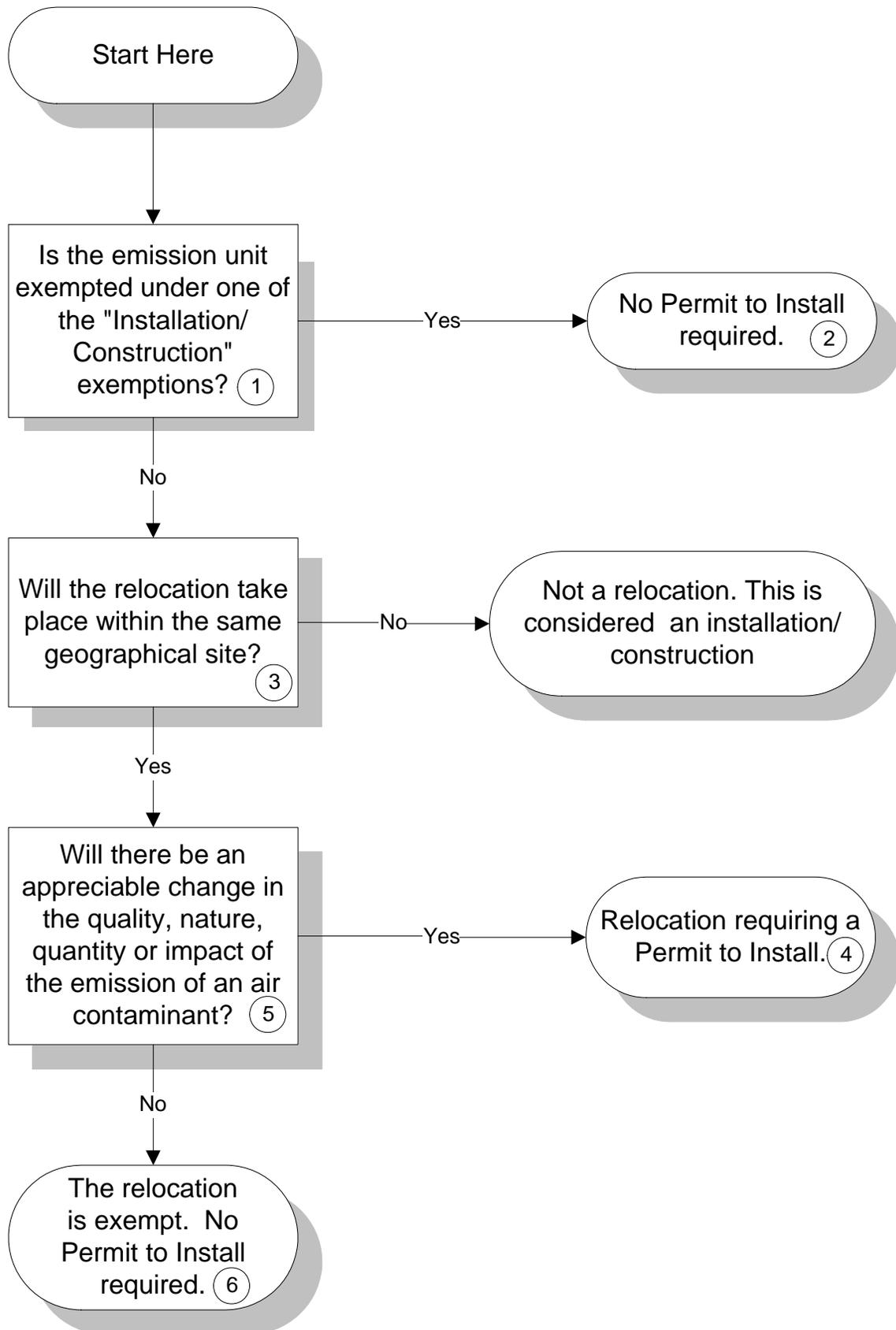
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## Instructions for Using the Relocation Flowchart

The purpose of the relocation flowchart is to help facilities determine whether or not relocating an emission unit is subject to the PTI requirement found in Michigan Rule 201. Relocation is simply moving an emission unit from one location to another location. It does not include replacing components or making physical or operational changes to the emission unit.

**Boxes 1 & 2** – If the emission unit is exempt from the PTI requirement under one of the “installation/construction” permit exemptions and after the relocation it will still meet the exemption, then the emission unit may be relocated without a Permit to Install. The facility must comply with any requirement in the exemption. For example, facilities using the exemption in Michigan Rule 290 must keep records of emissions.

**Boxes 3-6** – According to Michigan Rule 285(a), if the relocation will take place within the same geographical site and there will be no appreciable change in the quality, nature, quantity, or impact of the emission of air contaminants, a PTI is not required. Geographical site is defined in Michigan Rule 107(b) as contiguous land ownership by one landowner. A public right-of-way, such as a road, railroad, or watercourse through part of the site is not considered to break the continuity. Relocating emission units that results in the downwash or poor dispersion of air contaminants can result in an appreciable change in the impact of the emission of air contaminants, especially if those air contaminants are toxic or odorous.



Use the flowchart to determine if relocating an emission unit will require a Permit to Install.

## Instructions for Using the Reconstruction Flowchart

The purpose of the reconstruction flowchart is to help facilities determine whether or not the reconstruction of an emission unit is subject to the PTI requirement found in Rule 201. Reconstruction can be easily confused with the modification or installation/construction of emission units. Reconstruction is the one-for-one replacement of components of an emission unit that should not result in an appreciable change in emissions. For example, scrapping an old degreaser and replacing it with a new degreaser is an installation of a new emission unit, not a reconstruction. Replacing a coating booth in a coating line with an oven is a modification, not a reconstruction.

**Box 1** – If the replacement of components results in an appreciable change in the quality, nature, quantity, or impact of the emission of air contaminant, the facility may be making a modification to the emission unit, not reconstructing it.

**Boxes 2 & 3** – If the cost of the replacement of the emission unit components is 50 percent or less of the fixed capital cost of an entirely new emission unit, then the replacement does not meet the definition of reconstruction (see Michigan Rule 118(b)). Some examples of replacement of components that do not qualify as reconstruction include routine maintenance and replacing minor parts, such as replacing bags in a baghouse, replacement of engines, compressors, or turbines as part of a normal maintenance program, and ductwork. See Michigan Rule 285(a) for more examples.

**NOTE:** The fixed capital cost of new components is cumulative. For example, replacing new components in 1997 equaled 40 percent of the fixed capital cost. In a future year, the facility plans to replace additional components and the cost of replacement exceeds 10 percent of the fixed cost. The replacement is considered reconstruction, and a PTI may be required.

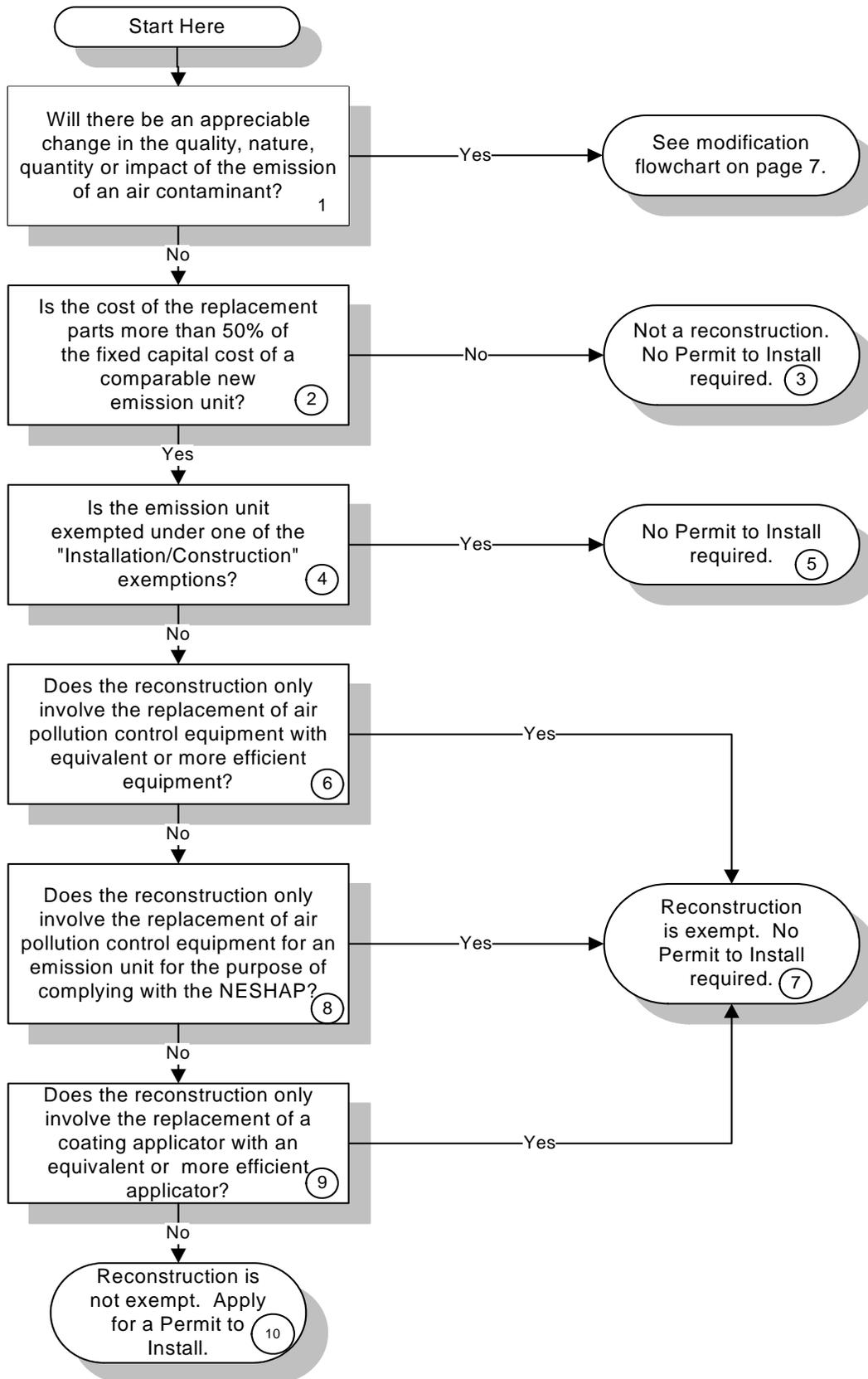
**Boxes 4 & 5** – If the emission unit is exempt under one of the “installation/construction” permit exemptions and it will still meet the exemption after the reconstruction, then this reconstruction does not need a PTI. The facility must comply with any of the requirements in the permit exemption. For example, Michigan Rule 287(c) requires a facility using the exemption to keep records of coating usage.

**Boxes 6 & 7** – According to Michigan Rule 285(d), reconstruction or replacement of air pollution control equipment with equivalent or more efficient equipment is not subject to the PTI requirement.

**Box 8** – According to Michigan Rule 285(e), replacing air pollution control equipment to comply with a National Emission Standard for Hazardous Air Pollutants (NESHAP) can proceed without a PTI.

**Box 9** – According to Michigan Rule 287(h), replacing a coating applicator system with a coating applicator system that has equivalent or higher design transfer efficiency is not subject to the PTI requirements unless the change is specifically prohibited by a permit condition.

**Box 10** – If the reconstruction does not meet any of the exemptions identified in Boxes 4, 6, 8, or 9, a PTI is required.



Use the flowchart to determine if reconstructing an emission unit will require a Permit to Install.

## Instructions for Using the Modification Flowchart

The purpose of the modification flowchart is to help facilities determine whether or not a proposed physical or operational change to an emission unit meets the definition of a “modification.” If the change is a modification, the flowchart will help the facility determine if the modification is exempt or subject to the PTI requirement found in Michigan Rule 201.

**Box 1** – If the physical or operational change does not increase the potential emissions of an air contaminant, it is not a modification. The table below has some examples of physical and operational changes. Do not confuse physical or operational changes with reconstruction. Reconstruction is a one-for-one replacement of components of an emission unit that should not result in any appreciable change in emissions.

Table 3-2 – Examples of Physical and Operational Changes	
PHYSICAL CHANGES	OPERATIONAL CHANGES
Change in the sequence of a process.	Increasing the temperature of the afterburner.
Adding a control device to the emission unit.	Increasing the hours of operation.
Changing the quantity or quality of raw materials, such as fuels and coatings.	Changing the curing time of a part in an oven.

**Boxes 2, 3, and 4** – If the proposed physical or operational change could not increase emissions or emit an air contaminant not previously emitted and the emission unit is covered under an existing PTI, determine if the change will require changes to any conditions of the permit. Changes to permit conditions may include the addition of new conditions, or changes to existing conditions. If permit condition changes are required, complete a permit application requesting the appropriate changes be made to the permit conditions. Include supporting information with the application. If there are no conflicts with the existing permit conditions, the proposed change does not meet the definition of a modification and does not require any action.

According to Michigan Rules 285(e) and (f), the following physical changes to an emission unit are exempt from the PTI requirement:

- Installing air pollution control equipment for an emission unit to comply with a National Emission Standard for Hazardous Air Pollutants (NESHAP).
- Installing air pollution control equipment for an existing emission unit if the control equipment itself does not actually generate a significant amount of an air contaminant as defined in Michigan Rule 119(e) or a meaningful quantity of a toxic air contaminant.

**Box 5 & 6** – Determine if the cumulative increase in emissions of air contaminants resulting from a proposed construction project that involves the modification of emission units will meet any of the criteria in Michigan Rule 278. If the facility does not pass the Rule 278 test (i.e., it is subject to one or more of the applicable criteria in Rule 278), then apply for a Permit to Install.

**Boxes 7, 8, & 9** – If the emission unit is exempt under one of the “installation/construction” permit exemptions and after the proposed change it will still meet the exemption, then this modification does not need a Permit to Install. The facility must comply with any requirement in the exemption. For example, Michigan Rule 287(c) requires the facility to keep records of coating usage.

**Boxes 10, 11, 12, 13, & 14** – If a PTI already exists for the emission unit, the facility should review the special conditions of the permit to find out if there is an emission limit for the air contaminant being increased. Emission limits for coating operations are often expressed in units of pounds of volatile organic compound (VOC) per gallon of coating, pounds of VOC per hour, or tons of VOC per year.

If there is an emission limit for the air contaminant being increased and if the proposed increase in emission requires a change to the existing permit limit, then the proposed change is a modification requiring a new PTI (see Box 11). If the emissions increase is allowed by the existing emission limit but requires changes to any other permit condition, the facility must apply for a PTI (see Box 12). If the increase does not require changes to

existing emission limits or any other permit condition, then the proposed change is not a modification and no action is required (see Box 14).

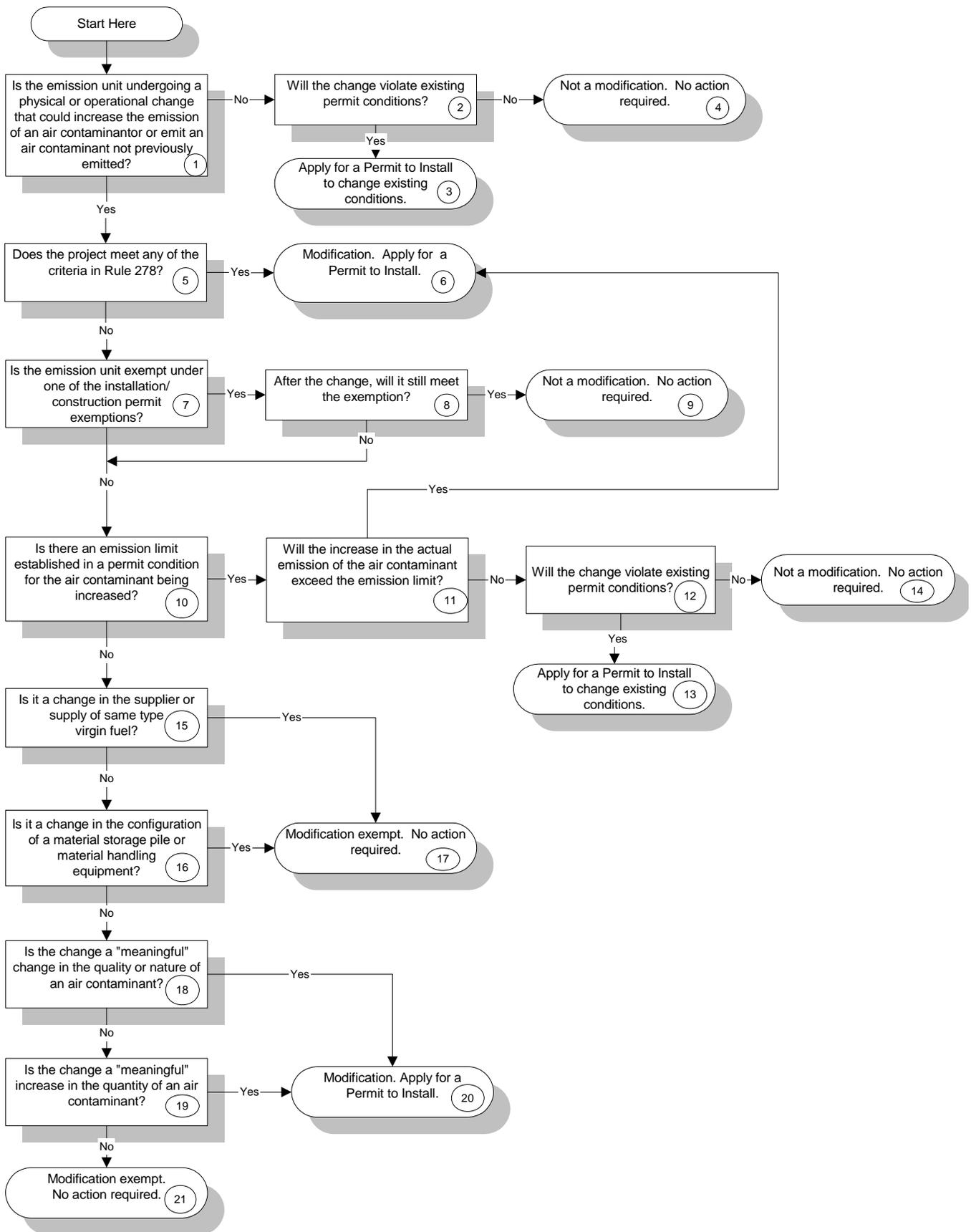
If there is no emission limit for the air contaminant being increased, the change is a modification – go to Box 15.

Note: Many HAPS and toxic air contaminants are also VOC's. However, a VOC limit in a PTI does not limit the emission of a specific HAP or toxic air contaminant.

**Boxes 15-21** – These boxes contain the modification exemptions in Michigan Rules 285(b) and (c). If the modification involves changes to a supply or supplier of the same type of virgin fuel (Box 15) or changes to material storage piles (Box 16), the modification is exempt (Box 17).

If the modification does not fit any of those exemptions, determine if the modification results in a meaningful change in the quality or nature or meaningful increase in the quantity of an air contaminant (Boxes 18 & 19). If not meaningful, the modification is exempt. If it is a meaningful change in the nature or a meaningful increase in the quantity of an air contaminant, then it is a modification that requires a Permit to Install.

The adjective “meaningful” is defined in a paper that the Air Quality Division presented at an Air and Waste Management Association (AWMA) conference on May 11, 1993. An example of how to determine a meaningful change is outlined in Chapter 3 of the Permit to Install Determining Applicability Guidebook,



*Use the flowchart to determine if a change to an emission unit will require a Permit to Install.*