## Texas Commission on Environmental Quality

## INTEROFFICE MEMORANDUM

To: All Air Permits Division and Field Operations Staff Date: September 1, 2005

Dan Eden, Deputy Director, Office of Permitting, Remediation and Registration Thru:

Glenn Shankle, Executive Director From:

Replacement of All Engine and Turbine Components for Oil and Gas Production - Revised **Subject:** 

**Introduction:** This memorandum revises the December 1, 2004 memorandum, same subject. It is intended

to document the practice of allowing replacement of engine and turbine components and clarify when such replacements are not considered new facilities or modifications to existing

facilities.

Issue: To ensure proper maintenance, good operation, and limit petroleum production interruptions,

> portions of turbine and engine sets used by the oil and gas industry are commonly replaced with components that have been rebuilt off-site instead of being rebuilt or repaired at a site (typically 5000 hp). In these cases, no changes are made to the supporting equipment (anchors, piping connections, fuel system, lubrication system, control system, structure, skids, inlet and exhaust ducts) which allows the combustion device to operate. The replacement combustion, compressor units, or power turbines are typically of the same horsepower, operate in the same manner, and have equal or less emissions than the original devices (in-kind). The new components operate in the same manner, provide no increase in throughput, and have equal or less emissions with no different characteristics with the

original devices.

Effective immediately, no authorization is required for in-kind replacement of engine or Action:

turbine components at oil and gas production facilities or petroleum pipelines and the production facility or pipeline will continue to operate under the original permit, standard permit, or permit by rule/standard exemption. This does not apply to any other industry or

facility type and will expire upon adoption of revised regulations and permit by rule §106.512.

**Justification:** This action will have an economic benefit, result in no adverse short-term environmental

impact on the public, and minimize resources for the agency and regulated community.

Under Texas Clean Air Act §382.003(9) and 30 Texas Administrative Code §116.10(11) exchanges of in-kind components which do not increase the amount or change the character of emissions are not considered a "modification". Replacement of engine and turbine components should be considered maintenance actions only. The replacement of existing permitted engines and turbines with in-kind facilities results in no environmental changes, and may have a minor short-term environmental benefit. To maintain good operation, the existing facilities need to undergo maintenance or rebuilding and if not replaced, would likely emit higher amounts of air contaminants to the atmosphere over time. authorization requirements will remove a perceived obstacle to replacements, allowing sites to continue operation and production. It is recommended that facility owner/operators should contact the appropriate regional office and be prepared to submit identifying information regarding the replacement (serial number, horsepower, device type) if requested to ensure continuity of site records and reports.

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This action is consistent with recent legislation specific to the oil and gas production and petroleum pipeline industry. Previously grandfathered engines and turbines used for petroleum production and handling have been given special consideration when being required to obtain new source review permits. This action affects the same industries and is consistent with providing flexibility to an economic segment that is part of the nation's critical energy infrastructure. It should be noted that this policy will establish a new baseline for all replacement engine and turbine components supporting the petroleum industry only and does not apply to any other industry, source, or facility type.