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**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**  
*Protecting Texas by Reducing and Preventing Pollution*

August 15, 2013

MR WREN STENGER  
DIVISION DIRECTOR  
MULTIMEDIA PLANNING AND PERMITTING DIVISION  
US ENVIRONMENTAL PROTECTION AGENCY REGION 6  
1445 ROSS AVE STE 1200  
DALLAS TX 75202-2733

Re: Notice of Proposed Permit and Executive Director's Response to Public Comment  
Renewal  
Permit Number: O2000  
ExxonMobil Oil Corporation  
Beaumont Refinery  
Beaumont, Jefferson County  
Regulated Entity Number: RN102450756  
Customer Reference Number: CN600920748  
Account Number: JE-0067-I

The Texas Commission on Environmental Quality (TCEQ) executive director's proposed final action is to submit a proposed federal operating permit (FOP) to the U.S. Environmental Protection Agency (EPA) for review. Prior to taking this action, all timely public comments have been considered. In addition, TCEQ received a letter from EPA dated December 30, 2009 which is being treated as additional comments. All comments are addressed in the enclosed Executive Director's Response to Public Comment (RTC). The executive director's RTC also includes resulting modifications to the FOP, if applicable.

Changes unrelated to comments have been made to the permit since commencement of the public notice period. A detailed explanation of all changes is contained in the enclosed statement of basis.

As of August 20, 2013 the proposed permit is subject to an EPA review for 45 days, ending on October 4, 2013.

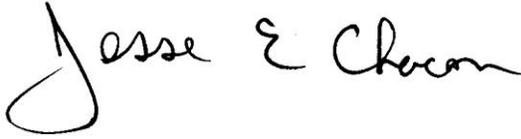
Mr. Wren Stenger

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Thank you for your cooperation in this matter. If you have questions concerning the processing of this permit application, please contact Mr. Alfredo Mendoza, P.E. at (512) 239-1335.

Sincerely,

A handwritten signature in black ink that reads "Jesse E. Chacon". The signature is written in a cursive style with a large, looped initial "J".

Jesse E. Chacon, P.E., Manager  
Operating Permits Section  
Air Permits Division  
Texas Commission on Environmental Quality

JEC/am

cc: Mr. Edwin S. Jackson, Environmental Advisor, ExxonMobil Corporation, Beaumont  
Air Section Manager, Region 10 - Beaumont  
Air Permit Section Chief, U.S. Environmental Protection Agency, Region 6-Dallas  
(Electronic copy)

Enclosures: Executive Director's Response to Public Comment

Project Number: 11856

## **EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT**

The Executive Director (ED) of the Texas Commission on Environmental Quality (the Commission or TCEQ) files this Response to Public Comment (RTC or Response) on the application for a Federal Operating Permit (FOP) Permit No. O2000 filed by ExxonMobil Oil Corporation (Applicant).

As required by Title 30 Texas Administrative Code (TAC) § 122.345 the Executive Director shall send a notice of the proposed final action, which includes a response to any comments submitted during the comment period. These comments are summarized in this response. The Office of Chief Clerk (OCC) timely received comment letters from the Environmental Integrity Project on behalf of Sierra Club, Galveston Houston Association for Smog Prevention (GHASP), and itself. In addition, TCEQ received comments from EPA. If you need more information about this permit application or the permitting process, please call the TCEQ Office of Public Assistance at 1-800-687-4040. General information about the TCEQ can be found at our Web site at <http://www.tceq.texas.gov>.

### **BACKGROUND**

#### Procedural Background

The Texas Operating Permit Program requires that owners and operators of sites subject to 30 TAC Chapter 122 obtain a FOP that contains all applicable requirements in order to facilitate compliance and improve enforcement. The FOP does not authorize construction or modifications to facilities, nor does the FOP authorize emission increases. In order to construct or modify a facility, the facility must have the appropriate new source review authorization. If the site is subject to 30 TAC Chapter 122, the owner or operator must submit a timely FOP application for the site, and ultimately must obtain the FOP in order to operate. ExxonMobil Oil Corporation applied to the TCEQ for an FOP renewal for the Beaumont Refinery, located in Beaumont, Jefferson County on April 11, 2008, and notice was published on November 12, 2009 in *Beaumont Enterprise* and November 13, 2009 in *El Perico*. The public comment period ended on December 13, 2009. Comments were received from the Environmental Integrity Project (EIP) on December 21, 2009. In addition, EPA submitted comments in a letter dated December 30, 2009.

Due to concerns from the EPA on timing issues with the first public notice, the FOP was sent to a second public notice. The second notice was published on October 1, 2010 in both the *Beaumont Enterprise* and *El Perico* newspapers. The comment period ended on October 31, 2010. No additional comments were received during the second notice period.

#### Description of Site

ExxonMobil Oil Corporation has applied to the TCEQ for an FOP Renewal that would authorize the applicant to operate the Beaumont Refinery. As part of the renewal application, ExxonMobil is consolidating 18 active FOPs into a single FOP for the site. The facility is located at 1795 Burt St in Beaumont, Jefferson County, Texas. The Beaumont Refinery processes crude oil into gasoline. The following individual processes are utilized to process crude oil into the various products to be sold to consumers or other businesses for use in the development of other consumer products.

## Process Description:

### Alkylation Unit

The Alkylation Unit chemically combines low molecular weight olefins with isoparaffins in the presence of sulfuric acid to produce gasoline components with high octane ratings. Dry olefinic feed is mixed with excess isobutane and contacted with a liquid acid catalyst in the reactor. The reactor effluent is separated into hydrocarbon and acid phases in a settler and the acid is returned to the reactor. Traces of acid, organic sulfate, and sulfonates (or organic) fluorides are removed. Then, the product is fractionated by distillation to provide a finished alkylate.

The blowdown systems (02BLW#007, 03BLW#007, 08BLW#007, 09BLW#007, 10BLW#007, 11BLW#007, and 12BLW#007) are each closed systems constructed of hardpiping and utilizing Flare No. 7 (60FLR#007).

### Catalytic Hydrodesulfurizer 1 and 2 (CHD 1&2)

CHD 1&2 operate continuously to remove sulfur and nitrogen compounds from middle distillates gasoline and cat cracker feed. The feedstock of CHD 1&2 contains sour distillates from the crude distillation tower and cat cracker gas oils. This feedstock is vaporized, mixed with hydrogen rich process gas, and heated before passing over a catalyst. With the catalyst present, the organic sulfur and nitrogen are converted into hydrogen sulfide (H<sub>2</sub>S) and ammonia (NH<sub>3</sub>) respectively. From the reactor, the product is compressed and sent to a high-pressure separator where the hydrogen is flashed off. Then, the H<sub>2</sub>S, NH<sub>3</sub>, and low-boiling point hydrocarbons are removed by a low pressure separator.

CHD 1&2 utilizes heaters, strippers, and separators to process the feedstock. Fugitives emissions are also generated at the site from the use of amine (DEA) in the acid gas knockouts.

### Coker Unit

The Delayed Coking process takes place within the Coker area. Coking is a thermal cracking process in which crude oil residues and process oils of low value are cracked at high temperatures and atmospheric to produce lighter stocks and petroleum coke. In the delayed coking process, hot residual oil is fed directly to the fractionator, where it combines with recycle and is pumped to the coker heater. This mixture is then heated to coking temperatures, causing partial vaporization and mild cracking. The vapor-liquid mix generated then enters a coke drum for further cracking; until a solid charcoal like product is produced. The coke drum overhead reenters the fractionator and Coker Gas Plant to be separated into gas, naphtha, and light and heavy gas oils. What remains in the coke drum is a highly porous charcoal like material, petroleum coke. The petroleum coke is cut from within the coke drum using a high-pressure water drill.

There is one blowdown system located within this permit area: 04BLW#004. All blowdowns are hard piped directly to the flare. Blowdown 04BLW#004 is hard piped to flare 60FLR#004.

### Crude A Unit

Crude Unit A operates continuously to separate crude oil into fractions with specific boiling ranges through distillation and steam stripping. The relatively lighter fractions are separated and recovered in the atmospheric tower. Naphtha may be further

fractionated in a second tower to produce light and heavy naphtha. The residue from the atmospheric fractionator goes through more processing in a vacuum distillation tower. This increases the output of liquid distillates and heavy residue.

This application area also contains South BRU (Benzene Recovery Unit). The benzene waste from the south side of the plant is sent to South BRU to be recovered. This unit utilizes a steam stripper to recover benzene that is sent here from other units at the refinery.

Fugitive emissions are also present at this site from the use of diethanolamine (DEA) in the acid gas knockouts and various other components indicated in this application. DEA systems PSVs utilize the flare (60FLR#006) as a control device.

#### Crude B Unit

Crude Unit B operates continuously to separate crude oil into fractions with specific boiling ranges through distillation and steam stripping. The relatively lighter fractions are separated and recovered in the crude tower. Naphtha that is produced may be further fractionated in a second tower to separate light and heavy naphtha. The residue from the atmospheric fractionator goes through more processing in vacuum distillation. This increases the output of liquid distillates and heavy residue. Fugitive emissions are also present at the site from the use of diethanolamine (DEA) in the acid gas knockouts and various other equipment components indicated in this renewal application. DEA systems PSVs utilize the low pressure flare (60FLR#005) and high pressure flare (60FLR#003) as control devices.

#### Fluidized Catalytic Cracking Unit

The Fluidized Catalytic Cracking Area is composed of the Fluidized Catalytic Cracking Unit (FCCU), the North Plant Flare Gas Recovery (NPFGR), and Gas Compressor Plant 3 (GCP3), and the Naphtha Splitter Unit (NSU).

The FCCU is a catalyst cracking unit used to convert heavy oils into a wide boiling range material from which lower molecular weight products such as naphtha and middle distillates are fractionated by distillation. The feedstock is generally a heavy distillate or gas oil with a boiling range of about 260°C (500°F) to 540°C (1000°F). The FCCU consists of a catalyst section and a fractionating section which operate together as an integrated processing unit. The catalyst section contains the reactor and regenerator, which, together with the standpipe and riser, form the catalyst circulation unit. The catalyst is in the form of very small spherical particles that behave as a fluid when aerated by vapor. In the fractionation section the reactor effluent is separated by distillation into recycle oil, middle distillate, and naphtha.

The NPFGR Unit takes gas from the flare system, which was previously burned to the atmosphere, and instead compresses it, scrubs it, and then sends it to the refinery fuel system. This is accomplished by redirecting some of the flare gases from FCC blowdown drums to a H<sub>2</sub>S Diethanolamine Absorber and a compressor system. The recovered C<sub>2</sub> through C<sub>6</sub> plusses will be used as refinery fuel gas.

GCP3 is then used to remove the heavier hydrocarbons from process gasses, stabilize light naphtha by removing the gaseous hydrocarbons, and separate the various fractions of hydrocarbon gases.

The NSU is designed to fractionate a current naphtha stream into three streams, a Light Naphtha stream, an Intermediate Naphtha stream, and a Heavy Naphtha stream. The Light Naphtha will be further processed in an existing gasoline treater unit, currently in service for processing catalytic cracking unit gasoline. The Intermediate Naphtha will be processed in a naphtha hydrofiner unit, which will be expanded and modified to permit processing the projected feed slate within the existing rated capacity of the unit. The Heavy Naphtha will be processed on a distillate hydrotreater unit, which will be modified to allow treating the Heavy Naphtha in conjunction with the diesel range feedstock.

The blowdown systems (06BLW#008, 07BLW#008, and 66BLW#008) are each closed systems constructed of hardpiping and utilizing the FCC Flare (60FLR#008).

### Flares

The ExxonMobil Beaumont Refinery utilizes continuous process flares. The flare systems at the site are connected as follows: The south plant flares: No. 6, No. 7, and No. 10; the CHD 1 and CHD 2; and the HP, LP, and FCC flares. If one flare is down the vent streams will be routed to another flare.

### General #1

General #1 contains ExxonMobil's Maintenance Areas, Laboratory, Safety Area, and Fueling Area. The laboratory tests samples of products generated at the refinery and stores residual materials in tank 63TIF#1373 after testing. Maintenance of equipment is performed in various locations throughout the refinery. These areas consist of a Machine Shop which operates a welding shop and vehicle fleet maintenance facilities and a maintenance area which conducts blasting/painting in an enclosed booth and operates a wash pad for cleaning miscellaneous parts before maintenance is performed. Additionally, some process areas in the refinery have small satellite maintenance shops located in close proximity to the operating unit. Degreasing/cleaning operations for small metal parts authorized under 30 TAC § 106.454 and not subject to 30 TAC Chapter 115 occur in these areas. The Safety Area is composed of portable equipment used in fire fighting and emergency response training. The Fueling Area for ExxonMobil's vehicle fleet is subject to Stage I and Stage II requirements of gasoline dispensing for motor vehicle as per 30 TAC Chapter 115.

### Hydrocracker (HDC)

The Hydrocracker area includes the Hydrocracker, the Dualayer, and the Stand Alone Methanator (SAM) units. Process descriptions for all three units are provided below.

The Hydrocracking process is the conversion of heavier higher-boiling feedstock into lower-boiling, more valuable products. The process utilizes two reactor stages. In the first reactor, feed is combined with hydrogen-rich process gas and contacted with a hydrotreating catalyst for the partial removal of sulfur and nitrogen compounds. In the second reactor, product from the first reactor is passed over a hydrocracking catalyst in the presence of hydrogen gas. The product from the second reactor is then condensed, separated from hydrogen-rich recycle gas, and fractionated by distillation into the desired products.

The Dualayer uses a caustic solution to remove mercaptans from gasoline base. The heat used at this unit is furnished by steam from Power Plant No. 3, which is part of the Utilities Area.

The SAM unit takes heated hydrogen from the MCC and converts the CO in the hydrogen to methane and water. The hydrogen, methane, and water go to the H<sub>2</sub> Production Knockout. The methane and hydrogen will go to the HDC, and the water goes to the sewer.

There are three blowdown systems located within this permit area: 19BLW#005, 20BLW#003, and 21BLW#003. All three blowdowns are hard piped directly to a flare. Blowdown 19BLW#005 is hard piped to flare 60FLR#005. Blowdowns 20BLW#003 and 21BLW#003 are hard piped directly to flare 60FLR#003.

#### Isomerization Unit

Isomerization is the process used to convert four-to-six carbon normal paraffins (butane, pentane, and hexane) into their respective branched paraffins. A sweet, dry feedstock is mixed with hydrogen and hydrogen chloride (or organic chloride), and passed over a fixed bed catalyst where the straight-chain paraffins are converted into their branched counterparts. The hydrogen is flashed off in a high-pressure separator and the hydrogen chloride is removed in a stripper column. The final product is fractionated by distillation to separate the branched paraffins.

The Isomerization Blowdown System (25BLW#010) is a closed system constructed of hardpiping and utilizes the Isomerization Flare (60BLR#010).

#### Loading

Three marine vessel loading racks are operated at the ExxonMobil Beaumont Refinery. Wharves Nos. 2, 4, and 5 each have a marine vessel loading/unloading rack. Materials loaded at Wharf No. 2 have a vapor pressure less than 1.5 psia such as various fuel oils and caustic materials. Wharves Nos. 4 and 5 are used to load materials over a wide vapor pressure range such as gasoline, aviation fuel, and other materials. Additionally these two wharves are connected to the marine vapor flare (60FLR#009).

#### Lubes Unit

Lubes are composed of Furfural No.1, Furfural No. 2, Ketone No. 2, and Hydrofinisher units.

Furfural No. 1 and No. 2 are designed to improve performance properties of heavy distillates that are intended to be used as lubricants. The furfural solvent selectively removes aromatic compounds typically in a tower by controlling the temperature and the amount of solvent being used.

Ketone No. 2 used MEK and toluene as solvents to remove normal paraffins from partially finished lubricating oils in order to improve their low temperature performance properties and remove wax.

The Hydrotreater uses a fixed bed catalyst treatment of oil with hydrogen to improve its quality by saturation of olefins, reducing acid in the oil, and stripping hydrogen sulfide or water from the lube oil.

The blowdown systems (37BLW#001 and 40BLW#001) are each closed systems constructed of hard piping and utilizes the CHD-1 Flare (06FLR#001).

### North Tanks Area

The vessels in North Tanks receive many materials for storage from other parts of the plant including, but not limited to gasoline in various stages of production, naphtha, MTBE, diesel, slop oil, or other petroleum fractions. These tanks store products in different stages of completion or wastes generated during product refining. From this area, the products or wastes are pumped to other parts of the refinery for further processing or treatment.

### Power Plant 4

The facility consists of three cogeneration trains and ancillary equipment. Each cogeneration train consists of a combustion turbine generator (CTG) with a heat recovery steam generator (HRSG). Selective catalytic reduction (SCR) will be utilized on each cogeneration train to control NO<sub>x</sub> emissions. Ancillary equipment includes a cooling tower, lube oil systems, and ammonia storage facilities.

The three CTG's (61TRB#001, 61TRB#002, and 61TRB#003) are fueled with pipeline quality natural gas. Combustion air is combined with natural gas and fed to the combustor. The combustion products and excess air are expanded through the turbine to produce shaft horsepower, which is used to drive a direct-coupled electric powered generator and to compress the combustion air. The exhaust gas exits the CTG and is routed to the HRSG for steam production. The HRSG's will use supplementary-fired duct burners (61BRN#001, 61BRN#002, and 61BRN#003) to increase steam production. The steam produced in the HRSGs will be delivered to the refinery for further use.

A SCR Unit is installed with each HRSG to reduce NO<sub>x</sub> emissions from the cogeneration trains. Ammonia is injected into the exhaust upstream of the catalyst bed. The ammonia reacts with the catalyst, reducing NO<sub>x</sub> to water and nitrogen. The final exhaust gases from each train will exit through a stack to the atmosphere.

### Platinum Reformer 3&4 (PtR 3&4)

Catalytic reforming converts low octane naphthas into high octane gasoline blending stocks. In reforming, cycloparaffins are converted to aromatics by dehydrogenation and dehydroisomerization. Some paraffins are also converted to ring compounds, and dehydrogenated to form aromatics. The naphtha feedstock is mixed with hydrogen, vaporized, and passed through a series of alternating furnaces and fixed bed reactors containing platinum catalyst. The reactor effluent is cooled and sent to separation. Hydrogen is removed from the top of the separator. Higher molecular weight product is withdrawn from the bottom and further fractionated into gas, LPG, and reformate.

The blowdown systems (27BLW#003, 27BLW#005, 28BLW#003, and 28BLW#005) are each closed systems constructed of hardpiping that utilizes the High Pressure Flare (60FLR#003) and Low Pressure Flare (60FLR#005).

### Sulfur Recovery Unit 1, 2 and 3 (SRU 1, 2, and 3)

The SRU 1, 2, and 3 units operate continuously to convert hydrogen sulfide and mercaptans (feed) to elemental sulfur by controlled combustion followed by a reduction of unconverted acid gas over a catalyst. First, the feed, which comes from other parts of the refinery, is partially combusted with air to form sulfur and water. This gas is then cooled and the sulfur condenses as a liquid. Second, the remaining gases are reheated and passed through a series of catalytic beds to increase conversion. Third, gases that are not converted by the previous process go the tail gas stream, where further

processing occurs to convert hydrogen sulfide and sulfur dioxide to sulfur. Finally, remaining unconverted sulfur compounds from the tail gas reactor are incinerated in a thermal oxidizer to form sulfur dioxide. Fugitive emissions are also present at the site from the use of diethonalamine (DEA) in the acid gas knockouts.

#### South Tanks Area

The South Tanks Area is composed of the tank farm located in the southern part of the refinery.

The vessels in South Tanks receive many materials for storage from other parts of the plant including, but not limited to crude, gasoline in various stages of production, naphtha, kerosene, methanol, benzene, and xylene. These tanks store products in various stages of completion, or wastes generated during the refining process. From this area, the products or wastes are pumped to other parts of the refinery for further processing or treatment.

There are two blowdown systems, (01BLW#006) and (50BLW#010) in this area. Each blowdown is part of a closed system constructed of hardpiping connected to a flare, 60FLR#006 and 60FLR#010 respectively.

#### Utilities Area

The Utilities area is inclusive. It includes Power Plants 2 and 3, the Plant Air Compressor Stations, Cooling Tower Water Treatment, Effluent Water Treatment, and the Secondary Impoundment Basin. The following are brief process descriptions of the facilities encompassing "Utilities."

Power Plant 2 is a cogeneration power facility. Located at this facility is a heat recovery steam generator that utilizes a duct burner, and one gas fired turbine. Because the steam turbine and gas turbine are operated in series, Power Plant 2 is considered a cogeneration facility.

Power Plant 3 is a steam generation power facility. As such, Power Plant 3 produces electricity through the use of steam turbines. The steam necessary to propel the turbines is provided by two gas fired boilers (no. 33 and 34).

The Plant Air Compressor Station uses steam turbines and electric motors as a means of providing compressed instrument air and yard air to the entire ExxonMobil Beaumont Refinery. The steam necessary for driving the turbines is obtained from excess steam generated by Power Plants 2 and 3. Diesel powered engines are used to power the Plant Air Compressor Station during emergencies.

The Cooling Tower Water Treatment facility is responsible for maintaining the water quality of ExxonMobil's Beaumont Refinery cooling towers. This is accomplished through the use of several different chemicals. The following chemicals are used: (1) chlorine gas for controlling microbiological formation, (2) corrosion inhibitor for preventing corrosion in the process water system, and (3) soda ash for adjusting the waters pH. Chemicals are added as necessary for controlling cooling tower water quality.

The function of the Effluent Water Treatment (EWT) is to clean up and improve the environmental quality of refinery wastewater by (1) controlling pH, (2) removing oils, and (3) removing solids. Any oils recovered from the treating operation are returned to the refinery slop oil system. Any solids are collected in the form of oily sludge that is

pumped to storage tanks and then returned to the unit to be processed by contractors for the disposal of solids. Bio-sludge is transferred to the effluent water treatment belt, where it is pressed and disposed of in a landfill.

The Secondary Impoundment Basin is used during periods of rainfall. During situations when the flow exceeds 12,000 GPM through the API separator and DAF unit, excess water is diverted to the secondary impoundment basin via the oil water separator and a storm water transfer system. This is accomplished through the use of inlet gates to the oil water separator, which are kept closed during dry periods or relatively light rainfalls.

**All comments were submitted by EIP on behalf of Sierra Club, Galveston Houston Association for Smog Prevention (GHASP), and itself.**

**COMMENT 1:** As a preliminary matter, EIP, GHASP and Sierra Club (Commenters) are concerned about recent actions on all of the Title V permits at ExxonMobil's Beaumont refinery. Currently, in addition to permit O-2000, there are numerous other Title V permits that cover the ExxonMobil's Beaumont refinery. Commenters are concerned that the permits are being aggregated in a way that does not comply with Part 70 public participation rules and the critical Part 70 and Clean Air Act (Act) requirement to include all applicable emission limits and standards in the Title V permits in a manner that assure compliance with those limits and standards.

Is draft renewal O-2000 actually a new permit that aggregates all ExxonMobil Beaumont refinery Title V permits?

Based on discussions with TCEQ staff, Commenters understand that the draft renewal of O-2000 actually contains the provisions of all of the other, currently active Title V permits at the facility. Based on these same discussions, Commenters understand that when the draft renewal of O-2000 is a final permit, those other Title V permits for the facility will be voided.

Whether in fact, (1.) the emission standards and limitations from other, current, Title V permits have been incorporated the draft renewal and (2.) upon issuance of the final O-2000 permit, all other Title V permits at the ExxonMobil site will be voided is difficult to verify based on publically available documents and information. For example, the Statement of Basis clearly states that there are no other FOPs for the facility (See Statement of Basis, p. 8). The Statement of Basis also provides: "The "application area" consists of the emission units and that portion of the site included in the application and this permit. When there is only one area for the site, then the application information and permit will include the site." (Id.) The Statement of Basis should explain what is actually happening at the site and with the permitting action. It appears that boiler plate language is simply filling in details that should be explained on a permit-specific basis. The Statement of Basis fails to explain, if correct, that the renewal of O-2000 includes significant changes from its prior version and that these changes include requirements from all of the currently existing Title V permits at the site. It is important for the Statement of Basis to be clear on this point so that the public can review the appropriate documents during the comment period. For example, one might want to review the current Title V permits and compare them to the draft renewal of O-2000 to determine if all of the requirements have been included in the draft.

Is ExxonMobil currently operating its Beaumont refinery without valid permits?

According to TCEQ's online databases, multiple Title V permits for the refinery expired and there is no information to indicate whether another permit now includes the standards and limitations from the expired permits (or that the refinery shut down segments of its operations). As of 12/11/09 permits O-1356, O-1870, O-1871, O-1999 and O-2037 are all listed as "expired" in the TCEQ's IMS tracking. All five permits expired between 11/2008 and 05/2009, yet no Title V permitting actions other than an administrative update on permit O-1998 have occurred since the expiration of these 5 permits. It appears that the catalytic hydrosulfurizer 1 & 2 authorized in O-1356, sulfur recovery units 1,2 and 3 authorized in O-1870, flares authorized in O-1871, utilities authorized in permit O-1999, and loading authorized in O-2037 are all currently operating without a valid Title V permit. In addition, when Commenters viewed the IMS tracking shortly after publication of renewal notice for O-2000, Commenters noticed additional (in addition to the permits listed as "expired") recently "voided" Title V permits. These voided Title V permits are no longer in the IMS tracking and there is no explanation or associated actions contained in the database that explain the voiding and current status of these permits.

These basic questions about how the Beaumont site is permitted should be addressed in the Statement of Basis. Moreover, the Title V permitting section at TCEQ must have a full understanding of all applicable emission limits and standards in order to draft and issue Title V permits that comply with Part 70. Commenters are concerned that information regarding agency actions on major source NSR permits, minor source NSR permits, PBRs and enforcement actions are not adequately compiled and understood as a collection of requirements to issue Title V permits in compliance with the Act.

**RESPONSE 1:** In response, the ED notes that the commission implements an EPA approved Federal Operating Permit Program. The governing rules for the Federal Operating Permit Program implemented by the commission are found in 30 Texas Administrative Code (TAC) Chapter 122. These rules govern all requirements of the Federal Operating Permit Program in Texas, and have been found by EPA to implement the federal requirements of 40 Code of Federal Regulations Part 70. ExxonMobil requested to consolidate 18 permits at the site when the renewal application was submitted for permit O2000. The renewal application was determined to be timely under 30 TAC § 122.133(2) and therefore the site continues to operate under a pending FOP renewal, in accordance with the requirements of 30 TAC § 122.241.

The renewal application made it clear that the scope of the renewal was to incorporate all applicable requirements into a single Title V permit at the site. The ED regrets that this fact was not made clear in the Statement of Basis that was made available during the first public notice comment period that extended from November 12, 2009 through December 13, 2009. The Statement of Basis document was updated when the permit went to a second public notice to clearly address that the renewal project includes a consolidation of all Title V permits that exist at the site. The permits being incorporated into permit O2000 are permits O1356, O1870, O1871, O1998, O1999, O2036, O2037, O2039, O2040, O2041, O2042, O2043, O2044, O2046, O2047, O2048, and O2049, which will be voided upon issuance of FOP O2000.

The Title V Information Management System (IMS) database was updated to reflect that timely renewal applications were received for the remaining permit areas. Since timely renewal applications were received, ExxonMobil is legally allowed to continue to operate under their permits while the renewal is pending. Void projects have been created for

these permits which are required to be created internally for closing out the permits in the IMS once the consolidated permit O2000 is renewed.

There were no significant changes in the Applicable Requirements in the consolidated Title V permit O2000. The changes to applicable requirements were due to amended versions of applicable State and Federal regulations that occurred since the last issuance of the permits for the Beaumont Refinery. The Statement of Basis has been updated to identify additional changes to applicable requirements that have occurred after the draft permit went through the public notice comment process.

Due to the complexity and size of the consolidated Title V draft permit, it is not feasible to identify every change in applicable requirements that occurred from the individual Title permits to the combined draft permit. ExxonMobil identified the changes made from the initial permits in the Title V renewal application on form OP-2. This list is several hundred items long and therefore was not included in the Statement of Basis. The ED refers the commenter to the Title V application for the list of the represented changes in the Title V permit and the Statement of Basis for changes to the Title V permit that occurred after public notice.

**COMMENT 2:** The proposed draft renewal permit does not identify the emission limitations associated with several NSR permits that are incorporated by reference into the renewal draft. Part 70 requires that:

Each permit issued under this part shall include the following elements:  
(a)(1) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of permit issuance. 40 C.F.R. § 70.6(a)(1).

TCEQ relies on the incorporation of entire NSR and PSD permits by reference to a permit number. Presumably, if one reviews that permit number one may find applicable emission standards and limitations. This multi-layered incorporation by reference is a complete failure to comply with 40 C.F.R. § 70.6(a)(1). The Applicable Requirements Summary also relies extensively on incorporation by reference, thus basing the entire permit's emission limitations on incorporation by reference. This does not "assure compliance." To the contrary, it poses a significant barrier to members of the public who wish to discover and/or comment on whether the permit assures compliance.

Permits incorporated by reference into this permit without identification of associated emission limitations and standards include: PSDTX799, PSDTX802, PSDTX932, PSDTX992M1, PSDTX768M1 and 49138. (See, New Source Review Authorization References, starting at Renewal-Draft p. 749). As explained in the Administrator's May 28, 2009 Order Granting in Part and Denying in Part Petition for Objection to Permit, response to Petition Number VI-2007-01 (CITGO Order), other than minor NSR permits and permits by rule "EPA did not approve (and does not approve of) Texas' use of incorporation by reference of emissions limitations for other requirements." CITGO Order at 11. Consistent with EPA's previous statements on the use of incorporation by reference, I agree that the applicable emissions limits (MAERT) should be explicitly identified in CITGO's Title V permit. It is especially important here where the Title V permit incorporates requirements from several permits (including two PSD permits, several federal regulations, and other requirements). Moreover, the Title V permit cross references the PSD permits in their entirety. Thus, EPA grants the petition on this issue with regard to TCEQ's use of incorporation by reference for emissions limitations, with

the exception of those emissions limitations from minor NSR permits and permits by rule. EPA directs TCEQ to reopen the permit and ensure that all such emissions limitations are included on the face of the title V permit. (CITGO Order at 11.)

EPA Region 6 has reaffirmed the CITGO Order provisions regarding Texas' use of incorporation by reference of emissions limitations in three recent Title V Objection letters (See, Objection to Federal Part 70 Operating Permit Valero Refining Texas, Texas City Refinery, TCEQ Permit No. O-01253 (October 30, 2009); Objection to Federal Part 70 Operating Permit Chevron Phillips Chemical Company, Ethylene Unit (EU 1592) and Utilities TCEQ Permit No. O-2113 (October 30, 2009); Objection to Federal Part 70 Operating Permit Formosa Plastics Corporation, TCEQ Permit Number O-1957 (October 30, 2009). In each of these letters, EPA objects to TCEQ's incorporation by reference of major NSR permits and the failure to include emission limitations and standards necessary to assure compliance with all applicable requirements.

In addition to the orders and objections from EPA, the courts make clear that the compilation of emission limits and monitoring requirements in one place is a fundamental piece of the permit and should be done in a manner so as to easily identify these limits and requirements. "Title V permits, . . . to facilitate compliance, consolidate all applicable requirements in a single document." N.Y. Pub. Interest Research Group v. Whitman, 321 F.3d 316, 320 (2nd Cir. N.Y. 2003), citing 42 U.S.C. § 7661a(a) and Virginia v. Browner, 80 F.3d 869, 873 (4th Cir. 1996) (Title V permit "is a source-specific bible for Clean Air Act compliance"). TCEQ must correct this fundamental flaw in the draft renewal and require ExxonMobil to re-publish the revised draft for public comment.

## **RESPONSE 2:**

The ED respectfully disagrees with EIP's interpretation of EPA's approval of Texas's operating permit program on this issue. The federally approved operating permit program for Texas has allowed for applicable requirements to be incorporated by reference into the FOP since 1996. See Final Interim Approval, 61 Fed. Reg. 32693, June 25, 1996; Final Full Approval, 66 Fed. Reg. 63318, December 6, 2001; and Final Approval of Resolution of Deficiency, 70 Fed. Reg. 16134, March 30, 2005. Title 30 TAC §122.142 states that the operating permit shall contain the specific regulatory citations in each applicable requirement identifying the emission limitations and standards. Additionally, EPA discussed the use of incorporation by reference in the preamble to the final Part 70 rule, discussing the requirements of § 70.6, Permit Content, stating:

"Section 70.6(a)(1)(i) requires that the permit reference the authority for each term and condition of the permit. Including in the permit legal citations to provisions of the Act is critical in defining the scope of the permit shield, since the permit shield, if granted, extends to the provisions of the Act included in the permit. Including the legal citations in the permit will also ensure that the permittee, the permitting authority, EPA, and the public all have a common understanding of the applicable requirements included in the permit. This requirement is satisfied by citation to the State regulations or statutes which make up the SIP or implement a delegated program." See 57 Fed. Reg. 32250, 32275 July 21, 1992.

In comments on the proposed final interim approval of the operating permit program, in 1995, the commission (then-TNRCC) proposed to include a standardized permit

provision that incorporate by reference all preconstruction authorizations, both major and minor, to resolve the EPA-identified deficiency of Texas' failure to include minor NSR as an applicable requirement. In the June 25, 1996 Final Interim Approval, EPA directed, "the State must be quite clear in any standardized permit provision that all of its major 'preconstruction authorizations including permits, standard permits, flexible permit, special permits, or special exemptions' are incorporated by reference into the operating permit as if fully set forth therein and therefore enforceable under regulation XII (the Texas Operating Permit Regulation) as well as regulation VI (the Texas preconstruction permit regulation)." (61 Fed. Reg. at 32695) Given this explicit direction in EPA's 1996 final interim approval of the Texas program, TCEQ understood that the standardized permit provision for preconstruction authorizations incorporated all NSR authorizations by reference, including major NSR.

As a result of Texas' initial exclusion of minor NSR as an applicable requirement of the Texas Operating Permit program, and EPA's final interim approval of a program that provided for a phase-in of minor NSR requirements using incorporation by reference, EPA was sued by various environmental groups. See *Public Citizen, Inc. v. U.S. E.P.A.*, 343 F.3d 449 (5th Cir. 2003). The petitioner's brief raised several issues, including the use of incorporation by reference of minor NSR, because the exclusion of minor NSR as an applicable requirement was a program deficiency identified by EPA. The petitioner's brief acknowledges that Texas' Operating Permit program incorporates all preconstruction authorizations by reference, through the use of a table entitled "Preconstruction Authorization References." The Petitioner's brief includes an example of this table, which clearly contains sections for Prevention of Significant Deterioration (PSD), nonattainment (NA), 30 TAC Chapter 116 Permits, Special Permits and Other Authorizations, and Permits by Rule under 30 TAC Chapter 106. See Brief of Petitioners, p. 30. The brief goes on to discuss the sample permit, Permit No. O-00108, which documents "six different minor NSR authorizations and one PSD permit" requiring one to look at each of the underlying permits in addition to the Title V permit. The Department of Justice (DOJ), in its reply brief for EPA, responded to this allegation of improper use of IBR in the context of the specific allegation whether "EPA reasonably determined that Texas corrected the interim deficiency related to minor new source review", answering unequivocally "yes". "Nothing in the statute or regulations prohibits incorporation of applicable requirements by reference. The Title V and Part 70 provisions addressing the content of Title V permits specify what Title V permits 'shall include,' but do not speak to how the enumerated items must be included." See, Brief of Respondents, pp. 25-26. The Court did not distinguish between minor and major NSR when concluding that IBR is permissible under both the CAA and Part 70.

Thus, it is the ED's position that incorporation by reference of both major and minor NSR permits is acceptable and was fully approved by EPA. However, given EPA's differing opinion, as reflected in the Premcor and CITGO orders, this comment, and the June 10, 2010 letter from EPA Region VI regarding this issue, the ED has revised FOP No. O2000 to include, in Appendix B of the permit, a "Major NSR Summary" table, which was initially suggested by EPA as adequate to resolve this issue. Inclusion of the major NSR permits and the "Major NSR Summary" table as an appendix addresses EPA's comment and ensures that the Title V permit is clear and meaningful to all affected parties. EPA has approved this method to resolve IBR of major NSR permits in a letter dated August 22, 2012.

Citations for applicable state and federal regulations, as well as, permit requirements that establish appropriate emission limitations for Exxon Mobil have been properly

incorporated into FOP O2000. TCEQ identifies the citation the Applicant must meet and the Applicant must certify compliance with the requirement. The Applicable Requirements Summary and the Major NSR Summary table include citations that identify the emission limitations, monitoring/testing, recordkeeping and reporting requirements that apply to emission units at the site.

The ED understands the concern that many federal regulations are lengthy and complex. However, for large industrial sites such as the ExxonMobil Beaumont Refinery, there are hundreds of emissions points to which an equal number of state and federal requirements may apply. In an effort to make the operating permits usable to inspectors, some level of referencing by citation to lengthy regulations is necessary. For most requirements listed in the Applicable Requirements Summary (ARS), references are made to the specific section or subsection that applies to a particular unit. When a particular rule has been recently promulgated or changed, the TCEQ cites to the overall rule to ensure compliance while the TCEQ updates internal permitting guidance. This is a short term place holder for the permit until more detailed citations are available. Once available, the specific citations are incorporated into the permit at the next permitting action.

**COMMENT 3:** The draft renewal permit impermissibly incorporates permits by rule. The draft renewal permit impermissibly incorporates numerous permit by rule (PBR) authorizations, the text of which do not appear in the draft renewal or its statement of basis.

Although TCEQ currently allows major sources to authorize emissions through PBRs, EPA has stated that it was approving the use of PBRs only for non-major facilities. See EPA's approval of Texas' general PBR provisions into the SIP. 68 Fed. Reg. 64543, 64544 (Nov. 14, 2003).

EPA guidance provides that facilities with emissions even approaching the major source threshold must authorize emissions through a case-by-case review of an individual permit. Potential to Emit Guidance for Specific Source Categories (April 14, 1998) p. 2. (Case-by-case reviews are "essential for complex sources warranting close scrutiny . . . and sources that limit their emissions to near-major amounts.") Incorporating PBRs in the manner proposed makes the case-by-case review nearly impossible. The Texas Health and Safety Code likewise prohibits the use of PBRs by "major" facilities. Tex. Health & Safety Code § 382.05196(a). These limits are intended to both ensure that federal major NSR requirements are met and to protect the NAAQS. Despite these limits, Texas allows major sources to authorize increases in emissions through PBRs. As a result, sources are allowed to modify their major source NSR permit requirements without complying with federal public participation requirements.

The Clean Air Act requires SIPs to include provisions for regulating the modification and construction of stationary sources as necessary to assure compliance with the NAAQS. 42 U.S.C. §§ 7410(a)(2)(A)-(C). Texas PBRs must, therefore, include provisions to assure such compliance, including provisions making the permits practicably enforceable. EPA, however, has repeatedly notified Texas that its existing PBRs are inconsistent with the approved SIP and EPA policy and do not assure compliance. PBRs cannot be used to authorize emissions from major sources, cannot be used to amend individual permits, must be source specific and must not be incorporated into the proposed renewal draft. If PBRs are incorporated into this Title V permit in the way suggested by the draft permit, air quality will be jeopardized, public participation will be thwarted. Furthermore, this

incorporation conflicts with Texas' statutory law, EPA guidance and EPA action on Texas' and other states' SIPs. Specific problems with the incorporation of PBRs into the Title V permit include the following:

Interference with attainment or maintenance of the NAAQS. In order to assure protection of the NAAQS, Texas' PBR program must include a mechanism for denying PBR authorizations for cause. CAA § 110(a)(2)(c); 40 C.F.R. § 51.160. There must be preauthorization review of applications for coverage under individual PBRs to assure the emissions authorized by PBRs will not contribute to violations of control strategies or interfere with attainment or maintenance. See 71 Fed. Reg. 14439, 14441 (March 22, 2006) ("EPA proposes a conditional approval because this rule, as adopted by the Missouri Air Conservation Commission on June 26, 2003, does not expressly include a mechanism for pre-construction review of [PBR] applications ...") Texas rules include no provision for pre-construction review of PBR applicability claims.

Lack of Adequate Public Participation: Because PBRs do not contain detailed provisions relating to emission limits and compliance (these are often found in the registrations, which are submitted after the close of public comment), the public is not given an adequate opportunity to comment when PBR rules are issued. Further, Texas rules expressly require PBRs to be "incorporated" into a facility's permit when the permit is amended or renewed. 30 Tex. Admin. Code § 16.116(d). Texas "incorporation" procedures do not provide adequate public participation or meet other requirements for permit amendments.

To the extent PBRs are used at a major facility, used to amend an individual permit, or are non source category specific, they violate the Texas SIP, EPA policy, and prior SIP decisions. Among other PBRs, the draft renewal permit incorporates, PBRs 106.261, 106.262, 106.263, and 106.264. These particular PBRs do not include specific emission limits and fail to include adequate monitoring and reporting requirements and compliance timeframes that violate EPA guidance and prior SIP approvals. To assure compliance with the Act, ExxonMobil must obtain valid authorizations, such as permit amendments, for any emissions currently authorized through illegal PBRs. Until it does so, ExxonMobil is in ongoing noncompliance with the Clean Air Act and the Title V permit cannot incorporate illegal PBRs.

In addition, the draft renewal permit incorporates different versions of the same PBR. Is one version more stringent than the other? Do all versions apply at all times? Do different versions apply to different sources? The differences between the versions of the same PBR, as well as the agency's rationale for incorporating seemingly outdated PBR versions in the draft permit should be explained in the Statement of Basis, which is silent on this point. These multiple versions include:

- PBR 106.261 – 2 versions: 09/04/2000 and 11/01/2003
- PBR 106.264 – 2 versions: 03/14/1997 and 09/04/2000
- PBR 106.472 – 2 versions: 03/14/1997 and 09/04/2000
- PBR 106.124 – 3 versions: 03/14/1997, 09/01/1999 and 09/04/2000

Finally, EPA recently notified Texas that it is evaluating the practice of incorporation by reference for emission limits in minor NSR permits.

As to Texas' use of incorporation by reference for emissions limitations in minor NSR permits and Permits by Rule, EPA will be evaluating this practice to

determine how well it is working. Further, as noted above, it is important for TCEQ to ensure that referenced permits are part of the public docket or otherwise readily available, and currently applicable, and that the title V permit is clear and unambiguous as to how the emissions limits apply to particular emissions units. Premcor Order, footnote 3.

Commenters attempted to locate the authorization letters for the PBRs and after looking for a sample of 6, only found 1. These documents are not readily available. These PBRs are not part of the public docket. As noted above, there are questions about whether each of the incorporated PBRs are currently applicable and there is no explanation as to how the emission limits apply to particular emission units. (TCEQ does include a table that matches emission units to permit number. That is helpful and should continue to be included in the permits, but it does not address how each of the emission limits apply. Moreover, only a handful of the PBRs incorporated by reference are listed in this table. See Draft-Renewal starting at p. 751.) TCEQ's current use of incorporation by reference for emission limits in minor NSR permits and PBRs does not satisfy the Part 70 requirements that the draft renewal permit include emission limitations and standards necessary to assure compliance with all applicable requirements. See 40 C.F.R. § 70.6(a)(1).

Commenters located the Authorization Letter and Technical Review for Permit by Rule Registration Number 82611. In the Authorization Letter dated October 21, 2009, TCEQ states that "emissions should be incorporated into Permit Number 49146 at next amendment or renewal." This is problematic because permit 49146 is not mentioned in the SOB or SOP for O-2000 (and it is listed as an active permit on TCEQ's IMS tracking). As discussed in the introduction, it is Commenters understanding that O-2000 will be the only active Title V permit at the facility after final issuance. Since NSR permit 49146 is not referenced in O-2000, Commenters are particularly troubled by the fact that the PBR authorization letter modifying emissions in a permit not incorporated into O-2000 is dated six days after TCEQ authorized publication of renewal notice for permit O-2000.

**RESPONSE 3:** As noted in response number 2, above, Texas' approved program appropriately allows for incorporations by reference. General PBR rules (30 TAC Chapter 106, Subchapter A) are approved as part of the Texas SIP. In addition, Chapter 106, Subchapter A is a defined applicable requirement under Chapter 122 and the EPA-approved Texas operating permit program. Subchapter A includes applicability, requirements for permitting by rule, registration of emissions, recordkeeping and references to standard exemptions and exemptions from permitting. Additionally, PBR authorizations can apply to distinct, insignificant sources of emissions (i.e. engine, production process, etc.) at a Title V site. As such PBRs do not violate the SIP, EPA policy, or prior SIP decisions; nor is incorporation of PBRs into ExxonMobil's operating permit impermissible. All current and historical PBRs and standard exemptions (predecessors to PBRs) are available on the TCEQ website for review.

Historical PBRs are available for review at [http://www.tceq.state.tx.us/permitting/air/permitbyrule/historical\\_rules/oldselist/selection\\_index.html](http://www.tceq.state.tx.us/permitting/air/permitbyrule/historical_rules/oldselist/selection_index.html) and current PBRs are available for review at [http://www.tceq.texas.gov/permitting/air/nav/numerical\\_index.html](http://www.tceq.texas.gov/permitting/air/nav/numerical_index.html).

Title 30 TAC Chapter 106 provides types of authorizations for certain types of facilities or changes within facilities which the Commission has determined will not make a significant contribution of air contaminants to the atmosphere. A PBR is a permit which

is adopted under Chapter 106, and is only available to sources which belong to categories for which the Commission has adopted a PBR in that chapter. A PBR cannot be used to amend an individual NSR permit. TCEQ rule 30 TAC § 116.116(d), which is SIP-approved, sets forth that all changes authorized under Chapter 106 to a permitted facility shall be incorporated into that facility's permit when the permit is amended or renewed. Therefore, PBR incorporation into FOPs is permissible.

The NSR Authorization References table in the draft Title V permit incorporates the requirements of NSR Permits, including PBRs by reference. All "emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of permit issuance" are specified in the PBR incorporated by reference or cited in the draft Title V permit. When the emission limitation or standard is not specified in the referenced PBR, then the emissions authorized under permit by rule from the facility are specified in §106.4(a)(1). Additional requirements for PBRs are found in the Special Terms and Conditions under New Source Review Authorization Requirements. In the ExxonMobil Oil Corporation draft Title V permit, these requirements are found in Special Terms and Conditions 19 and 20, relating to PBRs. The ED does not agree that the emission limitations and standards for PBRs should be listed on the face of the Title V permit, as the EPA has supported the practice of incorporation by reference for the purpose of streamlining the content of the Part 70 permit. See *White Paper for Streamlined Development of Part 70 Permit Applications*, July 10, 1995 and *White Paper 2 for Improved Implementation of the Part 70 Operating Permits Program*.

The EPA has also supported the practice of not listing insignificant emission units for which "generic" requirements apply. See *White Paper 2 for Improved Implementation of the Part 70 Operating Permits Program*. The NSR Authorization References table identifies preconstruction authorizations at the site that are required to be listed in the draft permit. The NSR Authorizations are applicable requirements and incorporated by reference.

The draft Title V permit includes multiple versions of the same PBR because they are separate authorizations for different emission units. An emission unit that was authorized under a specific version of a PBR can continue to be authorized under that version even if the PBR is revised with a new effective date as long as the emission unit is not modified or reconstructed as stated in 30 TAC §106.13. All PBRs listed in the Title V permit are valid authorizations.

Regarding specific problems the commenter describes with PBRs (i.e. public participation, interference with the NAAQS using PBRs to amend facilities), these issues are beyond the scope of this FOP action because they are arguments concerning the PBR authorization and not the FOP authorization.

PBR registration 82611 was consolidated into flexible permit 49138 which was issued on November 24, 2009. In addition to the PBR registration, NSR permit 49146 was also consolidated into flexible permit 49138. Subsequently, both the PBR registration and NSR permit 49146 have been voided. Flexible permit 49138 was available for review during the second public notice review period which extended from October 1, 2010 to October 31, 2010. Flexible permit 49138 has been incorporated into the draft Title V permit in Appendix B.

**COMMENT 4:** The draft renewal impermissibly incorporates and relies on a non-SIP approved flexible permit and fails to assure compliance with federal new source review.

The draft permit relies extensively on the incorporation of permit terms from ExxonMobil's flexible permit No. 49138. Flexible permits are state-only requirements and not appropriate for inclusion in Title V permits. Flexible permits are issued pursuant to 30 TAC Chapter 116, Subchapter G; however, those provisions have not been approved, pursuant to Section 110 of the federal Clean Air Act (CAA), 42 U.S.C. § 7410, as part of the applicable implementation plan for the State of Texas (Texas SIP). The terms of permit no. 49138 are not federally-enforceable.

Moreover, the draft permit and statement of basis are devoid of information to determine whether the terms and conditions of the incorporated flexible permits are in compliance with the applicable requirements of Texas SIP.

Additionally draft permit Special Condition 21 (Renewal-Draft Page 16) states "[t]he permit holder shall comply with the following requirements for flexible permits of 30 TAC Chapter 116...." Because the Chapter 116 flexible permit provisions have not been incorporated into the Texas SIP, Special Condition 21 should be stricken from the draft permit.

EPA has repeatedly notified Texas that the flexible permit rules (and thus permits) must be revised before the rules can be approved into the Texas SIP. In addition, EPA has notified the individual permit holder of flexible permits, such as ExxonMobil, that: EPA maintains that SIP permits issued to a source remain effective until amended, modified, or revoked in accordance with the SIP-approved methods for effecting such permit changes. This means that all SIP permit conditions and terms, including any representations upon which the SIP permit was issued, are not, and have not been, superseded, voided, or replaced by the terms, conditions, or permit application representations associated with a flexible permit. See Attachment B.

Thus, the proposed renewal of ExxonMobil's operating permit cannot incorporate the requirements of permit No. 49138 in lieu of SIP-approved permit terms and conditions. The Clean Air Act requires ExxonMobil to have a federal New Source Review permit. The terms and conditions of such permit, as well as monitoring sufficient to assure compliance with those terms and conditions, must be included in ExxonMobil's Title V permit. If ExxonMobil does not have such a permit, it must obtain one and is in ongoing noncompliance with the Clean Air Act until it does.

Extensive deficiencies with Texas flexible permit program have been outlined by EPA, and are incorporated at Attachment C. Most recently, EPA has explicitly informed Texas through a proposed disapproval of SIP provisions that the flexible permit program does not comply with federal requirements. 74 Fed. Reg. 48480 (September 23, 2009). See Attachment D. In agreement with many of the concerns being raised yet again in this comment letter, EPA explained in the proposed disapproval that the flexible permit program does not comply with federal requirements because:

[i]t fails to include, among other things, adequate accountability provisions, compliance determination procedures, replicable implementation procedures, sufficient monitoring, recordkeeping, and reporting requirements so that issued permits incorporate emission limitations and other requirements of the Texas SIP that ensure protection of the national ambient air quality standards

(NAAQS), and noninterference with the Texas SIP control strategies and reasonable further progress (RFP). 74 Fed. Reg. 48480, 48482 (Sept. 23, 2009).

Commenters have numerous concerns about flexible permit no. 49138. The Administrator's Premcor Order explained that "it is important for TCEQ to ensure that **referenced permits are part of the public docket or otherwise readily available**, and currently applicable, and that the Title V permit is clear and unambiguous as to how the emissions limits apply to particular emissions units. *Premcor Order*, footnote 3 (emphasis added). As detailed below, there are many questions about permit no. 49138. This permit was not included in any kind of public docket related to the Title V permit comment period. Nor, however, were important documents related to this permit readily available.

- Revised flexible permit 49138 was not reviewed in Title V process. According to TCEQ documents, flexible permit no. 49138 was revised on 11/24/09. See Attachment E. The draft renewal permit, however, was released for public comment on 10/15/09 before the flexible permit revision was final.

- The 11/24/09 revisions to flexible permit 49138 are numerous and unclear. Commenters were able to obtain the 11/24/09 version of flexible permit no. 49138 through TCEQ's remote document server. Commenters were unable to identify the associated project number used to identify and track actions related to the permit. As of 12/11/09, TCEQ's IMS shows that the last revision to flexible permit no. 49138 was completed on 6/29/09. Commenters searched the remote document server for the technical review document associated with the 11/24/09 revision but came up empty. Therefore, Commenters were unable to identify what changes occurred with the 11/24/09 revision.

- Flexible Permit 49138 was originally issued in 2006 and only covered flares. TCEQ's IMS tracking shows that flexible permit was first issued on 4/7/06 and a review of the initial flexible permit and associated technical review revealed that the permit covered only flares. See Attachment F. According to this same TCEQ tracking database, there has never been a project that has rolled in additional permits or emission sources. However, the current version of 49138 clearly includes emission sources in addition to the flares. Were these changes made with adequate public participation? It is unlikely given the complete absence of changes to this permit documented in TCEQ's publically available on-line records.

- TCEQ lists multiple active permits for the Beaumont site that are not included in the draft renewal. Although some or all of these permits may be referenced in one of the additional active Title V permits for the Beaumont site, as previously discussed, if Title V permit O-2000 will be the only active Title V permit after final issuance, were these active permits appropriately excluded? The Statement of Basis should address the exclusion of these permits. See Attachment G.

- The aggregation of permits is unclear. Commenters are concerned that ExxonMobil is aggregating both NSR (through the flexible permit) and Title V permits for the Beaumont facility in order to achieve maximum flexibility in establishing a baseline for NOx and VOC emissions. It appears that the aggregation of both NSR and Title V permits are an attempt to achieve emission reductions in paper only in order to avoid fines. If this is correct, such a clear attempt to circumvent the Act should not be permitted.

**RESPONSE 4:** As a preliminary matter, the ED believes that resolution of EPA concerns regarding flexible permits is a common objective for both TCEQ and the EPA. The concerns discussed below regarding the use of the Title V permitting process to challenge independent flexible permits on a case-by-case basis does not diminish the importance of reaching an expeditious resolution to the NSR flexible permit issue. The ED recognizes the flexible permit rules, located in 30 TAC Chapter 116, Subchapter G, and submitted to EPA in 1994, have not been approved into the Texas SIP. However, the Texas federal operating permit (FOP) program is EPA-approved. TCEQ reviews applications and issues FOPs according to EPA-approved program rules found in 30 Texas Administrative Code (TAC), Chapter 122. The Texas Operating Permit Program was granted full approval on December 6, 2001 (66 FR 63318), and subsequent rule changes were approved on March 30, 2005 (70 FR 161634). The application procedures, found in 30 TAC § 122.132(a) require an applicant to provide any information required by the ED to determine applicability of, or to codify any “applicable requirement.” In order for the ED to issue an FOP, the permit must contain all applicable requirements for each emission unit (30 TAC § 122.142). “Applicable requirement” is specifically defined in 30 TAC § 122.10(2)(h) to include all requirements of 30 TAC Chapter 116 and any term and condition of any preconstruction permit. As a Chapter 116 preconstruction authorization, flexible permits are applicable requirements, and shall be included in applications and Texas issued FOPs, in compliance with Texas’s approved program. According to the EPA review procedures of Chapter 122, EPA may only object to issuance of any proposed permit which is not in compliance with the applicable requirements or requirements of this chapter. Therefore, this objection is not valid under the program EPA has approved in Texas because the applicant provided information as to the applicable Chapter 116 requirements, including flexible permits, and the ED has included these requirements in the draft FOP. EPA objections to individual permits issued under an EPA approved operating permit program are not appropriate for concerns that relate to programmatic elements.

The ED also disagrees that additional information must be provided by the applicant showing how the emissions authorized by the flexible permit meet the air permitting requirements of the federally approved provisions of the Texas SIP. The flexible permit application, technical review, and flexible permit documentation demonstrates that the emissions authorized by the flexible permits meet the air permitting requirements of the federally approved provisions of the SIP regarding requirements for impacts review, emission measurement, BACT, NSPS, NESHAP, MACT, performance demonstration, modeling or ambient monitoring if required, MECT applicability, and nonattainment or PSD permitting if applicable. Texas submitted the initial flexible permit rule for EPA review and action in 1994. EPA did not act on the submission until July, 2010, when EPA disapproved the rules. EPA’s delay in acting on the flexible permit rules, the approval of the state’s federal operating permit program and confusion regarding whether the approved federal operating permit program provided federal enforceability for flexible permits, resulted in a very long period of detrimental reliance on this permit mechanism by regulated entities and TCEQ. The TCEQ challenged this disapproval in the 5<sup>th</sup> Circuit Court of Appeals. On August 13, 2012, the court vacated EPA’s disapproval of Texas’ flexible permit rules and remanded the EPA for further consideration. EPA did not request further appeal this decision, and the TCEQ is awaiting further action by EPA to re-review the rule submittals whose disapproval was vacated.

Notwithstanding the fact that the flexible permit rules in 30 TAC Chapter 116, Subchapter G, have not yet been SIP approved, the flexible permit review requirements are parallel to the SIP approved 30 TAC Chapter 116, Subchapter B permit review and no substantive differences in significant permit elements exist. Indeed, the technical review of the flexible permit No. 49138 application provides information regarding how Subchapter B requirements in § 116.111 are met, including: compliance with the SIP approved Subchapter B rules and review requirements, unit-specific limits based on BACT review at the time of the permit issuance, demonstrations that each emission unit and the facility covered by Permit No. 49138 meets all applicable NSPS, NESHAP requirements, and air dispersion modeling conducted by applicant. Additionally, the ED does not agree that it is appropriate, necessary or legally required under either 40 CFR Part 70 or the EPA approved federal operating permit program in Texas to require a condition in the operating permit to require a source to prepare and submit a written analysis of any future change/modification to ensure that minor and/or major NSR requirements under the SIP have not been triggered. The federally approved SIP already requires this analysis as part of any future NSR review. See 30 TAC Chapter 116, Subchapter B, Divisions 5 and 6. Minor NSR applicability requirements are adequately specified in the permit and commission rules governing NSR permits; thus, the applicant is currently subject to the requirements to demonstrate, upon any future change, when minor or major NSR requirements will apply.

Flexible permit 49138 does not only address emissions from flares. The specific initial issuance action the commenter refers to that occurred in 2006 only addressed flare emission recalculations as flares were the only sources included in the permit at that time. Flexible permit 49138 was amended on November 24, 2009 (NSR IMS project 126733) to incorporate all existing PBRs, standard permits, and other NSR permits that existed at that time for all emission units at the site.

Finally, the flexible permit terms and conditions are not appropriate to be identified as state-only in the FOP. The EPA approved definition of a “state-only requirement” in 30 TAC § 122.10(28) is “any requirement governing the emission of air pollutants from stationary sources that may be codified in the permit at the discretion of the ED. State-only requirements shall not include any requirement required under the Federal Clean Air Act or under any applicable requirement.” Therefore, the EPA approved program provides the ED with discretion to determine which requirements must be identified as “state-only” and explicitly prohibits anything defined as an “applicable requirement” from being “state-only.” Since flexible permits issued in 30 TAC Chapter 116 are “applicable requirements,” they may not be included as “state-only” requirements. Instead, they are applicable requirements which are subject to public notice, affected state review, notice and comment hearings, EPA review, public petition, recordkeeping requirements, compliance demonstration and certification requirements, and appropriate periodic or compliance assurance monitoring requirements. “State-only” requirements are specifically not required to meet requirements that are specific to 40 CFR Part 70. See 122.143(18). As stated previously, the flexible permit terms and conditions comply with SIP approved permit rules and assure compliance with future applicable NSR requirements. Again, with regard to flexible permits, the TCEQ will continue its dialogue with EPA to achieve the mutual goal of NSR permits issued under SIP approved rules.

ExxonMobil agreed to submit a deflex application to convert flexible permit 49138 to a permit issued under the SIP approved procedures of 30 TAC Chapter 116, Subchapter B as part of a supplement to their annual compliance certification that was submitted to

the TCEQ Beaumont Region Office and EPA Region 6 on March 25, 2011. TCEQ received a deflex application from ExxonMobil Oil Corporation on February 28, 2012 for flexible permit 49138. This permit application is currently under review. This conversion does not affect the current renewal of FOP O2000.

The commenters concerns on the timing issues of the first public notice were addressed by requiring a second public notice comment period for the Title V permit which extended from October 1, 2010 to October 31, 2010. All permit applications were made available during this second public notice comment period to allow opportunity for the public to review and comment on flexible permit 49138.

As mentioned above, the Title V renewal is incorporating 18 separate Title V permits into a single Title V permit for the site and this fact is stated in the revised Statement of Basis. This process is allowed under 30 TAC § 122.243(e) which states, "At the discretion of the executive director, during permit renewal, any permits at a site may be combined into a single permit which satisfies the requirements of this section." Additionally, NSR permit 49138 incorporated numerous NSR permits that previously existed at the site. The ED is not aware of any evidence that ExxonMobil aggregated these permits to set a baseline for NOx and VOC emissions or in an attempt to achieve emission reductions on paper to avoid fines.

**COMMENT 5:** Title V permits must include monitoring sufficient to assure compliance.

As the TCEQ is aware, Title V permits must include monitoring requirements sufficient to assure compliance with applicable emission limits and standards. On August 19, 2008, the D.C. Circuit Court of Appeals vacated an EPA rule that would have prohibited TCEQ and other state and local authorities from adding monitoring provisions to Title V permits if needed to "assure compliance." *Sierra Club, et al., v. EPA*, 536 F.3d 673 (D.C. Cir. 2008). The Court emphasized the statutory duty to include adequate monitoring in Title V permits:

Title V is a complex statute with a clear objective: it enlists EPA and state and local environmental authorities in a common effort to create a permit program for most stationary sources of air pollution. Fundamental to this scheme is the mandate that "[e]ach permit... shall set forth ...monitoring....requirements to assure compliance with the permit terms and conditions." 42 U.S.C. § 7661c(c). By its terms, this mandate means that a monitoring requirements insufficient "to assure compliance" with emission limits has no place in a permit unless it is supplemented by more rigorous standards." *Id.* at 677. In addition, the Court acknowledged that the mere existence of periodic monitoring requirements may not be sufficient. *Id.* at 676-677.

Has TCEQ conducted a review of the monitoring provisions of the multiple permits that are incorporated by reference into the renewal draft permit? How can TCEQ conduct a review of the monitoring provisions for the renewal draft permit to ensure that it complies with the court ruling and recent orders from the Administrator, if the main permit incorporated by reference (flexible permit 49138) was revised just after the draft renewal of O-2000 was released for public comment? Commenters are concerned that flexible permit 49138, in particular, does not include adequate monitoring. TCEQ should review and implement the Title V monitoring provisions to ensure that each provision is in compliance with the CAA and the Court's recent opinion. Wherever possible, the permit should require continuous emission monitoring that clearly measures compliance based on the averaging period in the underlying standard. For example, compliance with

an emission limit that has to be met on a daily basis should be measured every day, not once a year. Where continuous monitoring is not available, the permit should require alternative methods that more closely match monitoring frequency to the averaging time for compliance.

Commenters offer the following specific comments on monitoring deficiencies related to flexible permit no. 49138. Monitoring in the Title V permit or the underlying flexible permit 49138 is not sufficient to assure compliance in the following circumstances.

**FLARES:** There are significant monitoring deficiencies with regard to flares. The draft permit lists 10 flares in the refinery (EPN 6OFLR\_xxx) where xxx is 001 through 010. Included in these 10 flares is the marine flare (6OFLR\_009). Discussion pertinent to the 9 nonmarine flares is provided in the Special Conditions document on page 3 and in Condition 15, Condition 72, and Condition 76 C-E. In addition, Condition 88D discusses Temporary Flare Systems but it is not clear if these are in addition to the 6OFLR\_001 through 6OFLR\_010. Three (3) significant deficiencies are discussed below.

First, the Statement of Basis does not properly quantify emissions from the flares. No attempt is made to use historical data on flare flow rates, frequency of flaring, likely cause of flaring events and their durations, and similar data to estimate and project emissions from any of these flares. It is widely known and acknowledged that emissions from refinery flaring are significant. Data collected from refinery flaring in Southern California and in the Bay Area confirm this.

Second, the draft permit does not contain appropriate conditions that can ensure proper monitoring of the flares. While requiring that a pilot flame be present and that flare gas flow rates and concentrations (of SO<sub>2</sub>, for example) be monitored are appropriate, these are indirect measurements and limited to SO<sub>2</sub> emissions. For all other emissions such as CO, VOC, NO<sub>x</sub>, HAPs, etc. monitoring proposed is either non-existent (i.e., for NO<sub>x</sub>, CO) or unsupported (for VOC/HAP). For the latter, the requirement to use a specified (98% of 99%) destruction efficiency of the incoming VOC or HAP compounds is unsupported. Even adherence to the design and operational guidelines in 40 C.F.R. § 60.18 does not ensure that these high destruction efficiencies will be attained. Fundamentally, open-flame flares do not maintain (and cannot maintain) adequate combustion conditions (i.e., minimum temperature, minimum residence time at the proposed temperature) to guarantee a given destruction efficiency. Thus, direct monitoring or verification of these control efficiencies or emissions should be required. The permit does not contain any such conditions. For example, long path measurements using LIDAR or DIAL should be considered, at least for the larger flares in order to support or supplement assumptions currently made in the draft permit.

Third, the draft permit contains no conditions that will ensure that flaring events and emissions can be minimized. As such, requiring a proper Flare Minimization Plan, such as those required by the Bay Area AQMD and the South Coast AQMD, will ensure that flaring emissions are analyzed from a root-cause perspective and that steps are taken to minimize such emissions over time. The focus of such Plans should be to avoid or minimize to the greatest extent possible, any flaring at all. Approaches such as increasing capacitance in the refinery fuel gas system, routing all of the relief gases to the fuel gas system, improving the reliability of the various compressors etc., in the fuel gas system should be considered. In addition, proper turn-around planning with a constraint to minimize flaring should also be standard operating practice. And, aspects of equipment

design and operation, including use of preventive maintenance techniques to minimize malfunctions and resultant additional flaring should also be the focus of such conditions.

In summary, the current conditions on all of the flares do nothing to provide any basis for the current and future emissions – these are significant deficiencies.

### **NOx Sources and CEMS**

Although the proposed permit requires continuous monitoring of pollutants such as NOx from several emissions sources/stacks as listed in Table 4 of the Draft permit (Special Condition 61), the SOB does not provide an explanation for why numerous other sources are not required to use continuous emissions monitors (CEMS). CEMS for NOx and other pollutants such as SO<sub>2</sub> are widely available. For example, in the SCAQMD, as part of the emissions trading program RECLAIM, NOx and SO<sub>2</sub> sources that can emit 4 tons per year or greater NOx or SO<sub>2</sub> are required to use CEMS. There is no question that NOx and SO<sub>2</sub> CEMS are technically feasible for even the smallest sources. The table below, extracted from the proposed MAERT for the Beaumont refinery shows the various NOx sources, excluding flares. The lines highlighted in green are proposed to use NOx CEMS. The lines highlighted in yellow have annual emissions at less than 4 tons/year. All of the non-highlighted lines have annual emissions greater than 4 tons/year and could use CEMS to monitor and report emissions. The SOB should provide a clear explanation as to why these sources are not required to use CEMS. For instance, some of the excluded sources are greater emitters than those that are required to use CEMS. Examples include: 05STK-002, 05STK-004, 16STK-001, 28STK-001, 57STK-033 and 57STK-034.

**PM<sub>2.5</sub>:** The draft renewal fails to include any applicable standards or limitations or justification for failure to do so.

Neither the draft renewal nor flexible permit 49138 recognize PM<sub>2.5</sub> as a regulated pollutant. As such, the MAERT table does not quantify the PM<sub>2.5</sub> emissions limits for any of the sources. Attachment E does not include any consideration of PM<sub>2.5</sub> as a pollutant for any of the sources. And, no monitoring for PM<sub>2.5</sub> is required. There is no reason to exclude all aspects of PM<sub>2.5</sub> from the proposed permit.

Specifically, the permit should include and reference the proposed EPA methods for monitoring filterable and condensable PM<sub>2.5</sub>, as applicable, for each source. These include Methods 201A and 202 as well as Other Test Methods 27 and 28.

### **Additional Comments Regarding Flexible Permit No. 49138**

- The phrase “good air pollution control practices” appears in numerous locations in the proposed Special Conditions. However, it is not defined and therefore not enforceable. In each instance that this phrase appears, the condition should be reworded in a manner that makes the condition enforceable.

*Condition 2. “Non-fugitive emissions from relief valves, safety valves, or rupture discs of gases containing volatile organic compounds (VOC) at a concentration of greater than 1 percent are not authorized by this permit unless authorized on the maximum allowable emission rates table. Any releases directly to atmosphere from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration greater than 1 weight percent are not consistent with good practice for minimizing emissions.”*

- The reference to 1% in the above condition is equivalent to a level of 10,000 ppm. It is not clear why non-fugitive emissions from the sources above should be allowed at such high levels. The SOB contains no technical justification for this choice.

*Condition 5. “For purposes of assuring compliance with the emission limitations found in the “Emission Sources - Maximum Allowable Emission Rates,” the holder of this flexible permit will maintain an emissions record to demonstrate compliance with the hourly and annual emission caps.....Emissions calculations for verifying compliance with the emission caps shall be performed at least once every month to demonstrate compliance with the annual rolling average requirement.”*

- Although the condition above notes that Exxon has to demonstrate compliance with the hourly and annual emission caps, none of the conditions show how the demonstration of the hourly cap limit will be met. The hourly cap limit appears to be unenforceable.

*Condition 6. “Emissions of nitrogen oxides (NO<sub>x</sub>), CO, sulfur dioxide (SO<sub>2</sub>), particulate matter (PM), and VOC from combustion sources associated with this permit shall be determined in accordance with the following methods. The CEMS data shall be used if available. The most recent validated test emissions factors shall be used if CEMS data are not available....”*

- The reference to the “most recent validated test emission factors” is vague and unenforceable. Several questions arise. Who does the validation of the test data? What is the meaning of “most recent”? Does it mean just the last test conducted for that source? Or does it mean one or more of several tests going back in time. This condition should be reworded and clarified.

*Condition 6. SO<sub>2</sub> Emissions “...SO<sub>2</sub> emissions from other combustion sources shall be calculated based on operating data and the measured hydrogen sulfide (H<sub>2</sub>S) concentration in the fuel gas.”*

- Why are SO<sub>2</sub> emissions calculations restricted to only H<sub>2</sub>S concentrations? Adequate monitoring should require SO<sub>2</sub> calculations using total sulfur compound concentrations in the fuel gas.

*Condition 15E. “The Marine Flare (EPN 60FLR\_009) shall be equipped with a stack temperature controller that will regulate the amount of assist gas and the combustion air. The stack temperature controller shall be set at a minimum of 1300°F to ensure complete combustion and smokeless operation. The permit holder shall monitor the temperature on an hourly average basis.”*

- What is the technical basis for the minimum 1300 F temperature, which is supposed to assure “complete combustion” – i.e., 100% destruction efficiency?

*Condition 20. “The FCCU Regenerator Scrubber liquid to gas ratio shall be continuously monitored and be maintained greater than the minimum one hour average value observed in the last satisfactory stack test performed in accordance with TCEQ sampling guidance....”*

- The meaning of “...last satisfactory test” is unclear. The condition vague and unenforceable and should be clarified.

*Condition 30. “.....All coke handled at this facility shall be handled wet....”*

- The condition is vague. A minimum moisture content should be specified to make this condition enforceable.

*Condition 32. “All outbound conveyors used for coke transfer shall be located below grade or shall be covered. Conveyor drop points shall be totally enclosed. Coke loading into marine vessels shall be done inside the cargo hold below deck. The conveyor covers are considered abatement equipment and shall be kept in good repair...”*

- Since the conveyor covers are considered to be abatement devices, monitoring adequate to assure compliance should require that the conveyor covers are totally or completely covered.

*Condition 46. Filters and Chillers in VOC Service on Ketone 2 Unit*

*A. Immediately, but no later than four hours after the monthly material balance indicates that the project VOC emissions are above the annual emission limit, plant personnel shall take the following actions:*

- The reference to “project VOC” emissions is unclear and must be clarified in order to assure compliance.

*Special Condition Attachment A – Inherently Low Emitting Activities*

• The following activities are listed as inherently low emitting without justification or basis:

- (i) management of sludge from pits, ponds, sumps, and water conveyances
- (ii) cleaning

While, in specific instances, these activities may be low emitting, there is no basis to exclude all such activities as being low emitting, without reference to the emissions level or process conditions associated with such activities. Such information must be added in order to assure compliance with the emission limitations.

*Special Condition Attachment B – Routine Maintenance Activities*

- This attachment provides a blanket classification for 5 activities as routine maintenance. This is incorrect and improper. There is no reference to like-kind replacement. As such any of these activities can result in capacity increases and debottlenecking of upstream units or processes, which can trigger NSR. The entire attachment should be removed.

*Special Condition Attachment C – MSS Activities Summary*

- There is no basis provided for why the following activities should “vent to atmosphere.” This is not only a deficiency in the SOB for O-2000, but specific conditions should be placed on the conditions under which this venting can occur

in order for the permit to assure compliance with the emission standards and limitations.

- (i) process unit purge/degas/drain for “all process units”
- (ii) preparation for facility/component repair/replacement for “all process units”
- (iii) recovery from facility/component repair/replacement for “all process units”

#### Special Condition Attachment D – Facility List

- It is improper to classify MSS emissions separate from normal emissions. EPA has long established that MSS are part of normal operations for any facility, subject to narrow exceptions.

Moreover, the table appears to be incomplete. For example, several pollutants are not noted from specific sources. Examples include:

(NO<sub>x</sub> from 04STK\_001 through \_004, 36STK\_002, 36\_STK\_004, etc. Please note that there are numerous other sources that are described as heaters that do not appear to have normal NO<sub>x</sub> emissions.

Until this table has been subjected to proper QA/QC, the draft renewal O-2000, should not be finalized. Any revisions to this table should be included in a re-notice for public comments on draft O-2000.

**RESPONSE 5:** The ED has determined that the monitoring required by this permit demonstrates compliance for the applicable state and federal requirements. Consistent with 30 TAC Chapter 122, FOP O2000 includes monitoring sufficient to yield reliable data from the relevant time period that is representative of compliance with the permit; and monitoring sufficient to assure compliance with the terms and conditions of the permit. For those requirements that did not include monitoring, or where the monitoring was not sufficient to assure compliance, FOP O2000 includes such monitoring for the emission units affected. Additional periodic monitoring was identified for emission units after a review of applicable requirements determined that additional monitoring was required to assure compliance. This review was conducted during the technical review for this application and was available for review by the public. The Additional Monitoring appears in the Additional Monitoring attachment of the Title V permit. Each applicable requirement is reviewed to determine whether monitoring, recordkeeping, reporting, and testing (MRRT) are sufficient to assure compliance with that standard or requirement. Applicable requirements undergo this review when the requirement changes to ensure consistent application of MRRT sufficient to assure compliance for all permits that contain the applicable requirement. In the case where additional monitoring has been determined necessary, this monitoring is included in the Additional Monitoring Summary attachment of the permit and the rationale for such monitoring is included in the Statement of Basis document. The ED disagrees that continuous emission monitoring should be a default requirement, as suggested by the commenters. However, when CEMS monitoring is not required, the commission does require alternative methods that match monitoring frequency with the corresponding compliance averaging times.

As required in the General Terms and Conditions, ExxonMobil Oil Corporation maintains a copy of the permit along with records containing the information and data (gathered through monitoring) sufficient to demonstrate compliance with the permit, including production records and operating hours. During the review for the underlying NSR permit, the Maximum Allowable Emission Rate Limits were calculated, as appropriate, using the maximum firing rate, the heating value of the fuel (the value is obtained from engineering tables), an emission factor taken from AP-42, Chapter 1, or provided by the vendor. The monitored fuel flow rate, with the heating value of the fuel and the factor that was used to calculate the maximum allowable emission rate, is used to calculate the actual emission rate to demonstrate compliance, unless a continuous emissions monitoring system (CEMS) is utilized.

Texas Health and Safety Code (THSC) § 382.016 authorizes the TCEQ to prescribe reasonable requirements for measuring and monitoring the emissions of air contaminants from a source. Similarly, 30 TAC § 116.111(a)(2)(B) states that, “the proposed facility will have provisions for measuring the emission of significant air contaminants as determined by the Executive Director. This may include the installation of sampling ports on exhaust stacks ...” It is clear that the state rules do not require CEMS for every type of air pollutant compound emitted.

FOP O2000 includes sufficient monitoring in the terms and conditions and in the Additional Monitoring Summary attachment of the Title V permit for those requirements in the Applicable Requirement Summary that require additional monitoring to satisfy the periodic monitoring requirement of 30 TAC Chapter 122. This permit demonstrates compliance to the applicable state and federal requirements, and specific monitoring issues are discussed further below and in the statement of basis.

The ED provides the following responses to comments on Flexible permit 49138:

**Flares:** The ED does not agree that additional flare monitoring is necessary to assure compliance. Flares are safety mechanisms, which must be sized and designed to manage the facility’s worst case operating scenario (which presents the most challenging scenario for operation) without visible emissions that exceed the specified opacity requirements. Steam-assisted flares (like the ones at this site) in particular have an even lower probability of visible emissions when operated correctly. The ExxonMobil flares are steam-assisted and are sized to manage worst-case operating scenarios. The flare has already demonstrated that it can operate with no visible emissions during the performance demonstrations as required under 40 CFR § 60.18.

There is no currently-available, EPA-approved mechanism for testing or monitoring emissions from an operating flare. Instead, once a flare has satisfied the performance demonstration requirements under 40 CFR § 60.18, federal law requires that the presence of a pilot flame be continuously monitored to document that a flame is present at all times. See 40 CFR § 60.18(f)(2). NSR Permit No. 49138, which is included in the FOP Permit No. O2000 under Appendix B, requires continuous monitoring of the presence of a pilot flame. See NSR Permit 49138, Special Condition 15. Therefore, the federal operating permit already requires continuous monitoring necessary to assure compliance.

TCEQ is not aware of any facts that would compel additional monitoring beyond that which has been consistently required under federal law and in Texas permits over the past several decades, especially in the absence of any EPA- or TCEQ-approved methods

for monitoring flare emissions. The flares are designed to be utilized to manage emissions from upsets of process equipment. Further, emissions from upsets must be recorded and reported, and are subject to corrective action and enforcement pursuant to TCEQ rules set forth under 30 TAC Chapter 101, including requirements for minimizing emissions. The performance demonstrations, continuous pilot flame monitoring, and quarterly visible emissions monitoring is sufficient to yield reliable data to assure compliance with the terms and conditions of the permit regarding visible emissions from flares during normal operations.

Due to the federal flare requirements of 40 CFR § 60.18, the ED does not require LIDAR or DIAL monitoring for certifying flare destruction efficiencies. Therefore, the Statement of Basis does not attempt to quantify emissions from flares using historical data nor does it address a flare minimization plan as this is not a requirement of NSR permit 49138.

**NO<sub>x</sub> sources and CEMS:** Table 4 in the Special Conditions of flexible permit 49138 identifies all emission sources that have continuous monitoring systems for specific pollutants. ExxonMobil is required to keep records of fuel consumption, emissions calculations using AP-42 or other emissions factors, and records of stack testing that provide an adequate assurance of compliance with emission limitations for sources that are not equipped with a CEMS. Using fuel consumption data and emission factors, ExxonMobil can assure compliance with permit allowables by multiplying the emission factor with fuel consumption rate that will yield the emission rate in tons per year (or pounds per hour) to compare to the maximum permitted allowables (MAERT) in NSR permit 49138.

CEMS are required for large combustion sources (historically >100 MMBtu/hr) which are considered to be pieces of process equipment subject to variability in operation. Smaller combustion sources (< 100 MMBtu/hr) are generally support equipment which operate at steady rates to supply predictable amounts of heat and/or steam. For smaller combustion sources it is technically feasible and economically practicable to use a combination of fuel monitors, BTU analyzers and stack sampling results to calculate emissions. Emissions and operation of the smaller process heaters and boilers will remain consistent unless the fuel type or firing rate is changed requiring a new stack test to determine the NO<sub>x</sub> factor.

**PM<sub>2.5</sub>:** Flexible permit 49138 contains PM<sub>2.5</sub> emission limits in the MAERT table and is incorporated in Appendix B of proposed permit O2000. ExxonMobil is required to keep records to demonstrate compliance with the PM emission limits in the flexible permit which include emissions calculations using validated test emission factors or other data as stated in Special Condition 6 of NSR permit 49138. The PM emission monitoring method for each emission source is identified in Table 6 of NSR Flexible Permit 49138.

**Additional Comments on permit 49138:** The phrase “good air pollution control practices” is a common phrase currently used in many federal air regulations. It does not require a literal dictionary definition. The commission can enforce this phrase based on what is generally accepted in the regulated industry. Generally, this phrase means that the permit holder should maintain emission units and control devices in accordance with manufacturer’s recommendations, accepted engineering practice, or other written procedures to ensure the proper operation of such devices in order to minimize air emissions due to poor maintenance.

Condition 2: The ED does not agree that 1% weight percent is a high level for non-fugitive emissions from relief valves, safety valves, or rupture disks. The 10,000 ppm limit is what many federal regulations such as 40 CFR Part 60, Subpart VV and 40 CFR Part 63, Subpart H define as a detectable leak from relief valves and rupture disks.

Condition 5: The ED does not agree that the hourly cap limit rate is unenforceable. The condition requires that the permit holder maintain an emission record of emission calculations to demonstrate compliance with the hourly and annual cap limits listed in the MAERT table. The emissions record consists of calculations using CEMS data and flowrates for those units equipped with a CEMS and calculations using emission factors and fuel usage/feed rates for emission units not equipped with a CEMS. The method of calculating the emission rates is listed in Special Condition 6.

Condition 6: The ED does not agree that the phrase “most recent validated test emissions factors” is unenforceable or vague in nature, due to the plain language, which indicates the most recent in time ExxonMobil is responsible for providing the validation records and any stack testing data as requested by the permitting authority.

SO<sub>2</sub> emissions from other combustion devices are calculated from measured H<sub>2</sub>S concentration in the fuel gas because they do not have SO<sub>2</sub> CEMS monitors installed. A conservative assumption is made in the conversion of H<sub>2</sub>S to SO<sub>2</sub> emissions for estimating SO<sub>2</sub> emissions from these combustion sources. These conservative assumptions for estimating SO<sub>2</sub> emissions are therefore adequate to assure compliance. Typically a one mole of H<sub>2</sub>S converted to one mole of SO<sub>2</sub> is used for worst case scenarios, i.e. 100% of the H<sub>2</sub>S is converted to SO<sub>2</sub>.

Condition 15E: The marine flare was designed and built to meet the requirements of both 40 CFR 63, Subpart Y and U.S. Coast Guard Regulations (33 CFR 154). The marine flare is equipped with a Dock Safety Unit (DSU), which protects marine vessels from fire or explosion. Vapors from the vessel are rendered non-explosive by the addition of enrichment gas (natural gas/methane) through a sparger located downstream of the detonator arrestor. Each DSU is equipped with dual oxygen analyzers to ensure that the oxygen concentration in stream stays low enough to keep the vapor stream out of the explosive range. An automatic shutdown of the loading operation will occur if the oxygen concentration in the stream reaches the explosive stage.

The enriched vapor flows to the knockout/blower skid. All field vapor piping is heat traced or slopped and equipped with low point condensate collection devices. After the vapors reach the knockout/blower skid, the vapors go through a knockout to eliminate any additional condensate. The vapor is then accelerated through a centrifugal vapor blower to a liquid seal skid and a detonation arrestor before entering the vapor combustion device header. The vapor combustion device contains three anti-flashback burner stages, which are connected to the vapor header. Each burner stage is equipped with an assist air blower that provides combustion air and mixing of the hydrocarbon vapors. Stack temperature control is ensured by the use of two quench air louvers located at the base of the stack, and an assist gas train which adds assist gas to the waste vapors if necessary. There are analyzers throughout the system that monitor the vapor combustion system. Should any of the analyzers go above the alarmed set points, the loading operation is automatically shutdown.

ExxonMobil represented in a previous NSR permit action that 1300 degrees Fahrenheit is the minimum combustion temperature such that sufficient assist gas is provided for

sufficient heating values (i.e. Btu content) to burn efficiently. The temperature is measured with a stack temperature controller that regulates the assist gas and the quench air louvers which provide quench and combustion air. The stack temperature controller is set at a temperature that ensures complete combustion and smokeless operation.

Condition 20: The ED does not agree that "... last satisfactory test" is vague or unenforceable. The permit holder is responsible for maintaining the performance test records for the scrubber that show the specific liquid to gas ratio maintained during either the initial performance test or subsequent performance test that demonstrated compliance with the emission limits for the FCCU. An unsatisfactory test would indicate that the liquid to gas ratios represented did not correlate to an emission rate that would demonstrate compliance with the permitted allowables.

Condition 30: The ED does not agree that "... All coke handled at this facility shall be handled wet ..." is vague or unenforceable. A minimum moisture content is not specified in this condition because the relative humidity of the air will vary the moisture content of the coke pile on any given day and a minimum value cannot be established as windy days may require the coke pile to have a higher moisture content than on a calm day to prevent visible emissions from occurring. As stated in Special Condition 30, "If this condition is violated, further controls shall be installed and/or implemented as required to eliminate such visible emissions." This is a standard requirement to minimize visible emissions from coke piles as well as to prevent fire hazards and is further enhanced by Special Condition 33 that states, "The coke stockpile area shall be watered, treated with dust-suppressant chemicals, oiled, or paved and cleaned, as necessary, to insure that there are no visible emissions. A retaining wall shall be maintained around this area."

Condition 32: All Special Conditions of flexible permit 49138 are applicable requirements under 30 TAC Chapter 122. The permit holder is responsible for maintaining records that the conveyor covers are kept in good repair. These records should be kept as part of the operation and maintenance plan that ExxonMobil maintains for the site. While this condition may not explicitly state that records are required to be kept, the general recordkeeping requirement of 30 TAC § 122.144 and compliance certification requirements of 30 TAC § 122.146 apply and therefore require ExxonMobil to keep records in order to certify compliance with each applicable requirement.

Furthermore, NSR permit 49138 requires that ExxonMobil keep records containing information sufficient to demonstrate compliance with the permit. This includes keeping records that the conveyor covers are kept in good repair. Recordkeeping can serve in place of monitoring requirements to provide assurance of compliance.

Condition 46: The ED disagrees that "project VOC" emissions are unclear or requires any further enhancement to make this condition enforceable. The emissions from the filters and chillers in VOC service on the Ketone 2 Unit (EPN 42CAF\_001) are included under the VOC flexible emissions cap at described in Attachment D to permit 49138 and the MAERT table. Any emission increase as a result of an activity will be considered a "project VOC" increase.

Special Condition Attachment A: This table is provided for informational purposes. An engineering analysis of these activities has demonstrated them to be low emitting activities. To assure compliance, Special Condition 78 states, "Attachment A identifies

inherently low emitting MSS activities that may be performed at the refinery. Emissions from activities identified in Attachment A shall be considered to be equal to the potential to emit represented in the permit application. The estimated emissions from the activities listed in Attachment A must be revalidated annually. This revalidation shall consist of the estimated emissions for each type of activity and the basis for that emission estimate.”

Special Condition Attachment B: The commenter did not provide adequate information for the ED to assess why these activities are incorrect or improper. The ED does not agree that this attachment should be removed. Special Condition 78 states, “Routine maintenance activities, as identified in Attachment B, may be tracked through the work orders or equivalent. Emissions from activities identified in Attachment B shall be calculated using the number of work orders or equivalent that month and the emissions associated with that activity identified in the permit application.”

Special Condition Attachment C: The conditions under which certain activities are permitted to vent to the atmosphere are listed in the MSS Special Conditions 77-92 of permit 49138. The ED does not agree that the basis for these MSS conditions be reiterated in the Statement of Basis document. The Statement of Basis includes a discussion on NSR authorizations and how to request copies of them from the TCEQ file room. A phone number is also provided to contact APD in order to provide assistance such as accessing the NSR permits from the remote document server. The technical review of each NSR authorization, including discussions of MSS activities, is also accessible on the remote document server.

Special Condition Attachment D: The ED does not agree that it is improper to classify MSS emissions separately from normal emissions and there is no requirement in 30 TAC Chapter 116 preventing such classification. The ED does not agree that the table is incomplete, and the commenter has not provided adequate information for the ED to evaluate this claim. The basis for the MSS emissions can be found in the NSR amendment application and technical review for NSR permit 49138 that was issued on November 24, 2009.

Based on the above explanations regarding the NSR permit 49138 Special Condition Attachments A-D, the ED categorically denies that the tables did not go through an appropriate review and sees no reason to hold up the issuance of Title V permit O2000.

**COMMENT 6:** The draft renewal permit fails to require adequate compliance certification.

Article 6 of Senate Bill 12, passed by the Texas legislature in 2007, limits TCEQ’s ability to take formal enforcement action for violations “based on information it receives as required by Title V of the federal Clean Air Act ... from a person, as defined in Section 382.003, Health and Safety Code.” TCEQ amended its enforcement guidance in June 2007 to implement this statute and apply this limit on formal enforcement action to any deviations reported pursuant to Title V. See, Attachment H.

Pursuant to the above legislation and TCEQ’s revised guidance, TCEQ is only allowed to take formal enforcement action for: (1) violations that require initiation of formal enforcement action (i.e. Category A High Priority Violations), (2) repeat Category B and C violations due to the same root cause from two consecutive investigations that have not

been corrected within a time frame specified by TCEQ. This clearly violates the NSR and Title V requirements that TCEQ have adequate enforcement authority, including the authority to recover civil penalties for each violation. 42 U.S.C. §§ 7410(A)(2)(E) and 7661a(b)(5).

In addition, the compliance certification should, at a minimum, certify compliance with the monitoring method for every limit. The compliance certification provisions in the Title V permit must meet the requirements set out at 30 Tex. Admin. Code § 122.146 and 40 C.F.R. § 70.5(c)(9). Specifically, 30 TAC § 122.146(5)(A) states:

(5) The annual compliance certification shall include or reference the following information:

(A) the identification of each term or condition of the permit for which the permit holder is certifying compliance, the method used for determining the compliance status of each emission unit, and whether such method provides continuous or intermittent data...(emphasis added).

Draft renewal special condition no. 22 currently states:

The permit holder shall certify compliance with all permit terms and conditions using, at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified. (Emphasis added.)

The draft permit language should rely on the statutory and regulatory language so that it is clear that in order to certify compliance, the permit holder cannot make a single sweeping statement of compliance for all of the permit terms and conditions. Rather, the compliance certification should identify the method of compliance for each and every limit.

**RESPONSE 6:** Special Condition 23 of the draft permit is in compliance with the specific requirements of the EPA-approved Federal Operating Permit program, as found in 30 TAC Chapter 122. Specifically, § 122.146(5), requires the annual compliance certification to include or reference the specified elements, including:

- The identification of each term or condition of the permit for which the permit holder is certifying compliance, the method used for determining the compliance status of each emission unit, and whether such method provides continuous or intermittent data;
- For emission units addressed in the permit for which no deviations have occurred over the certification period, a statement that the emission units were in continuous compliance over the certification period;
- For any emission unit addressed in the permit for which one or more deviations occurred over the certification period, specific information indicating the potentially intermittent compliance status of the emission unit, and;
- The identification of all other terms and conditions of the permit for which compliance was not achieved.

All permit holders are required to comply with the requirements of 30 TAC § 122.146, as well as all other rules and requirements of the commission. The requirements of Senate

Bill 12, as noted by the commenter, do not impact approved compliance certification requirements. The commission enforces violations of applicable requirements in accord with statutory and regulatory requirements.

In addition, in 2006, EPA's Title V Task Force endorsed the 'short-form' approach used by TCEQ, as an option for compliance certification. (See Title V Task Force, Final Report to the Clean Air Act Advisory Committee, page 108 (April 2006)).

However, in order to help clarify any confusion, Special Term and Condition 23 has been revised to read as follows:

“The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.”

**COMMENT 7:** The draft renewal permit impermissibly uses the permit shield provisions.

The ExxonMobil draft renewal permit O-2000 includes over 1500 individual permit shields (there could be 2000, but Commenters quit counting after 1500). The sheer number of these shields is a concern. There is little explanation of the justification for these shields. The Statement of Basis fails to adequately explain the numerous shields purported authorized in this permit. For example, the Statement of Basis provides that “[t]he portion of this document entitled “Basis for Applying Permit Shields” specifies which units, if any, have a permit shield.” Statement of Basis, p. 12. But, when one goes to that section, it does not identify the units. It states:

### **Basis for Applying Permit Shields**

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit. Statement of Basis, p. 9.

While there is a table in the Statement of Basis, titled “Determination of Applicable Requirements,” it does not comply with standing EPA policy for certain types of shield, particularly shields based on grandfathering. With regard to grandfathering, the table does not provide any additional information other than the assertion that the construction or modification date was on or before a certain date.

Furthermore, the permit includes numerous shields that purport to ‘grandfather’ facilities (See for example the permit shield purports to shield a flare unit from subpart J

regulations by stating only that it was built prior to 2003. Renewal Draft p. 740) As explained below, EPA objected to a negative applicability determination, like that used by Texas, in a permit issued by Colorado. EPA objected to the Colorado permit because Colorado did not adequately investigate whether the facility in question qualified for the negative applicability determination that Colorado included in its permit. The permit stated that certain boilers were "grandfathered" because there had been no construction or major modifications that would have triggered New Source Review (NSR) applicability, and no modifications had occurred at any boiler since the specified New Source Performance Standards (NSPS) applicability dates. In its objection, EPA stated:

This blanket statement cannot be made unless the Division has been provided all of the potentially relevant facts regarding new source review and NSPS applicability in TriGen's operating permit application. While the Division may have reviewed its files for TriGen to make these determinations, the source may not have notified the Division of all changes that could have triggered PSD or NSR, or that could be considered a modification subject to NSPS. Thus, even an exhaustive review of the Division's files is not sufficient to determine whether a facility may have undergone a modification that should have triggered major modification permitting requirements or the NSPS. . . . Last, this shield for TriGen is not consistent with the permit shield provisions in 40 CFR § 70.6(f)(3)(ii) . . . which state that the permit shield shall not alter or affect the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance." EPA [Region 8] *Objection Issues and Comments Regarding the Proposed Title V Operating Permit for TriGen-Colorado Energy Corporation*, Sept. 13, 2000, p.8.

Similarly, EPA issued a letter to the Oregon Department of Environmental Quality that stated: EPA shares the Department's concerns about the significant resources that may be required for the Department to make non-applicability determinations in the new source review context for the purposes of the permit shield, especially with respect to minor new source review. Any additional expenditures relating to such determinations must, of course, be considered title V related activities in any future evaluation of the adequacy of a state's title V fees. Letter from Ann Pontius, Chief Air Compliance and Permitting Section, EPA to John Ruscigno, Oregon Department of Environmental Quality, dated June 29, 1995.

Neither the proposed permit nor the Statement of Basis provide an adequate justification or documentation of investigation of whether the units qualify for a negative applicability determination. Finally, language must be added stating that the permit shield cannot excuse past violations. 40 C.F.R. § 70.6(f)(3)(ii). The language at draft renewal permit condition 29 does not comply with this requirement.

It is important that the public is able to discern how the agency decided which conditions to consider for a shield. In addition to the negative applicability determinations discussed above, if other conditions are clearly not applicable to this facility, why do they need to be included in the shield? If the shield is being granted based on a representation by ExxonMobil, then that should clearly be made a condition of the permit. Texas should not be granting permit shields on the basis of conditions that could change unless such conditions are made a requirement of the permit.

**RESPONSE 7:** The ED disagrees that the permit shield does not meet the requirements of 40 CFR § 70.6(f). Special Term and Condition 30 was drafted in compliance with the requirements of the EPA approved federal operating permit program for the State of Texas, 30 TAC Chapter 122. Section 122.142(f), Permit Content Requirements, clearly allows the ED discretion to grant a permit shield for specific emission units at the request of an applicant. Additionally, § 122.148, Permit Shield, provides the requirements for the exercise of discretion by the ED, including that specific information be submitted by the applicant, in addition to other requirements. The ED determined that the application information submitted by ExxonMobil Oil Corporation and certified by a responsible official was sufficient to grant the permit shield.

Furthermore, the permit shield as listed in FOP O2000 provides a “concise summary” of the negative applicability determination for each regulation that may potentially apply to emission units listed in the Permit Shield table as required by 40 CFR § 70.6(f)(1)(ii). This concise summary contains both the determination and the relevant facts upon which the determination was based, as supported by a certification by the responsible official as to the truth, accuracy and completeness of the facts for which the responsible official is liable both civilly and criminally. The SOB notes that a permit shield was requested and granted. The ED has exercised his discretion, as allowed under the EPA-approved operating permit program, and the permit shield is not an unsupported or unenforceable “blanket statement”. The ED is aware of no provision in 40 CFR Part 70 stating that a permit shield cannot be granted based on certified representations regarding construction, modification, or reconstruction date information.

Lastly, 30 TAC § 122.148(g)(2), specifies that nothing in that section alters or affects the “liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance.” There is no requirement under 30 TAC § 122.148 that requires the permit to include language that the permit shield cannot excuse past violations since 30 TAC § 122.148(g)(2) explicitly states this.

**COMMENT 8:** Special Condition 3 lacks sufficient specificity to assure compliance.

Under the *Special Terms and Conditions* provisions of the draft renewal Title V permit, Special Condition 3 requires stationary vents with certain flow rates comply with identified provisions of 30 TAC Chapter 111 of the Texas SIP. However, there is no identification of the specific stationary vents that are subject to those requirements. As such, this condition fails to meet the requirement of 40 C.F.R. § 70.6(a)(1), in that the condition lacks the specificity to ensure compliance with the applicable requirements associated with those unidentified emissions units. In addition, the Statement of Basis document for the draft Title V permit does not provide the legal and factual basis for Special Condition 3, as required by 40 C.F.R. § 70.7(a)(5). TCEQ should revise Special Condition 3 of the draft Title V permit to list the specific stationary vents that are subject to the specified requirements of 30 TAC Chapter 111 and provide an explanation in the Statement of Basis for the legal and factual basis for Condition 3. (See, *Objection to Federal Part 70 Operating Permit Valero Refining Texas, Texas City Refinery, TCEQ Permit No. O-01253* (October 30, 2009); *Objection to Federal Part 70 Operating Permit Chevron Phillips Chemical Company, Ethylene Unit (EU 1592) and Utilities TCEQ Permit No. O-2113* (October 30, 2009); *Objection to Federal Part 70 Operating Permit Formosa Plastics Corporation, TCEQ Permit Number O-1957* (October 30, 2009).

**RESPONSE 8:** With regard to stationary vents, there are three basic opacity requirements in 30 TAC § 111.111 that may apply, depending upon specific applicability criteria. Stationary vents constructed on or before January 31, 1972 must meet the requirements of 30 TAC § 111.111(a)(1)(A), which states that opacity shall not exceed 30% averaged over a six-minute period. Stationary vents constructed after January 31, 1972 must meet the requirements of 30 TAC § 111.111(a)(1)(B), which states that opacity shall not exceed 20% averaged over a six-minute period. Lastly, stationary vents where a total flow rate is greater than or equal to 100,000 actual cubic feet per minute (acfm) may not exceed 15% opacity averaged over a six minute period, unless that source has an installed optical instrument capable of measuring opacity that meets specified requirements, specified in 30 TAC § 111.111(a)(1)(C). Subsection 111.111(b) merely states that any of the emission units subject to section 111.111 (for this permit area, this would include all stationary vents and gas flares) shall not include contributions from uncombined water in determining compliance with this section.

The EPA has previously supported the practice of not listing emission units in the permit that only have site-wide or “generic” requirements. See White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995. The ED documented in the draft FOP that the Chapter 111 visible emission requirements for stationary vents were site-wide requirements - applying uniformly to the units or activities at the site. Because the applicant indicated in its application that only the Chapter 111 site-wide requirements apply to these stationary vents and other sources, the applicant is not required to list these smaller units individually in the unit summary, and therefore, these emission units did not appear in the applicable requirements summary table in the draft FOP.

For purposes of clarity, the FOP was revised to group stationary vents according to which opacity limit applies. Vents with a flow rate greater than or equal to 100,000 acfm are subject to 15% opacity and are identified in the Applicable Requirements Summary. All other vents at the site are subject to 20% opacity, as noted in the revised Special Term and Condition 3.A., which is a site-wide term and condition, as allowed in the *White Paper for Streamlined Development of Part 70 Permit Applications*, July 10, 1995.

A determination of the legal and factual basis for Special Term and Condition 3.A. was added to the Statement of Basis document for the draft Title V permit.

**COMMENT 9:** The draft renewal permit fails to include the requirements from applicable federal consent decree.

EPA made clear in the CITGO Order that the terms from consent decrees should be included in a Title V permit.

EPA believes that, because CDs and AOs reflect the conclusion of a judicial or administrative process resulting from the enforcement of "applicable requirements" under the Act, all CAA-related requirements in such CDs and AOs are appropriately treated as "applicable requirements" and must be included in title V permits, regardless of whether the applicability issues have been resolved in the CD. This view is consistent with: (1) EPA's part 70 regulations, see, e.g., 40 C.F.R. § 70.5(c)(8) (compliance schedules "shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject"); (2) statements EPA made at the time these

regulations were issued, see, e.g., 57 Fed. Reg. 32250, 32255 (July 21, 1992) (preamble to the 1992 final part 70 rule) ("[s]ources seeking to obtain or renew a part 70 permit cannot be shielded from enforcement actions alleging violations of any applicable requirements (including orders and consent decrees) that occurred before, or at the time of, permit issuance."); and (3) EPA's practice implementing title V. See, e.g., *In the Matter of East Kentucky Power Cooperative, Inc. Hugh L. Spurlock Generating Station Maysville, Kentucky*, Petition IV-2006-4, at 17 (August 30, 2007) (title V Order noting that "should the proposed consent decree be entered by the court in the related enforcement action, [the State and the source] would need to appropriately respond by incorporating the compliance schedule(s) required by the consent decree into the permit."); title V *In the Matter of Dynergy Northeast Energy Generation*, Petition No. II-2001- 06, at 29-30 (title V Order noting that "conditions from [a] 1987 Consent Decree are applicable requirements that must be included in [the source's] title V permit."); see also *Sierra Club v. EPA*, 557 F.3d 401, 411 (6th Cir. 2008) (noting EPA's view that once a CD is final, it will be incorporated into the source's title V permit).

CITGO Order pp. 12-13.

It appears that the applicable ExxonMobil consent decree terms were not included in the draft renewal. The current version of the draft renewal permit and the statement of basis do not include any reference to the consent decree.

To the extent that the terms were incorporated by reference, they were not identified as related to the consent decree. The permit must explicitly incorporate the 12/13/2005 EPA Consent Decree (See Attachment I), as well as the two stipulated non-material modifications to the 2005 Consent Decree, which were filed with the U.S. District Court for the Northern District of Illinois on June 1, 2006 and November 13, 2007 and the Third Amendment Making Material Modifications to Consent Decree, filed with the Court 12/17/2008 (See Attachment J). The 12/17/2008 filing is particularly important because it includes certain injunctive obligations for the ExxonMobil Beaumont refinery. The draft renewal permit should specifically state these injunctive obligations, emission limitations and monitoring requirements of the Consent Decree as terms of the permit.

The draft renewal permit must be revised to (1) include the a reference to the Consent Decree in applicable requirements summary and specifically include any emissions limitations and (2) include a compliance schedule to meet the requirements of 40 C.F.R. § 70.6(c)(3) and 40 C.F.R. § 70 .5(c)(8)(iii)(C).

**RESPONSE 9:** The ED respectfully disagrees with the commenter's interpretation of the Federal Clean Air Act (FCAA), Title V, and the implementing regulation, 40 CFR Part 70 regarding the incorporation of consent decrees. Neither Title V of the FCAA or the implementing regulation, 40 CFR Part 70, include as part of the definition of "applicable requirement" consent decrees or other enforcement mechanisms such as Agreed Orders. As a result, the EPA-approved operating permits program in Texas does not specify that consent decrees or other enforcement mechanisms are "applicable requirements." Instead, as required in 40 CFR § 70.6(c), a schedule of compliance consistent with the requirements of 40 CFR § 70.5(c)(8) is required to be included in the permit when sources are not in compliance. For each applicable requirement, the schedule must "resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject." Since consent decrees are not "applicable requirements" under 30 TAC Chapter 122 or 40 CFR Part 70, there is no

requirement to include consent decree obligations in the Federal Operating Permit. Additionally, where a company did not admit to noncompliance in a consent decree, there is no determination that noncompliance existed upon which to require a “schedule of compliance” under either 30 TAC Chapter 122 or 40 CFR §§ 70.5(c)(8) or 70.6(c).

Since 30 TAC Chapter 122 does not include consent decree obligations as an “applicable requirement”, those obligations are not required to be included as such in Federal Operating Permits issued under the federally approved Texas program. Instead, the TCEQ has required that companies either incorporate their consent decrees by reference in their federal operating permit, or note outstanding consent decree obligations in either schedules of compliance (where a company admits that they have a noncompliance issue) or in a consent decree schedule similar to a compliance schedule.

The proposed permit was revised to add the consent decree obligations in the permit attachments titled “Consent Decree Requirements.”

**The following comments were submitted by the U.S. Environmental Protection Agency (EPA).**

**COMMENT 1:** Objection to the incorporation of Flexible Permit into the Title V permit. The New Source Review (NSR) Authorization References table in the draft Title V permit incorporates by reference Flexible Permit No. 49138, most recently amended on November 24, 2009 (seven days after the Title V permit was received by EPA for comment). Flexible permits are issued pursuant to 30 TAC Chapter 116, Subchapter G; however, those provisions have not been approved, pursuant to Section 110 of federal Clean Air Act (CAA), 42 U.S.C. § 7410, as part of the applicable implementation plan for the State of Texas (Texas SIP). Therefore, pursuant to 40 CFR § 70.8 (c)(1), EPA must object to the issuance of this Title V permit because the terms and conditions of the incorporated flexible permit cannot be determined to be in compliance with the applicable requirements of Texas SIP. The failure to have submitted information necessary to make this determination constitutes an additional basis for this objection, pursuant to 40 CFR § 70.8(c)(3)(ii). In order to respond to this objection, additional information must be provided by the applicant showing how the emissions authorized by the flexible permit meet the air permitting requirements of the federally-approved provisions of the Texas SIP. Furthermore, the Title V permit must include an additional condition specifically requiring the source to prepare and submit to TCEQ a written analysis of any future change/modification to ensure that minor and/or major new source review requirements under the federally-approved Texas SIP have not been triggered. Finally, the terms and conditions of the flexible permit, based upon the requirements of 30 TAC Chapter 116, Subchapter G must be identified as State-only terms and conditions, pursuant to 40 CFR § 70.6(b)(2).

**RESPONSE 1:** As a preliminary matter, the ED believes that resolution of EPA concerns regarding flexible permits is a common objective for both TCEQ and the EPA. The concerns discussed below regarding the use of the Title V permitting process to challenge independent flexible permits on a case-by-case basis does not diminish the importance of reaching an expeditious resolution to the NSR flexible permit issue. The ED recognizes the flexible permit rules, located in 30 TAC Chapter 116, Subchapter G, and submitted to EPA in 1994, have not been approved into the Texas SIP. However, the Texas federal operating permit (FOP) program is EPA-approved. TCEQ reviews applications and issues FOPs according to EPA-approved program rules found in 30 Texas Administrative Code (TAC), Chapter 122. The Texas Operating Permit Program

was granted full approval on December 6, 2001 (66 FR 63318), and subsequent rule changes were approved on March 30, 2005 (70 FR 161634). The application procedures, found in 30 TAC § 122.132(a) require an applicant to provide any information required by the ED to determine applicability of, or to codify any “applicable requirement.” In order for the ED to issue an FOP, the permit must contain all applicable requirements for each emission unit (30 TAC § 122.142). “Applicable requirement” is specifically defined in 30 TAC § 122.10(2)(h) to include all requirements of 30 TAC Chapter 116 and any term and condition of any preconstruction permit. As a Chapter 116 preconstruction authorization, flexible permits are applicable requirements, and shall be included in applications and Texas issued FOPs, in compliance with Texas’s approved program. According to the EPA review procedures of Chapter 122, EPA may only object to issuance of any proposed permit which is not in compliance with the applicable requirements or requirements of this chapter. Therefore, this objection is not valid under the program EPA has approved in Texas because the applicant provided information as to the applicable Chapter 116 requirements, including flexible permits, and the ED has included these requirements in the draft FOP. EPA objections to individual permits issued under an EPA approved operating permit program are not appropriate for concerns that relate to programmatic elements.

The ED disagrees with the allegation that the failure of the applicant to have submitted information necessary to make a determination of whether they were in compliance with the SIP constitutes an additional basis for this objection, pursuant to 40 CFR §70.8(c)(3)(ii). Section 70.8(c)(3)(ii) is premised on the permitting authority not “submitting any information necessary [for EPA] to review adequately the proposed permit.” The ED has provided all information requested by EPA, when asked, including NSR permits and other supporting information. The flexible permit applications, technical reviews, and flexible permits clearly do not allow sources to utilize the flexible permit authorization mechanism to circumvent major NSR permitting requirements. Specifically, 30 TAC Chapter 116 requires that all new major sources or major modifications be authorized through nonattainment or PSD permitting under Subchapter B, Divisions 5 and 6.

The ED also disagrees that additional information must be provided by the applicant showing how the emissions authorized by the flexible permit meet the air permitting requirements of the federally approved provisions of the Texas SIP. The flexible permit application, technical review, and flexible permit documentation demonstrates that the emissions authorized by the flexible permits meet the air permitting requirements of the federally approved provisions of the SIP regarding requirements for impacts review, emission measurement, BACT, NSPS, NESHAP, MACT, performance demonstration, modeling or ambient monitoring if required, MECT applicability, and nonattainment or PSD permitting if applicable. Texas submitted the initial flexible permit rule for EPA review and action in 1994. EPA’s delay in acting on the flexible permit rules, the approval of the state’s federal operating permit program and confusion regarding whether the approved federal operating permit program provided federal enforceability for flexible permits, resulted in a very long period of detrimental reliance on this permit mechanism by regulated entities and TCEQ.

Notwithstanding the pending final disapproval of the flexible permit rules in 30 TAC Chapter 116, Subchapter G, the flexible permit review requirements are parallel to the SIP approved 30 TAC Chapter 116, Subchapter B permit review and no substantive differences in significant permit elements exist. Indeed, the technical review of the flexible permit No. 49138 application provides information regarding how Subchapter B

requirements in § 116.111 are met, including: compliance with the SIP approved Subchapter B rules and review requirements, unit-specific limits based on BACT review at the time of the permit issuance, demonstrations that each emission unit and the facility covered by Permit No. 49138 meets all applicable NSPS, NESHAP requirements, and air dispersion modeling conducted by applicant. Additionally, the ED does not agree that it is appropriate, necessary, or legally required under either 40 CFR Part 70 or the EPA approved federal operating permit program in Texas to require a condition in the operating permit to require a source to prepare and submit a written analysis of any future change/modification to ensure that minor and/or major NSR requirements under the SIP have not been triggered. The federally approved SIP already requires this analysis as part of any future NSR review. See 30 TAC Chapter 116, Subchapter B, Divisions 5 and 6. Minor NSR applicability requirements are adequately specified in the permit and commission rules governing NSR permits; thus, the applicant is currently subject to the requirements to demonstrate, upon any future change, when minor or major NSR requirements will apply.

Finally, the flexible permit terms and conditions are not appropriate to be identified as state-only in the FOP. The EPA approved definition of a “state-only requirement” in 30 TAC § 122.10(28) is “any requirement governing the emission of air pollutants from stationary sources that may be codified in the permit at the discretion of the ED. State-only requirements shall not include any requirement required under the Federal Clean Air Act or under any applicable requirement.” Therefore, the EPA approved program provides the ED with discretion to determine which requirements must be identified as “state-only” and explicitly prohibits anything defined as an “applicable requirement” from being “state-only.” Since flexible permits issued in 30 TAC Chapter 116 are “applicable requirements,” they may not be included as “state-only” requirements. Instead, they are applicable requirements which are subject to public notice, affected state review, notice and comment hearings, EPA review, public petition, recordkeeping requirements, compliance demonstration and certification requirements, and appropriate periodic or compliance assurance monitoring requirements. “State-only” requirements are specifically not required to meet requirements that are specific to 40 CFR Part 70. See 122.143(18). As stated previously, the flexible permit terms and conditions comply with SIP approved permit rules and assure compliance with future applicable NSR requirements. Again, with regard to flexible permits, the TCEQ will continue its dialogue with EPA to achieve the mutual goal of NSR permits issued under SIP approved rules.

TCEQ received an application from ExxonMobil Oil Corporation on February 28, 2012 for flexible permit 49138 to convert it to a permit issued under the SIP approved requirements of 30 TAC Chapter 116, Subchapter B. This permit application is currently under review. This conversion does not affect the current renewal of FOP O2000. ExxonMobil Oil Corporation will be required to submit an appropriate revision to the Title V permit after the flexible permit has been converted.

**COMMENT 2:** Objection to the Statement of Basis. TCEQ prepared a Statement of Basis (SOB) for the draft Title V permit which states that this is a renewal action. The SOB claims there are no other FOPs at the refinery, leaving one to conclude that the proposed action actually merges other Title V permits at the refinery (i.e., FOP Nos. O1356, O1870, O1871, O1999, and O2037) into this draft Title V permit (FOP No. O2000). The SOB fails to discuss this important change in nature and scope of the Title V permit as it constitutes more than a renewal of FOP No. O2000. In addition, the draft Title V permit went to public comment to include most if not all of the refinery’s PSD

permits, NSR permits, standard permits (including pollution control projects), and PBR authorizations. As stated in Objection 1 above, flexible permits are issued under a non-SIP approved permitting program, and the terms and conditions of such permits should be designated as state-only requirements. Pursuant to 40 CFR § 70.7(a)(5), the statement of basis must set forth the legal and factual basis for the draft permit conditions (including reference to the applicable statutory or regulatory provisions). As indicated in previously issued EPA orders in response to petitions to review Title V permits, the SOB serves to highlight elements that EPA and the public would find important to review (*See, e.g., In the Matter of Bristol-Myers Squibb Co, Inc.*, Petition No. II-2002-09, February 18, 2005). Therefore, pursuant to 40 CFR § 70.8(c)(1), EPA must object to the issuance of this Title V permit because the SOB to meet the requirements of 40 CFR § 70.7(a)(5). In order to respond to this objection, the SOB must be revised to include a discussion of the process units covered by the Title V permit, the changes being made to FOP No. O2000 since its last revision or amendment, and the rationale for all monitoring associated with all applicable requirements in the PSD permits, minor NSR permits, standard permits, and PBR authorizations. The SOB should also include a discussion of whether or not the changes trigger the significant modification procedures set forth in 40 CFR § 70.7(e)(4) and the EPA-approved Texas Title V operating permit program requirements.

**RESPONSE 2:** The ED respectfully disagrees that EPA has the authority to object to a proposed draft permit based on the content of a statement of basis, which is not legally a part of the proposed draft permit. In accordance with 30 TAC § 122.350, EPA Review, the EPA may only object to a proposed *permit* that is not in compliance with the applicable requirements or the requirements of Chapter 122. This requirement reiterates the requirements of Federal Clean Air Act, § 505(b) and 40 CFR § 70.8(c), which limits EPA's authority to object to the *proposed permit* by their specific language. Thus, this objection is not a valid objection under either Texas' EPA-approved Title V program, 40 C.F.R. Part 70 or the Federal Clean Air Act.

The ED's intent was not to exclude any emission units from the process description when a summary of the major processes was included in the Statement of Basis. For brevity, the Statement of Basis was updated to provide a concise summary of the processes at the Beaumont Refinery.

The Statement of Basis includes all changes made to the Title V permit as part of the renewal application under the summary of revision section. Furthermore, a statement has been added to the Statement of Basis that a monitoring sufficiency determination has been made for the Beaumont Refinery site. There is no requirement under the CAA or 40 CFR Part 70 that the SOB include a discussion of monitoring rationale for all applicable requirements, or that the SOB include a discussion of the kind of revision procedure required by any permit change. Additionally, see response 1 to the EIP comments above for specific information regarding how the statement of basis was changed to more accurately reflect the proposed permit.

**COMMENT 3:** Objection to the incorporation by reference of PSD Permit. The *New Source Review Authorization References* table of the draft Title V permit incorporates PSD-TX-799, issued May 20, 1991, PSD-TX-802 issued October 25, 1991, PSD-TX-932 revised August 29, 2002, PSD-TX-992M1 issued January 31, 2008, and PSD-TX-768M1 amended May 21, 1999 by reference. EPA has discussed the issue of incorporation by reference in *White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program* (March 5, 1996)(*White Paper 2*). As EPA explained in

White Paper 2, incorporation by reference may be useful in many instances, though it is important to exercise care to balance the use of incorporation by reference with the obligation to issue permits that are clear and meaningful to all affected parties, including those who must comply with or enforce their conditions. *Id.* at 34-38. See also *In the Matter of Tesoro Refining and Marketing*, Petition No. IX-2004-6 at 8 (March 15, 2005)(*Tesoro Order*). As EPA noted in the *Tesoro Order*, EPA's expectations for what requirements may be referenced and for the necessary level of detail are guided by Sections 504(a) and (c) of the CAA and corresponding provisions at 40 CFR § 70.6(a)(1) and (3). *Id.* Generally, EPA expects that Title V permits will explicitly state all emission limitations and operational requirements for all applicable emission units at a facility. *Id.* We note that the TCEQ's use of incorporation by reference for emissions limitations from minor NSR permits and Permits by Rule is currently acceptable. See 66 Fed. Reg. 63318, 63324 (Dec. 6, 2001); see also, *Public Citizen v. EPA*, 343 F.3d 449, at 460-61 (5th Cir. 2003)(upholding EPA's approval of TCEQ's use of incorporation by reference for Texas's limited use of incorporation by reference of emissions limitations from minor NSR permits and Permits by Rule).<sup>1</sup> In approving Texas' limited use of incorporation by reference of emissions limitations from minor NSR permits and Permits by Rule, EPA balanced the streamlining benefits of incorporation by reference against the value of a more detailed Title V permit and found Texas' approach for minor NSR permits and Permits by Rule acceptable. See *Public Citizen*, 343 F.3d , at 460-61. EPA's decision approving this use of IBR in Texas' program was limited to, and specific to, minor NSR permits and Permits by Rule in Texas. EPA noted the unique challenge Texas faced integrating requirements from these permits into Title V permits. See 66 Fed. Reg. at 63,326; 60 Fed. Reg. at 30,039; 59 Fed. Reg. 44572, 44574. EPA did not approve (and does not approve of) TCEQ's use of incorporation by reference of emissions limitations for other requirements. See *In the Matter of Premcor Refining Group, Inc.*, Petition No. VI-2007-02 at 5 and *In the Matter of CITGO Refining and Chemicals Co.*, Petition No. VI-2007-01 at 11. Pursuant to 40 CFR §70.8(c)(1), EPA objects to the issuance of the Title V permit because it incorporates by reference the major New Source Review permits PSD-TX-799, PSD-TX-802, PSD-TX-932, PSD-TX-992M1m and PSD-TX-768M1 and fails to include emission limitations and standards as necessary to assure compliance with all applicability requirements. See 40 CFR § 70.6(a)(1). In response to this objection, TCEQ must include (as conditions of the Title V permit) all the emission limitations and standards of PSD-TX-799, PSD-TX-802, PSD-TX-932, PSD-TX-992M1, and PSD-TX-768M1 necessary to ensure compliance with all applicable requirements. Alternatively, TCEQ could include a specific condition for each emissions unit to reference the exact provisions of PSD-TX-799, PSD-TX-802, PSD-TX-932, PSD-TX-992M1, and PSD-TX-768M1 that contain the emission limitations and standards reflecting the applicable requirements for that unit and then physically attach a copy of PSD-TX-799, PSD-TX-802, PSD-TX-932, PSD-TX-992M1, and PSD-TX-768M1 to the Title V permit. Thus, the Title V permit would contain all the emission limitations (including the MAERT) and standards of the PSD permits with a special condition for each emissions unit directing the reader to the specific location in the attached PSD permit containing the applicable requirements for that unit.

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<sup>1</sup> Please note that in the *Matter of Premcor Refining Group, Inc.* Petition No. VI-2007-02 at 6, fn 3 (May 28, 2009) and *In the Matter of CITGO Refining and Chemicals Co.*, Petition No. VI-2007-01 at 11-12, fn 45 (May 28, 2009) EPA stated that the Agency will be evaluating the use of incorporation by reference for emissions limitations in minor NSR permits and Permits by Rule to determine how well this practice is working.

### **RESPONSE 3:**

The ED respectfully disagrees with EPA's interpretation of its approval of Texas's operating permit program on IBR. The federally approved operating permit program for Texas has allowed for applicable requirements to be incorporated by reference into the FOP since 1996. See Final Interim Approval, 61 Fed. Reg. 32693, June 25, 1996; Final Full Approval, 66 Fed. Reg. 63318, December 6, 2001; and Final Approval of Resolution of Deficiency, 70 Fed. Reg. 16134, March 30, 2005. Title 30 TAC §122.142 states that the operating permit shall contain the specific regulatory citations in each applicable requirement identifying the emission limitations and standards. Additionally, EPA discussed the use of incorporation by reference in the preamble to the final Part 70 rule, discussing the requirements of § 70.6, Permit Content, stating:

“Section 70.6(a)(1)(i) requires that the permit reference the authority for each term and condition of the permit. Including in the permit legal citations to provisions of the Act is critical in defining the scope of the permit shield, since the permit shield, if granted, extends to the provisions of the Act included in the permit. Including the legal citations in the permit will also ensure that the permittee, the permitting authority, EPA, and the public all have a common understanding of the applicable requirements included in the permit. This requirement is satisfied by citation to the State regulations or statutes which make up the SIP or implement a delegated program.” See 57 Fed. Reg. 32250, 32275 July 21, 1992.

In comments on the proposed final interim approval of the operating permit program, in 1995, the commission (then-TNRCC) proposed to include a standardized permit provision that incorporated by reference all preconstruction authorizations, both major and minor, to resolve the EPA-identified deficiency of Texas' failure to include minor NSR as an applicable requirement. In the June 25, 1996 Final Interim Approval, EPA directed, “the State must be quite clear in any standardized permit provision that all of its major ‘preconstruction authorizations including permits, standard permits, flexible permit, special permits, or special exemptions’ are incorporated by reference into the operating permit as if fully set forth therein and therefore enforceable under regulation XII (the Texas Operating Permit Regulation) as well as regulation VI (the Texas preconstruction permit regulation).” (61 Fed. Reg. at 32695) Given this explicit direction in EPA's 1996 final interim approval of the Texas program, TCEQ understood that the standardized permit provision for preconstruction authorizations incorporated all NSR authorizations by reference, including major NSR.

As a result of Texas' initial exclusion of minor NSR as an applicable requirement of the Texas Operating Permit program, and EPA's final interim approval of a program that provided for a phase-in of minor NSR requirements using incorporation by reference, EPA was sued by various environmental groups. See *Public Citizen, Inc. v. U.S. E.P.A.*, 343 F.3d 449 (5th Cir. 2003). The petitioner's brief raised several issues, including the use of incorporation by reference of minor NSR, because the exclusion of minor NSR as an applicable requirement was a program deficiency identified by EPA. The petitioner's brief acknowledges that Texas' Operating Permit program incorporates all preconstruction authorizations by reference, through the use of a table entitled “Preconstruction Authorization References.” The Petitioner's brief includes an example of this table, which clearly contains sections for Prevention of Significant Deterioration (PSD), nonattainment (NA), 30 TAC Chapter 116 Permits, Special Permits and Other Authorizations, and Permits by Rule under 30 TAC Chapter 106. See Brief of Petitioners,

p. 30. The brief goes on to discuss the sample permit, Permit No. O-00108, which documents “six different minor NSR authorizations and one PSD permit” requiring one to look at each of the underlying permits in addition to the Title V permit. The Department of Justice (DOJ), in its reply brief for EPA, responded to this allegation of improper use of IBR in the context of the specific allegation whether “EPA reasonably determined that Texas corrected the interim deficiency related to minor new source review”, answering unequivocally “yes”. “Nothing in the statute or regulations prohibits incorporation of applicable requirements by reference. The Title V and Part 70 provisions addressing the content of Title V permits specify what Title V permits ‘shall include,’ but do not speak to how the enumerated items must be included.” See, Brief of Respondents, pp. 25-26. The Court did not distinguish between minor and major NSR when concluding that IBR is permissible under both the CAA and Part 70.

Thus, it is the ED’s position that incorporation by reference of both major and minor NSR permits is acceptable and was fully approved by EPA. However, given EPA’s differing opinion, as reflected in the Premcor and CITGO orders, this comment, and the June 10, 2010 letter from EPA Region VI regarding this issue, the ED has revised FOP No. O2000 to include, in Appendix B of the permit, a “Major NSR Summary” table of NSR Permit 49138, which was initially suggested by EPA as adequate to resolve this issue. Inclusion of the major NSR permits and the “Major NSR Summary” table as an appendix addresses EPA’s comment and ensures that the Title V permit is clear and meaningful to all affected parties.

It should be noted that, in a letter dated August 22, 2012, EPA approved TCEQ’s approach of attaching the Major NSR Summary table and major NSR permits as an appendix to the Title V permit in order to address IBR of major NSR.

**COMMENT 4:** Under the *General Terms and Conditions* provision of the draft Title V permit, reference is made to 30 TAC § 122.144 of the Texas FOP program which requires records be kept for 5 years; however, Special Condition 9(N) of NSR permit No. 4802 (amended December 29, 2008) only requires records to be kept for three years. Also Special Condition 6(C) of Permit No. 19282 (altered January 30, 2008) only requires records to be kept for 2 years. This condition is inconsistent with the 5 year recordkeeping requirements of 40 CFR § 70.6(a)(3)(ii)(B) and cannot be carried forward into the Title V permit. Pursuant to 40 CFR § 70.8(c)(1), EPA objects to the issuance of the Title V permit since the recordkeeping requirements of NSR Permit No. 4802 and 19282 are not in compliance with the requirements of 40 CFR § 70.6(a)(3)(ii)(B). In response to this objection, TCEQ must revise the Title V permit to include a condition that states that records of monitoring data and supporting information must be maintained for a minimum of five years from the date of monitoring, notwithstanding the requirements of any other permit conditions or applicable requirements.

**RESPONSE 4:** The TCEQ requires five-year recordkeeping for all FOPs. Pursuant to 30 TAC §122.144(1), all records of required monitoring data and other permit support information must be kept for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. This is consistent with the recordkeeping requirements of 40 CFR § 70.6(a)(3)(ii)(B). The requirements of 30 TAC § 122.144(1) have been and will continue to be incorporated for all FOPs through the general terms and conditions of the FOP, which specifically require “The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), and 30 TAC § 122.146 (Compliance

Certification Terms and Conditions).” These requirements were (and still are) also reiterated on the cover page of the FOP.

As all terms and conditions of preconstruction authorizations issued under 30 TAC Chapter 106, PBR and 30 TAC Chapter 116, NSR are applicable requirements and enforceable under the FOP, the five year record retention requirement of 30 TAC § 122.144(1) supersedes any less stringent data retention schedule that may be specified in a particular PBR or NSR permit. To further clarify the five year recordkeeping retention schedule for the FOP, the following text will be added to the General Terms and Conditions of the FOP.

“In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment.”

**COMMENT 5:** Under the *Special Terms and Conditions* provisions of the draft Title V permit, Condition 3 requires stationary vents with certain flow rates comply with identified provisions of 30 TAC Chapter 111 of the Texas SIP. However, there is no identification of the specific stationary vents that are subject to those requirements. As such, this condition fails to meet the requirement of 40 CFR § 70.6(a)(1), in that the condition lacks the specificity to ensure the compliance with the applicable requirements associated with those unidentified emission units. In addition, the Statement of Basis document for the draft Title V permit does not provide the legal and factual basis for Condition 3, as required by 40 CFR § 70.7(a)(5). Pursuant to 40 CFR § 70.8(c)(1), EPA objects to the issuance of the Title V permit since Condition 3 is not in compliance with the requirements of 40 CFR §§ 70.6(a)(1) and 70.7(a)(5). In response to this objection, TCEQ must revise Condition 3 of the draft Title V permit to list the specific stationary vents that are subject to the specified requirements of 30 TAC Chapter 111 and provide an explanation in the Statement of Basis for the legal and factual basis for Condition 3.

**RESPONSE 5:**

With regard to stationary vents, there are three basic opacity requirements in 30 TAC § 111.111 that may apply, depending upon specific applicability criteria. Stationary vents constructed on or before January 31, 1972 must meet the requirements of 30 TAC § 111.111(a)(1)(A), which states that opacity shall not exceed 30% averaged over a six-minute period. Stationary vents constructed after January 31, 1972 must meet the requirements of 30 TAC § 111.111(a)(1)(B), which states that opacity shall not exceed 20% averaged over a six-minute period. Lastly, stationary vents where a total flow rate is greater than or equal to 100,000 actual cubic feet per minute (acfm) may not exceed 15% opacity averaged over a six minute period, unless that source has an installed optical instrument capable of measuring opacity that meets specified requirements, specified in 30 TAC § 111.111(a)(1)(C). Subsection 111.111(b) merely states that any of the emission units subject to section 111.111 (for this permit area, this would include all stationary vents and gas flares) shall not include contributions from uncombined water in determining compliance with this section.

The EPA has previously supported the practice of not listing emission units in the permit that only have site-wide or “generic” requirements. See White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995. The ED documented in the draft FOP that the Chapter 111 visible emission requirements for stationary vents were site-wide requirements - applying uniformly to the units or activities at the site. Because the applicant indicated in its application that only the Chapter 111 site-wide requirements apply to these stationary vents and other sources, the applicant is not required to list these smaller units individually in the unit summary, and therefore, these emission units did not appear in the applicable requirements summary table in the draft FOP.

For purposes of clarity, the FOP was revised to group stationary vents according to which opacity limit applies. Vents with a flow rate greater than or equal to 100,000 acfm are subject to 15% opacity and are identified in the Applicable Requirements Summary. All other vents at the site are subject to 20% opacity, as noted in the revised Special Term and Condition 3.A., which is a site-wide term and condition, as allowed in the *White Paper for Streamlined Development of Part 70 Permit Applications*, July 10, 1995.

A determination of the legal and factual basis for Special Term and Condition 3 was added to the Statement of Basis document for the draft Title V permit.

**COMMENT 6:** The draft Title V permit incorporates by reference 40 CFR Part 63, Subpart GGGGG – National Emission Standards for Hazardous Air Pollutants: Site Remediation. This subpart provides multiple options for emissions limitations for process vents covered by 40 CFR § 63.7890. Pursuant to 40 CFR § 70.8(c)(1), EPA objects to the issuance of the Title V permit because Special Condition 1.G. fails to identify the specific compliance option selected by the permit holder that will be used to demonstrate compliance with the emission limitations for process vents subject to 40 CFR § 63.7890. The failure to identify the selected compliance option fails to meet the requirements of 40 CFR 70.6(a)(1). In response to this objection, the draft Title V permit must reference the specific compliance option selected by the permit holder that will be used to ensure compliance with the emission limitations governing process vents regulated under 40 CFR Part 63, Subpart GGGGG.

**RESPONSE 6:** The ED has added a Special Term and Condition 1.D to the proposed permit that requires the permit holder to keep records to document the specific compliance option used for demonstrating compliance with an emission limitation or standard when an applicable requirement has multiple compliance options. In addition to this term and condition, the detailed regulatory citations documenting the emission standards, monitoring/testing, recordkeeping, and reporting requirements for emission unit 62REM#001 subject to 40 CFR Part 63, Subpart GGGGG have been identified in the Applicable Requirement Summary.

**COMMENT 7:** Special Condition 22 of the draft Title V permit states that the permit holder shall certify compliance with all terms and conditions. The compliance certification requirements for Title V permits are stated in 40 CFR § 70.6(c)(5). Pursuant to 40 CFR § 70.8(c)(1), EPA objects to the issuance of the Title V permit because Special Condition 23 of the draft renewal does not meet the regulatory requirements. In response to this objection, TCEQ must amend Special Condition 22 to include all the requirements for compliance certifications, as set forth in 40 CFR § 70.6(c)(5), including the identification of the methods or other means for determining the compliance status with each term and condition of the permit.

**RESPONSE 7:** Special Term and Condition 22 has been renumbered to Special Term and Condition 23 due to changes in the draft permit. The ED does not agree that Special Condition 23 of the draft permit needs to be revised. Special Condition 23 of the draft permit is in compliance with the specific requirements of the EPA approved Federal Operating Permit program, as found in 30 TAC Chapter 122. Specifically, § 122.146(5), requires the annual compliance certification to include or reference the specified elements, including: the identification of each term or condition of the permit for which the permit holder is certifying compliance, the method used for determining the compliance status of each emission unit, and whether such method provides continuous or intermittent data; for emission units addressed in the permit for which no deviations have occurred over the certification period, a statement that the emission units were in continuous compliance over the certification period; for any emission unit addressed in the permit for which one or more deviations occurred over the certification period, specific information indicating the potentially intermittent compliance status of the emission unit; and the identification of all other terms and conditions of the permit for which compliance was not achieved. All permit holders are required to comply with the requirements of 30 TAC § 122.146, as well as all other rules and requirements of the commission.

In addition, in 2006, EPA's Title V Task Force endorsed the 'short-form' approach used by TCEQ, as an option for compliance certification. (See Title V Task Force, Final Report to the Clean Air Act Advisory Committee, page 108 (April 2006)).

For clarity Condition 23 has been revised to read as follows:

“The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.”

**COMMENT 8:** The draft Title V permit includes a “Permit Shield” attachment that covers many “grandfather” facilities, and TCEQ’s statement of basis (SOB) includes statements that a specific facility was constructed before a certain date. EPA has previously objected to negative applicability determinations based on blanket statements on “grandfathered” units claiming that no modifications have occurred that triggered PSD, NSR or a modification subject to NSPS applicability (*See, e.g.*, letter from Kerrigan G. Clogh, Assistant Regional Administrator, EPA, Region 8 to the Colorado Department of Public Health and Environment, Re: EPA Review of Proposed Title V Operating Permit for TriGen-Colorado Energy Corporation, dated September 13, 2000 (“TriGen Objection”). Similar blanket statements such as those contained in the draft Title V permit and the accompanying SOB do not meet the permit shield requirements of 40 CFR § 70.6(f). Pursuant to 40 CFR § 70.8(c)(1), EPA objects to the issuance of the Title V permit because the permit shield provisions of the draft Title V permit are not supported by an adequate determination that meets the requirements of 40 CFR § 70.6(f), as further explained in the TriGen Objection referenced above. In response to this objection, TCEQ must provide an adequate demonstration consistent with the requirements described above or delete the permit shield requirements in the Title V permit.

**RESPONSE 8:** The ED disagrees that the permit shield does not meet the requirements of 40 CFR § 70.6(f). Special Condition 30 was drafted in compliance with the requirements of the EPA approved federal operating permit program for the State of Texas, 30 TAC Chapter 122. Section 122.142(f), Permit Content Requirements, clearly allows the ED discretion to grant a permit shield for specific emission units at the request of an applicant. Additionally, § 122.148, Permit Shield, provides the requirements for the exercise of discretion by the ED, including that specific information be submitted by the applicant, in addition to other requirements. The ED determined that the application information submitted by ExxonMobil Oil Corporation and certified by a responsible official was sufficient to grant the permit shield.

Furthermore, the permit shield as listed in FOP O2000 provides a “concise summary” of the negative applicability determination for each regulation that may potentially apply to emission units listed in the Permit Shield table as required by 40 CFR § 70.6(f)(1)(ii). This concise summary contains both the determination and the relevant facts upon which the determination was based, as supported by a certification by the responsible official as to the truth, accuracy and completeness of the facts for which the responsible official is liable both civilly and criminally. The SOB notes that a permit shield was requested and granted, and contains the complete table of permit shields from the permit. The ED has thus exercised his discretion, as allowed under the EPA approved operating permit program for the State of Texas, and the permit shield thus is not an unsupported or unenforceable “blanket statement”. The ED is aware of no provision in 40 CFR Part 70 stating that a permit shield cannot be granted based on certified representations regarding construction, modification, or reconstruction date information.

**COMMENT 9:** On December 13, 2005, a Consent Decree was lodged in federal court resolving alleged violations of the federal Clean Air Act at several ExxonMobil plants, including the Beaumont Refinery. *United States v. Exxon Mobil Corporation and ExxonMobil Oil Corporation* (N.D. IL). The Consent Decree requires ExxonMobil to effect changes to its operations in accordance with an agreed upon schedule and to incorporate those changes into federally enforceable permits, including Title V permits. Since the changes extend into the future, the CAA-related requirements of the Consent Decree must be included in the Title V permit and reflected in the Title V permit’s Compliance Schedule. See *In the Matter of CITGO Refining and Chemicals Co.*, Petition No. VI-2007-01 at 12-14. 40 CFR § 70.6(c)(3) requires Title V permits to contain “[a] schedule of compliance consistent with § 70.5(c)(8).” In turn, 40 CFR § 70.5(c)(8) requires, among other things, that compliance schedules “shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject.” 40 CFR § 70.5(c)(8)(iii)(C). The Compliance Schedule in the draft Title V permit is deficient because it fails to reference any of the requirements of the Consent Decree for actions and dates that extend into the future. Pursuant to 40 CFR § 70.8(c)(1), EPA must object to the issuance of this permit because the compliance schedule in the Title V permit fails to meet the requirements of 40 CFR § 70.6(c)(3) and 40 CFR § 70.5(c)(8). In response to this objection, TCEQ must revise the Title V permit to include a compliance schedule that meets the requirements of the 40 CFR § 70.6(c)(3) and 40 CFR § 70.5(c)(8). In addition, TCEQ must review the incorporated minor NSR permits to ensure that the CAA-related requirements of the Consent Decree have been appropriately incorporated therein.

**RESPONSE 9:** The ED respectfully disagrees with the EPA’s interpretation of the FCAA, Title V, and the implementing regulation, 40 CFR Part 70 regarding the incorporation of consent decrees. Neither Title V of the FCAA or the implementing regulation, 40 CFR Part 70, include as part of the definition of “applicable requirement” consent decrees or other enforcement mechanisms such as Agreed Orders. As a result, the EPA approved operating permits program in Texas does not specify that consent decrees or other enforcement mechanisms are “applicable requirements.” Instead, as required in 40 CFR § 70.6(c), a schedule of compliance consistent with the requirements of 40 CFR § 70.5(c)(8) is required to be included in the permit when sources are not in compliance. For each applicable requirement, the schedule must “resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject.” Since consent decrees are not “applicable requirements” under 30 TAC Chapter 122 or 40 CFR Part 70, there is no requirement to include consent decree obligations in the Federal Operating Permit. Additionally, where a company did not admit to noncompliance in a consent decree, there is no determination that noncompliance existed upon which to require a “schedule of compliance” under either 30 TAC Chapter 122 or 40 CFR §§ 70.5(c)(8) or 70.6(c).

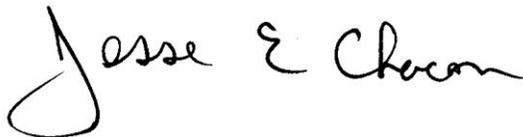
Since 30 TAC Chapter 122 does not include consent decree obligations as an “applicable requirement”, those obligations are not required to be included as such in Federal Operating Permits issued under the federally approved Texas program. Instead, the TCEQ has required that companies either incorporate their consent decrees by reference in their federal operating permit, or note outstanding consent decree obligations in either schedules of compliance (where a company admits that they have a noncompliance issue) or in a consent decree schedule similar to a compliance schedule.

The proposed Title V permit was revised to add the consent decree obligations and current resolution status for the Beaumont Refinery in the permit attachments titled “Consent Decree Requirements.”

#### **ADDITIONAL CONCERNS**

TCEQ acknowledges the additional concerns EPA has with the ExxonMobil Beaumont Refinery FOP and will address these issues as appropriate.

Respectfully submitted,

A handwritten signature in black ink that reads "Jesse E. Chacon". The signature is written in a cursive style with a large, looped initial "J".

Jesse E. Chacon, P.E., Manager  
Operating Permits Section  
Air Permits Division