



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1201 ELM STREET, SUITE 500
DALLAS, TEXAS 75270**

March 14, 2023

Ms. Cecilia Mena
Office of Legal Services
Texas Commission on Environmental Quality (MC 205)
Post Office Box 13087
Austin, Texas 78711-3087

RE: Non Rule Project Number 2023-024-106-AI

Dear Ms. Mena:

EPA provides the attached comments for consideration in regard to the 30 TAC Chapter 106, Permits by Rule, which are open for review as part of the Quadrennial review process under the Texas Government Code §2001.039.

If you have any questions, please contact our Air Permits Section Manager, Cynthia Kaleri at (214) 665-6772, or Aimee Wilson at (214) 665-7596.

Sincerely,

Jeff Robinson
Branch Manager
Grants, Monitoring and Air Permits Branch

Enclosure

ENCLOSURE

What did EPA approve?

On November 14, 2003, EPA approved Texas's streamlined process for construction permits, permits by rule (PBR) that would not have a significant impact on air quality and meet the Clean Air Act (CAA) requirements in 40 CFR 51.160. The TCEQ State Implementation Plan (SIP) submittals were sent to EPA on July 25, 2002, and December 9, 2002. These SIP submittals codified the previously approved¹ "standard exemptions" from Chapter 116 to Chapter 106. The PBR is an alternate minor construction permit for new and modified facilities which TCEQ asserted would not make a significant impact to National Ambient Air Quality Standards (NAAQS). EPA approved this alternate construction permit, PBR, to meet the requirements of 40 CFR 51. EPA approved the process for PBRs that these permits will have an initial public notice and comment period and the emissions from the sources using the PBR will not cause a violation of the primary air quality standards (NAAQS).

EPA approved section 106.4(a)(1), for a facility that is authorized to emit no more than 250 tons per year (tpy) of carbon monoxide (CO) or nitrogen oxides (NO_x); or 25 tpy of volatile organic compounds (VOC), sulfur dioxide (SO₂), or inhalable particulate matter (PM₁₀) or of any other contaminant except carbon dioxide, water nitrogen, methane, ethane, hydrogen and oxygen. Section 106.4(a)(2)-(3) approved by EPA states that a PBR cannot be used by a facility for a change which constitutes a major source or a major modification under Title I of the Act, Part C or Part D. Such sources must meet the applicable requirements under Chapter 116, Subchapter B. The facility that obtains a PBR must also comply with all the CAA requirements of Section 111 and Section 112 as well as all the rules and regulations of TCEQ (section 106.4(c)).

EPA approved 30 TAC 106.4(a)(4) which states, "Unless at least one facility at an account has been subject to public notification and comment as required in Chapter 116, Subchapter B or Subchapter D of this title (relating to New Source Review Permits or Permit Renewals), total actual emissions from all facilities permitted by rule at an account shall not exceed 250 tpy of CO or NO_x; or 25 tpy of VOC or SO₂ or PM; or 15 tpy of PM₁₀; or 10 tpy of PM_{2.5}; or 25 tpy of any other air contaminant except water, nitrogen, ethane, hydrogen, oxygen, and GHGs (as specified in §106.2 of this title (relating to Applicability))".

Chapter 106 Subchapter A includes all the administrative requirements which support the issuance and enforcement of PBRs. The FRN of November 14, 2003 clearly states the process for a PBR to be adopted or revised through rulemaking to include a 30 day public comment period and for TCEQ to address all comments received prior to finalizing its action on a PBR.

History of PBRs and Chapter 106

Prior to 1993, the Standard Exemptions were part of section 116.6 of TCEQ rules, approved by EPA into the SIP on August 13, 1982. In 1993, Texas recodified these Standard Exemptions into Subchapter C of Chapter 116 and resubmitted to EPA for SIP approval. In 1996, Texas subsequently recodified its provisions for Standard Exemptions into Chapter 106 and in 2000 redesignated Standard Exemptions as PBRs. The July 25, 2002 submittal contained Subchapter A of Chapter 106 which is the procedural sections for a PBR containing sections 106.1, 106.2, 106.4, 106.5, 106.6, 106.8, 106.13. On December 9, 2002, Texas submitted revisions to section 106.6 which addressed procedures by which registrations of

¹ These Standard Exemptions were previously approved by EPA on August 13, 1982, FR 35194.

emissions limit a sources' PTE. This was necessitated for Texas to obtain full approval of the Title V operating program.

When approving the PBR program EPA stated, “A facility which qualifies for a PBR must also comply with all applicable provisions of section 111 of the Act (Standards of Performance for New Stationary Sources or New Source Performance Standards (NSPS)) and section 112 of the Act (National Emission Standards for Hazardous Air Pollutants (NESHAP)) (section 106.4(a)(6))”. 68 FR 64545. Approval was given as this supported that the PBR program would meet the requirements of 40 CFR 51.160(a) which provides that the SIP must include procedures that enable the permitting authority to determine whether the construction or modification will result in a violation of applicable portions of the control strategy or interfere with attainment or maintenance of a national ambient air quality standard. EPA notes that some PBRs require TCEQ approval prior to construction. However, some only need to be “claimed” and others require registration of emissions.

Design requirements of a PBR

The PBR is an alternate minor construction permit that needs to meet all the requirements of 40 CFR 51.160 and 51.163. The John Seitz memorandum² on limiting the potential to emit (PTE) is a good basis for the design of streamlined permits such as the Texas PBRs. These permits for specific narrow categories of sources can contain accurate specific emission limits and conditions that will allow the State to determine that the air quality impact will be minimal when used by these sources.

Why EPA has concerns that revisions to the Chapter 106 Rules for PBRs may be necessary

EPA approved Section 106.4(a)(1), for a facility that is authorized to emit no more than 250 tons per year (tpy) of carbon monoxide (CO) or nitrogen oxides (NOx); or 25 tpy of volatile organic compounds (VOC), sulfur dioxide (SO₂), or inhalable particulate matter (PM₁₀) or of any other contaminant except carbon dioxide, water nitrogen, methane, ethane, hydrogen and oxygen. EPA questions whether there are sufficient safeguards in place to prevent a PBR project authorized with these limits in nonattainment areas from circumventing non-attainment new source review (NNSR). In other words, what prevents an applicant in a serious or severe nonattainment area from claiming a PBR project with net NOx emissions increases in excess of the 25 TPY significant emission rate for NNSR? TCEQ should reevaluate the 106.4 limits based on new or revised NAAQS promulgated in 2010, 2013, and 2020 and limit the total emissions from a source to a reasonable de minimis level.

TCEQ should consider the cumulative impacts of the use of PBRs³. The cumulative impacts of emissions from the use of PBRs at a site have raised concerns that efforts to improve air quality might be affected. The consideration of cumulative impacts caused by PBRs is especially important for the oil and gas handling and production facilities PBR as it tends to be utilized in high concentrations in some counties, some of which are non-attainment areas. TCEQ should also look at the number of PBRs that are claimed by individual sites, and sites that are co-located. Does TCEQ undertake any review of each account to determine what impacts may accrue if multiple PBRs are being claimed or registered, are for interrelated projects and if those projects impacts should be aggregated and possibly permitted through a case-by-case NSR permit, or if the total combined emissions of those PBRs would suggest the facility should apply for

² Options for limiting the Potential to Emit (PTE) of stationary source under Section 112 and Title V of the Clean Air Act (Act), from John S. Seitz and Robert I. Van Heuvelen dated 1/25/1995

³ See EPA Legal Tools to Advance Environmental Justice: Cumulative Impacts Addendum. January 2023. <https://www.epa.gov/system/files/documents/2022-12/bh508-Cumulative%20Impacts%20Addendum%20Final%202022-11-28.pdf>

a major source NSR permit? Does TCEQ review the number and frequency of “off permit” changes that are made to title V permits and evaluate if these are being made appropriately? EPA has seen instances where a company has made such “off permit” changes through the use of a PBR multiple times over a few months⁴.

As indicated in 106.4(a)(2)-(3), the PBR cannot be used as a substitute for major source permits. The EPA review of the Title V permits for major sources indicates that there is little or no recordkeeping prescribed in some individual PBRs, and with the pervasive use of PBRs, this indicates that this provision may not always be practically enforceable. The table on the next page identifies PBRs which do not include any PBR specific recordkeeping requirements, this information is also found on the TCEQ website⁵. The use of a PBR does not preclude the use of “netting” to avoid major source permitting. TCEQ should review any netting performed when a source is registering a PBR at a site with sitewide emissions that exceed the major source and/or netting threshold. This is especially relevant in non-attainment areas where the netting trigger for federal NSR is 5 TPY. Are sources reviewing the increases (and decreases) in emissions in the contemporaneous period when registering or claiming a PBR? EPA has concerns that existing major sources in ozone non-attainment areas may be able to claim or register a PBR for emissions in excess of 5 TPY of VOC or NOx without performing contemporaneous netting to determine if the project results in a significant net emissions increase.

EPA has found instances where TCEQ may have allowed a site without a Chapter 116 permit to exceed the total site-wide emission limitation of 106.4(a)(4) and has concerns that it may happen more frequently than known⁶. How does TCEQ verify that site-wide emissions for all PBRs do not exceed the limits of 30 TAC 106.4(a)(4)? How can TCEQ verify compliance with this requirement for any site when not all PBRs have to be registered with the TCEQ? If a site has a “claimed” PBR and that PBR only has the generic emission limit of 30 TAC 106.4(a)(1) applicable to it, then does that preclude the site from obtaining any other PBR authorization? How can TCEQ prevent such a source from “claiming” an additional PBR since it is unclear if they required to notify TCEQ of any PBRs that are merely “claimed” through the use of the 106.4 checklist? What mechanisms, beyond the non-mandatory 106.4 checklists⁷, are in place to ensure that a source’s site-wide emissions from claimed and registered PBRs never exceed the emission limits of 30 TAC 106.4(a)(4) when they do not have a chapter 116 permit? Are there any additional safeguards in place to ensure the sitewide emissions from a PBR only source do not exceed the emission limits of 30 TAC 106.4(a)(4), and also do not exceed the major source thresholds when in an Ozone or PM non-attainment county?

When the TCEQ is proposing new PBRs or revisions to existing PBRs, TCEQ should provide an estimate of the number of the proposed PBRs that are currently authorized (or could be authorized), with the anticipated locations or areas where these authorizations occur to inform the public of the possible pollutants and the health effects. Without such knowledge of the number of facilities within specific areas using the PBR, TCEQ will not be able to determine the cumulative impact of these PBRs especially when 106.4(a)(1) has such large emission thresholds. PBRs should be a clearly defined permit for a specific category of sources with definitive emission limits and conditions and should also be for only small sources that have less than significant emission increases. TCEQ has several PBRs that meet a defined

⁴ Example: Dow Freeport title V permit O2219 which applied for an OP-Notify on February 14, 2019, March 7, 2019, March 28, 2019, May 1, 2019, May 24, 2019, September 26, 2019, October 16, 2019, and November 6, 2019.

⁵ https://www.tceq.texas.gov/permitting/air/nav/numerical_index.html

⁶ EPA found that this appears to have occurred at the ExxonMobil Baytown Technology and Engineering Complex, RN103774212.

⁷ See: Quick Checklist:

<https://www.tceq.texas.gov/assets/public/permitting/air/Forms/PermitsByRule/Checklists/10150.pdf>; and Full Checklist at <https://www.tceq.texas.gov/assets/public/permitting/air/Forms/PermitsByRule/Checklists/10149.pdf>

specific category of sources. These are listed in the table below. These PBR pertain to small sources of emissions and at the time of approval did not seem to cause a violation of the NAAQS. However, with the new standards for PM_{2.5}, NO_x, SO₂ and Pb, these PBRs must be reevaluated for their protectiveness of the current NAAQS. Also of concern are the monitoring requirements for certain PBRs that are not practically enforceable since many PBRs do not specify the type of monitoring, recordkeeping, and compliance testing to be performed to ensure compliance with the PBR. TCEQ should have specific and definitive monitoring requirements and should specify methods for emission estimates that are replicable. EPA appreciates that TCEQ is requiring all title V permit renewal and significant revision applications to include a PBR Supplemental Table which the applicant fills out in order to identify the monitoring, recordkeeping, and reporting for each emission unit that is covered by a claimed or registered PBR. However, the quality of information in these tables varies widely and it is EPA's understanding that TCEQ is not verifying the adequacy of the information provided. If PBRs were updated with adequate monitoring, recordkeeping, and reporting it would alleviate some of the problems identified in EPA title V petition orders and objection letters issued for multiple permits.

The table below identifies the PBRs and the Standard Exemption Number for each PBR (if applicable) that were in place when EPA first approved the PBR program and includes any new PBRs that were added since. The table identifies, as best to EPA knowledge, if the PBR requires registration and if the PBR includes recordkeeping requirements. In addition, the right column identifies PBRs for which TCEQ has determined to be only for insignificant sources. Looking at the PBRs that are not for insignificant sources and are still active, the large majority are shown to not require registration and a large subset of those show they do not have any recordkeeping requirements. TCEQ maintains that the generic recordkeeping requirements at 30 TAC 106.8 are adequate for those PBRs which do not contain specific recordkeeping and monitoring requirements. When EPA approved the PBR program, it only approved the program itself, it did not undertake a thorough review of each individual PBR in 30 TAC Chapter 106 Subchapters B through X. A PBR cannot be practically enforceable without inclusion of any recordkeeping requirements.

The majority of the above source categories are specific but should be evaluated against the current NAAQS standards. An example is PBR 106.227, Soldering, Brazing, Welding that allows a facility to emit up to 0.6 TPY of lead (Pb). TCEQ should consider all the area sources to determine if this limit of Pb is acceptable and where there could be a violation of the NAAQS should there be other sources of Pb emissions. Other examples that should be evaluated for potential NAAQS implications are PBRs that have particulate emissions.

Old Standard Exemption	PBR- Chapter 106	Description – General Small Emission Sources	Authorization Mechanism	Insignificant
1	101	Domestic Use Facilities	Repealed 9/3/2009 de minimis emissions	
3	102	Comfort Heating	No registration or recordkeeping	Yes
4	103	Air conditioning and Ventilation Systems	Repealed- de minimis	
12	121	Hydraulic and Hydrostatic Testing equipment	Repealed- de minimis	
34	122	Bench-Scale Laboratory equipment	No registration or recordkeeping	Yes

Old Standard Exemption	PBR- Chapter 106	Description – General Small Emission Sources	Authorization Mechanism	Insignificant
49	123	Vacuum producing devices for laboratory use	Repealed- de minimis	
76	124	Pilot Plants	No registration	
25	141	Batch Mixers	No registration	Yes
73	142	Rock Crushers	Repealed 2008- need Standard permit	
77	143	Wet Sand and Gravel Production	No registration	Yes
91	144	Bulk Mineral Handling	Requires approval	
92	145	Bulk Sand Handling	Requires approval	
94	146	Soil Stabilization Plants	Requires approval	
99	147	Asphalt Concrete Plants	After 10/2003- only SP or NSR	
112	148	Material Unloading	No registration	Yes
114	149	Sand and Gravel Processing	No registration	Yes
122	150	Asphalt Silos	Requires approval	
62	161	Animal Feeding Operations	Caged laying, pullet operations require approval	Yes
63	162	Livestock Auction Facilities	No registration	Yes
72	163	Racetracks, Zoos and Animal Shelters	No registration or recordkeeping	Yes
	181	Used-Oil Combustion Units	No registration	
33	182	Ceramic Kilns	No registration	
7	183	Boilers, Heaters and other Combustion devices	No registration	
71	201	Permanent and Temporary Concrete Batch Plants	Repealed 2000	
93	202	Temporary Concrete Batch Plants	Repealed 2000	
117	203	Specialty Batch Plants	Repealed 2000	
10	221	Extrusion Presses	No registration	
120	223	Saw Mills	Repealed 2/2008- need SP	
123	224	Aerospace Equipment and Parts Manufacturing	Need approval	
115	225	Semiconductor Manufacturing	No registration	
125	226	Paints, Varnishes, Ink, and other Coating Manufacturing	No registration	
39	227	Soldering, Brazing, Welding	No registration	
30	228	Platen Presses for Laminating	Repealed	
15	229	Textile Dyeing and Stripping Equipment	No registration or recordkeeping	Yes
109	241	Slaughterhouses	No registration	Yes
20	242	Food Preparation	No registration or recordkeeping	Yes
29	243	Smokehouses	No registration	Yes

Old Standard Exemption	PBR-Chapter 106	Description – General Small Emission Sources	Authorization Mechanism	Insignificant
32	244	Ovens, Barbecue Pits, Cookers	No registration or recordkeeping	Yes
98	245	Ethyl Alcohol Facilities	No registration	
106	261	Facilities (Emission Limitations)	Requires registration	
118	262	Facilities Emission and Distance Limitations)	Requires registration	
70	263	Routine Maintenance, Startup and Shutdown of Facilities, and Temporary Maintenance Facilities	May require registration	
111	264	Replacement of Facilities	Requires notification	
40	265	Hand-held and Manually Operated Machines	No registration or recordkeeping	
59	266	Vacuum Cleaning Systems	No registration or recordkeeping	Yes
64	281	Feed Milling	No registration	
119	282	Feed Grinding Facilities	Repealed	
74	283	Grain Handling, Storage and Drying	Prior approval may be required	
69	291	Cotton Gin Stands	Repealed	
85	301	Aqueous Fertilizer Storage	No registration or recordkeeping	Yes
108	302	Portable Pipe Reactor	Repealed	
17	311	Crucible or Pot Furnace	No registration	
18	312	Wax and Melting and Application	Repealed	
22	313	Tumblers for Cleaning or Deburring Metal	No registration	Yes
23	314	Shell Core and Mold Machines	No registration or recordkeeping	
24	315	Sand or Investment Molds	No registration	
35	316	Metal Inspection	No registration or recordkeeping	Yes
36	317	Miscellaneous Metal Equipment	No registration or recordkeeping	Yes
37	318	Die Casting Machines	No registration or recordkeeping	Yes
44	319	Foundry Sand Mold Forming Equipment	No registration	Yes
57	320	Miscellaneous Metallic Treatment	No registration	
58	321	Metal Melting and Holding Furnace	No registration	
96	322	Furnace to Reclaim Aluminum or Copper	Prior approval	
47	331	Cosmetics Packaging and Pharmaceutical Packaging and Coating	No registration or recordkeeping	Yes
81	332	Chloring Repackaging (Previously Coating)	No registration	
28	333	Water-based Adhesive Mixers	No registration	Yes

Old Standard Exemption	PBR-Chapter 106	Description – General Small Emission Sources	Authorization Mechanism	Insignificant
65	351	Salt Water Disposal (Petroleum)	Prior approval	
66	352	Oil and Gas Production Facilities	Registration required in most cases	
67	353	Temporary Oil and Gas Facilities	No registration	
79	354	Iron Sponge Gas-Treating Unit	No registration	
100	355	Pipeline Metering, Purging and Maintenance	No registration	
8	371	Cooling-Water Units	No registration	
101	372	Industrial Gases	No registration	Yes
103	373	Refrigeration Systems	No registration	
121	374	Lime-Slaking Facilities	No registration	
41	375	Aqueous Solutions for Electrolytic and Electroless Processes	No registration	
	376	Decorative Chrome Plating	No registration	
11	391	Rubber and Plastic Curing Presses	No registration or recordkeeping	Yes
113	392	Thermoset Resin Facilities	No registration	
27	393	Conveyance and Storage of Plastic and Rubber Material	No registration	
45	394	Plastic Compression and Injection Molding	No registration or recordkeeping	Yes
46	395	Equipment for Mixing Plastic and Rubber (No Solvent)	No registration	
48	396	Equipment for Mixing Plastic and Rubber (With Solvent)	Registration required	
9	411	Steam or Dry Cleaning Equipment	No registration or recordkeeping	
14	412	Fuel Dispensing	No registration or recordkeeping	
19	413	Bond lining to brake shoes	repealed	
26	414	Packaging Lubes and Greases	No registration or recordkeeping	Yes
43	415	Laundry Dryers	No registration or recordkeeping	Yes
95	416	Uranium Recovery Facilities	Prior approval	
89	417	Ethylene Oxide Sterilizers	Registration required for use of 100-1,000 pounds of EO per yr.	
13	418	Printing Presses	Registration required for 10 TPY or more of VOC	
38	419	Photographic Process Equipment	No registration or recordkeeping	
16	431	Milling and Grinding of Coatings and Molding Compounds	No registration or recordkeeping	Yes
50	432	Dipping Tanks and Containers	No registration	Yes
75	433	Surface Coat Facility	Registration required	

Old Standard Exemption	PBR-Chapter 106	Description – General Small Emission Sources	Authorization Mechanism	Insignificant
104	434	Powder Coating Facility	Repealed	
116	435	Classic or Antique Automobile Restoration Facility	Repealed	
124	436	Auto Body Refinishing Facility	Prior approval	
31`	451	Wet Blast Cleaning	No registration or recordkeeping	Yes
102	452	Dry Abrasive Cleaning	Registration required for outside blast cleaning	
42	453	Washing and Drying of Glass and Metal	No registration	Yes
107	454	Degreasing Units	Prior approval	
21	471	Storage or Holding of Dry Natural Gas	No registration or recordkeeping	Yes
51	472	Organic and Inorganic Liquid Loading and Unloading	No registration	
53	473	Organic Liquid Loading and Unloading	No registration	
78	474	Hydrochloric Acid Storage	No registration	
82	475	Pressurized Tanks or Tanks Vented to a Firebox	No registration	
83	476	Pressurized Tanks or Tanks Vented to a Control	No registration	
84	477	Anhydrous Ammonia Storage	Prior approval	
86	478	Storage Tank and Change of Service	Registration required in some instances	
2	491	Dual-Chamber Incinerators	Registration required	
80	492	Flares	Registration required in some instances	
88	493	Direct Flame Incinerators	Repealed	
90	494	Non-commercial Incinerators and Crematories	Prior approval	
87	495	Heat Cleaning Devices	Prior approval	
97	496	Air Curtain Incinerators	Registration required	
5	511	Portable and Emergency Engines and Turbines	No registration	
6	512	Stationary Engines and Turbines	Registration required	
	513	Natural Gas Fired Combined Heat and Power Units	Registration required	
60	531	Sewage Treatment Facility	No registration or recordkeeping	Yes
61	532	Water and Wastewater Treatment	No registration	
68	533	Water and Soil Remediation	Notification is required	
110	534	Municipal Solid Waste Landfills and Transfer Stations	No registration	