UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

SEP 29 2014

CERTIFIED MAIL 7010 2780 0002 4354 1512 RETURN RECEIPT REQUESTED

Mr. Tim Rens
Manufacturing Director, N.A.
710-B Bussey Road
Marshall, TX 75670

RE: Pergan Marshall, LLC - Proposed Petition Reissuance Denial Decision

Dear Mr. Rens:

Based on a detailed technical review of the submitted petition reissuance and supporting documents, EPA is proposing to deny the Pergan Marshall, LLC petition reissuance request. This request is seeking the reissuance of an exemption to the land disposal restrictions of the Hazardous and Solid Waste Amendments of 1984, to the Resource Conservation and Recovery Act.

The reason for the proposed denial of this reissuance request is based on the recent dramatic increase in the reservoir pressure that prevents Pergan from demonstrating that they can meet the non-endangerment and no migration standards. EPA acknowledges that this dramatic reservoir pressure increase is due to multiple Class II injection wells permitted by the Railroad Commission of Texas in recent years and currently operating around Pergan's site. The negative impact of these Class II injectors on the injection interval pressure conditions does not change Pergan's regulatory burden for the demonstration.

Enclosed are the public notice and the fact sheet document associated with this proposed decision. A final decision regarding this petition reissuance will be made after the end of the public comment period.

If you have any questions regarding this matter, please call Brian Graves (214) 665-7193.

Sincerely yours,

for William K. Honker, P. E.
Director
Water Quality Protection Division

Enclosures

cc: Lorrie Council, TCEQ
Rich Heitzenrater, TCEQ Region 14

PUBLIC NOTICE OF A PROPOSED HAZARDOUS WASTE EXEMPTION REISSUANCE DENIAL

U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 6
1445 ROSS AVENUE
DALLAS, TEXAS 75202-2733

The U.S. Environmental Protection Agency (EPA), Region 6, proposes to deny a reissuance of a petition for an exemption to the land disposal restrictions of the Hazardous and Solid Waste Amendments of 1984 (HSWA) to the Resource Conservation and Recovery Act (42 U.S.C. §6901, et seq) for the following facility:

Applicant:	Pergan Marshall, LLC Marshall Texas Plant
Facility Location:	710-B Bussey Road Marshall, TX 75670
Injection Well Permit Numbers:	WDW-180 & 243

Development of the proposed decision was based on a detailed technical review of the submitted petition reissuance request with support documents.

The land disposal restrictions prohibit the injection of untreated restricted hazardous waste. However, the amendments mentioned above provide that an exemption to these restrictions may be granted if the Administrator determines that the method of land disposal (i.e., injection well) is protective of human health and the environment. A method of land disposal may not be determined to be protective, "unless, upon application by an interested person, it has been demonstrated to the Administrator, to a reasonable degree of certainty, that there will be no migration of hazardous constituents from the disposal unit or injection zone for as long as the wastes remain hazardous." (42 U.S.C. § 6924 (g)(5)) Regulations establishing the criteria for petitioning for an exemption to the land disposal restrictions were published in Volume 53, Number 143 of the Federal Register, July 26, 1988, (53 Fed. Reg. 28118 (1988)). Those regulations are now codified at 40 CFR Part 148.

A final decision for this reissuance of a petition for an exemption to the land disposal restrictions request will be made after the close of the comment period, which ends at the close of business on November 18, 2014.

All persons, including the applicant, who wish to comment on the proposed decision to deny the petition reissuance may do so by submitting comments along with their name and address to the EPA address shown below. All written comments must be postmarked by November 18, 2014, to be considered in formulating a final decision. EPA is not required to hold a public hearing. However, if there is sufficient public interest in the proposed decision, EPA may hold a public hearing. Anyone desiring such a hearing must submit a written request identifying the issue(s) for discussion at the hearing to the office in Dallas, Texas, before the close of business on November 18, 2014. EPA will give at least 30 days notice of a public hearing, if a hearing is held.

Written comments, requests for information regarding the Agency's decision on this petition reissuance, and requests for copies of the fact sheet (description of the rationale supporting the proposed decision)

should be sent to EPA Region 6 at the address shown below. Information on the Agency's decision may also be obtained by contacting Brian Graves at (214) 665-7193 or graves.brian@epa.gov.

U.S. Environmental Protection Agency - Region 6
Source Water Protection Branch (6WQ-S)
1445 Ross Avenue
Dallas, Texas 75202-2733

The administrative record for the proposed petition decision is available for review beginning October 2, 2014, between 8:00 a.m. and 4:00 p.m., Monday through Friday, for the extent of the comment period, at EPA's Dallas office shown above.

Pertinent EPA comment and public hearing procedures may be found in 40 CFR §124.10 and §124.12.

EPA will notify the applicant and each person who has submitted written comments of the final reissuance of an exemption decision. The final decision will also be published in the Federal Register.

September 18, 2014

FACT SHEET

EPA is proposing to deny a reissuance of an exemption to the land disposal restrictions for the following injection well facility:

Applicant:	Pergan Marshall, LLC Marshall Texas Plant
Street Address:	710-B Bussey Road Marshall, TX 75670
Mailing Address:	710-B Bussey Road Marshall, TX 75670
Permit Numbers:	WDW-180 WDW-243
Issuing Office:	U.S. Environmental Protection Agency Region 6 1445 Ross Avenue Dallas, TX 75202-2733

Decision

The Environmental Protection Agency (EPA) proposes to deny the Pergan Marshall, LLC (Pergan) reissuance of an exemption to the land disposal restrictions request for the following reasons:

1. Pergan failed to demonstrate that fluids will not move from the injection zone into an Underground Source of Drinking Water (USDW) through area artificial penetrations, thereby failing the non-endangerment standard.

2. Pergan failed to demonstrate that hazardous waste will not migrate from the injection zone through area artificial penetrations, thereby failing the no migration standard.

3. The reissuance demonstration pressure buildup model, submitted by Pergan, could not properly account for the reservoir pressure increase effects of multiple Class II disposal wells in the Pergan facility area.

The following explains the derivation of the proposed decision, which is categorized according to the criteria outlined in 40 CFR Part 148. [53 Fed. Reg., 28118, (7/26/88)]

Summary

The EPA land disposal restrictions promulgated under Section 3004 of the Resource Conservation and Recovery Act prohibit the injection of restricted hazardous waste unless a

petitioner demonstrates to the EPA there will be no migration of hazardous constituents from the injection zone for as long as the waste remains hazardous. These no migration demonstrations must meet the regulatory standards promulgated in 40 CFR 148 Subpart C. The demonstration includes a description of the well operations, geologic siting, and waste stream characteristics. The demonstration also includes modeling strategies which incorporate all the previously mentioned information and utilize mathematical equations to predict injection reservoir pressure buildup and injected waste movement.

Pergan submitted its initial version of a petition reissuance application in 2003 to renew its original petition, which was approved 11/5/91, and to add a new injection well. Between 2003 and 2014, the facility underwent several changes in ownership, made multiple reissuance document submittals, changed their underground injection control (UIC) technical contractor several times, and received multiple notice of deficiencies from Region 6, both written and verbal. Pergan was allowed to continue injecting past the 12/31/10 cessation of injection date of their original petition because they had submitted a reissuance application prior to this cessation date and EPA Region 6 had not made a decision whether to approve or deny Pergan's reissuance application.

Starting in 2005 and continuing to 2014, Class II injection activity in the same injection interval as the Pergan injection wells increased significantly within a 15 mile radius around the Pergan facility, both in terms of active wells and injection volumes. The Class II injection well permitting program is administered by the Railroad Commission of Texas (RRC). The RRC permitted the Class II wells based on a ¼ mile area of review around each injector and did not consider the interaction between several injectors in a common large laterally continuous disposal interval area which can lead to undesirable reservoir pressure buildup effects.

Under 40 CFR §146.68(e), an annual falloff test is required for Class I hazardous waste injection wells. Pergan, as part of its compliance with its existing petition, submitted annual falloffs tests for WDW-243 to EPA for review. Beginning in 2006, an upward trend in static reservoir pressure was noted on the facility falloff test data as shown in enclosed figure. The increasing static pressure trend became more pronounced in 2007 through 2012. The static pressure leveled off in 2013 before again rising in 2014. In 2014 the flowing bottomhole pressure finally exceeded the compliance limit of Pergan's 11/5/91 approved petition. During the same period, multiple Class II injection wells were permitted by RRC and began injecting into the Rodessa formation.

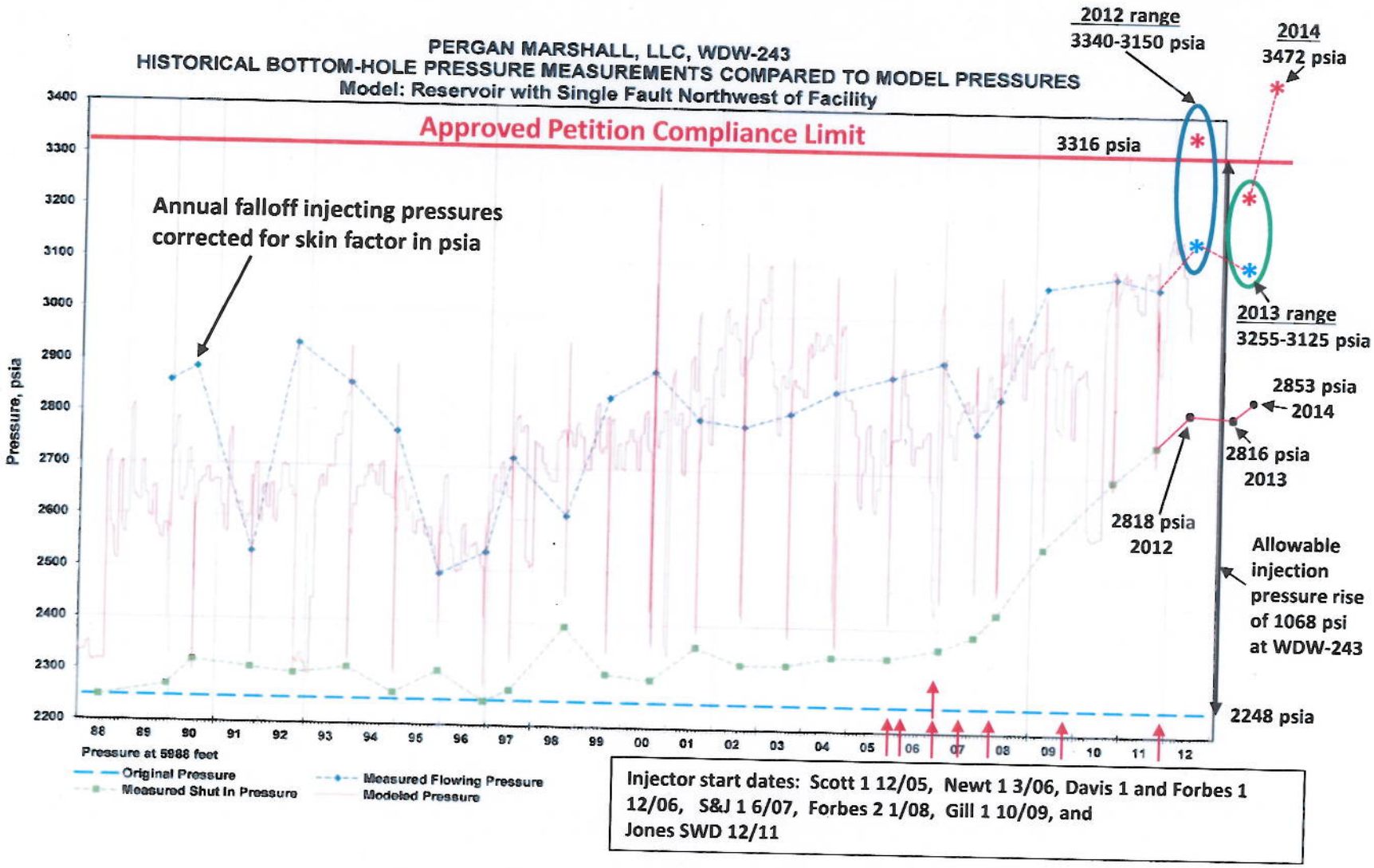
Pergan's site geology, submitted as part of its reissuance application, demonstrated the continuous areal extent of its injection interval, the Rodessa formation, over a multi-mile area which correlated to the completion intervals for these newly operating Class II injectors. Accordingly, Pergan submitted revisions to the reissuance pressure buildup demonstration modeling in 2008, 2012, and 2013, attempting to account for the contributions of various area Class II injectors in the Rodessa formation.

The 2012 reissuance modeling submittal was also provided to the Texas Commission on Environmental Quality (TCEQ) which administers the Class I injection well program in Texas

for all aspects other than no migration petition approval, including endangerment concerns. The 2012 submittal predicted potential worst case endangerment of underground sources of drinking water occurring at several area artificial penetrations in the Pergan area beginning as early as July 2013 and continuing into 2020 when the requested reissuance operating period would end. Both the 2012 and 2013 pressure buildup modeling were unable to match the operating pressures and injection volumes at the area Class II injection wells included in the model setup and may not account for all area injectors contributing to the reservoir static pressure increase.

EPA notes that in reviewing the reissuance demonstration modeling provided by Pergan, the majority of the pressure buildup in the reservoir has and would continue to be caused by Class II injection activity, not Pergan's Class I injection. The reservoir pressure buildup is projected to continue even with Pergan ceasing Class I injection due to the large Class II injection volume into the Rodessa formation.

Conclusions

Based on a detailed and thorough review of the Pergan reissuance document, the EPA proposes to deny the Pergan petition reissuance application for an exemption to the land disposal restrictions. This decision is based on Pergan's failure to meet both the no migration standard described in 40 CFR Part 148 and the non-endangerment standard described in 40 CFR Part 146, due to reservoir pressure buildup.

Pergan Static Reservoir Pressure Trend