From:	Jeffrey Dehnhardt
To:	Water Permit Application
Cc:	Ryan Russell
Subject:	Request to Add Homes to Existing Permitted System
Date:	Tuesday, October 09, 2018 4:34:08 PM
Attachments:	Vicinity Map.png

To Whom It May Concern,

We are hereby requesting consideration of a minor modification of an existing no-discharge permit for the purpose of serving three additional single family homes. We are making this request on behalf of our client, Mr. Ryan Russell, Member of Eagle Creek Holdings, LLC. Mr. Russell is also the President of the Legacy Estates Home Owner Association, Inc.

Eagle Creek Holdings, LLC are proposing the addition of three lots to the Legacy Estates subdivision located in Washington County to the southwest of the City of Tontitown. Additionally, Eagle Creek Holdings, LLC are proposing that sanitary sewer treatment and disposal for the proposed three additional lots be provided by the existing permitted facility operated under Permit No. 4890-WR-2 and owned by the Legacy Estates Home Owner Association, Inc.

Legacy Estates was originally intended to be a multi-phase subdivision. The three lots that are proposed to be added to the existing permitted wastewater treatment/disposal system were originally intended to be a part of Phase II of Legacy Estates. These lots are located along the west side of Astor Drive, just to the south of the intersection of Astor Drive and Harmon Road (CR 873). While these lots are contiguous to what was originally Phase I of Legacy Estates (now, simply, Legacy Estates), the topography of the site does not allow these lots to drain by gravity to the existing permitted facility. Thus, the lots were originally intended to be developed under Phase II where they could be served by gravity sewer.

Because the site topography will not allow service to the proposed lots by gravity sewer, a new lift station and force main would be constructed to pump the sewage from the three proposed additional lots, as well as four lots that were previously platted along the east side of Astor Drive which will also not drain by gravity, to the existing treatment facility. The lift station would be of the submersible type and would be of a duplex design containing grinder pumps capable of meeting the flow requirements for the seven lots (four currently platted plus three proposed). A 2" diameter force main would convey the sewage from the proposed lift station to the existing manhole located on the northeast corner of Macy Lane and Astor Drive. Attached to this email is an aerial map showing the location of the proposed improvements.

Some important details of the existing development and treatment system, as well as the proposed improvements, are included below.

Existing Permit: Existing Permittee: Association, Inc. (Ryan Russell, President) Proposed Developer: 4890-WR-2 Legacy Estates Homeowner

Eagle Creek Holdings, LLC

(Ryan Russell, Member)	
Treatment Plant Location:	Latitude: 36°8'18"N
Longitude: 94°17′12″W	
Number of Lots Currently Platted:	115
Number of Homes Currently Occupied:	57
Requested Number of Additional Homes to be Served:	3
Current Permitted Capacity of Drip Fields:	27,016 gal/day
Current Average Water Usage (57 Homes):	131 gallons per day per
home	
Current Total Volume Water Used Per Day (57 Lots at 131 gal/day):	7,467 gallons/day
Projected Usage at Full Build Out (115 Lots at 131 gal/day):	15,065 gallons per day
Maximum Permitted Usage at Full Build Out (115 Lots):	235 gallons per day per
home	
Projected Usage at Expanded Full Build Out (118 Lots at 131 gal/day):	15,458 gallons per day
Maximum Permitted Usage at Expanded Full Build Out (118 Lots):	229 gallons per day per
home	

Of course, full plans and specifications of the proposed improvements will be submitted to ADEQ for review. No construction activities will take place without ADEQ authorization.

Please do not hesitate to contact me if you have questions or require additional information.

Thank you, Jeffrey K. Dehnhardt, P.E. Engineering Services, Inc. 1207 South Old Missouri Road P.O. Box 282 Springdale, AR 72765-0282 Phone: (479) 751-8733 / Fax: (479) 751-8746 www.engineeringservices.com



ENGINEERING SERVICES INC.

