(date)

Re: Village of Middleville Water System Improvements Project, Not Likely to Adversely Affect Indiana Bat Concurrence Request

Dear _____:

We are requesting concurrence from the U.S. Fish and Wildlife Service that the proposed water system improvements project is *not likely to adversely affect* the endangered Indiana bat (*Myotis sodalis*). The proposed project is located in Middleville (T4N-R10E-S23), Barry County, Michigan. Funding for this project is provided by the U.S. Environmental Protection Agency (USEPA). The project involves drilling a new community water well and watermain installation, which is adjacent to, but does not directly impact a wooded area. All work will be performed between July 1, and October 31, 2006.

Specifically, the proposed well is to be drilled in a currently open area located in an abandoned railway right-of-way (ROW). No trees are proposed for removal. The adjacent wooded area to the east contains several trees with diameters greater than 9 inches in diameter. Although dead trees with peeling bark are scattered throughout the area, the majority are living trees without any peeling bark (see attached photos).

A drilling rig will be driven onto the site using the existing access road and abandoned ROW. The drilling process involves drilling a vertical hole in the ground approximately 200 feet deep. The area of disturbance at the surface is limited to the diameter of the bore hole, which is less than 10 inches. A diesel engine will operate the rig. During the drilling process, there will be periodic noise and exhaust from the engine. The completed well will be a steel pipe that extends about 1 foot above grade with a locked cap. No well house will be built at this site.

In addition to the well, a 12-inch diameter watermain will be installed, connecting the well to the adjacent residential area. The watermain route will traverse the ROW and existing access road. This portion of the project also does not involve any tree removal. During the watermain installation, periodic noise and engine exhaust is expected.

According to your Section 7 Consultation website (June 1, 2006), the only listed species that may be present in the action area is the endangered Indiana bat. The site was evaluated on June 9 and 10, 2006 to determine whether habitat suitable for summer roosting Indiana bats is present in the action area. Suitable habitat for Indiana bat exists in areas adjacent to the proposed project site. Indiana bats have been documented in Barry County; surveys for the bats have not been conducted on site. As the project site is within the core of the summer range for Indiana bats, and as potential roosting trees are present in the vicinity, we conclude that Indiana bats may be present.

Although tree removal is not a proposed project activity, Indiana bats will likely be exposed to increased noise disturbance as a result of operating the diesel engine. Test drilling activities will be performed in July and August; final installation will occur in October. All activities will occur during daylight hours. Exposure to noise is not likely during final installation activities as

this action will occur after (October) the bats have left to return to their hibernation sites. During the test drilling period (July and August 2006), adult and newly volant juvenile bats present will likely be exposed to noise.

There is little data on how bats will respond to noise disturbance and what does exist is equivocal. It appears, however, that Indiana bats are tolerant of some noise disturbance provided that it is not very near to their roosting site. For example, Indiana bats are known to roost and forage in suitable habitat in the vicinity of the Indianapolis International Airport (Ritzi et al. 2005; Sparks et al. 2005). Given that Indiana bat roosting habitat is not adjacent to the area where construction activities will occur, we anticipate that Indiana bats exposed to the noise will not respond in a meaningful or detectable manner.

Based on the above analysis, we conclude that our action may affect but is not likely to adversely affect Indiana bat. We request, on behalf of U.S. EPA, your concurrence with our determination.

REFERENCES

Ritzi, C.M., B.L. Everson and J.O. Whitaker, Jr. 2005. Use of bat boxes by a maternity colony of Indiana bats (Myotis sodalis). Northeastern Naturalist 12(2):217-220.

Sparks, D.W., C.M. Ritzi, J.E. Duchamp, and J.O. Whitaker, Jr. 2005. Foraging habitat of the Indiana bat (Myotis sodalis) at an urban-rural interface. Journal of Mammalogy 86(4):713-718.