CERTIFICATE OF SERVICE

I, STEPHANIE FLOWERS, an attorney, do certify that I filed electronically with the Office of the Clerk of the Illinois Pollution Control Board the attached APPEARANCE and AGENCY RESPONSE TO PETITION FOR WATER WELL SETBACK EXCEPTION and will cause the same to be served upon the following persons, by placing a true and correct copy in an envelope addressed to:

John T. Therriault, Clerk Illinois Pollution Control Board James R. Thompson Center Suite 11-500 100 West Randolph Chicago, Illinois 60601 (Electronic Filing) Mark C. Eiden Mark C. Eiden & Associates, PC Suite 4 611 S. Milwaukee Avenue Libertyville, IL 60048 (First Class Mail)

John Tierney 36701 N. Highway 83 Lake Villa, IL 60046 (First Class Mail) Bradley P. Halloran, Hearing Officer Illinois Pollution Control Board James R. Thompson Center Suite 11-500 100 W. Randolph Chicago, Illinois 60601 (Electronic Filing)

Vera Tierney 36701 N. Highway 83 Lake Villa, IL 60046 (First Class Mail)

and mailing it by First Class Mail from Springfield, Illinois on April 17, 2014 with sufficient postage affixed.

TEPHANIE FLOWERS

DATED: 4-1/-14 1021 North Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9276

(217) 782-5544

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

|) | |
|---|--------------------------|
|) | |
|) | |
|) | PCB No. 2014-122 |
|) | (Petition for Water Well |
|) | Setback Exception) |
|) | |
|) | |
|) | |
|) | |
| |))))))))) |

NOTICE OF FILING

John T. Therriault, Clerk Illinois Pollution Control Board James R. Thompson Center Suite 11-500 100 W. Randolph Chicago, Illinois 60601 Mark C. Eiden Mark C. Eiden & Associates, PC. Suite 4 611 S. Milwaukee Avenue Libertyville, IL 60048

John Tierney 36701 N. Highway 83 Lake Villa, IL 60046

Bradley P. Halloran, Hearing Officer Illinois Pollution Control Board James R. Thompson Center Suite 11-500 100 W. Randolph Chicago, Illinois 60601

Vera Tierney 36701 N. Highway 83 Lake Villa, IL 60046

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Illinois Pollution Control Board an APPEARANCE and AGENCY RESPONSE TO PETITION FOR WATER WELL SETBACK EXCEPTION, copies of which are herewith served upon you.

ILLINOIS ENVIRONMENTAL PROTECTION

AGENCY

Stephanie Flowers

Assistant Counsel

Division of Legal Counsel

DATED: 4-/7-/4
1021 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9276

(217) 782-5544

Stephanie.Flowers@Illinois.gov

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

| ASCEND R.L.B., INC. |) | |
|--------------------------------|---|--------------------------|
| |) | |
| Petitioner, |) | |
| v. |) | PCB No. 2014-122 |
| |) | (Petition for Water Well |
| ILLINOIS ENVIRONMENTAL |) | Setback Exception) |
| PROTECTION AGENCY, |) | • |
| JOHN TIERNEY AND VERA TIERNEY, |) | |
| |) | |
| Respondents. |) | |

APPEARANCE

The undersigned hereby enters her appearance as attorney in the above-titled proceeding on

behalf of the Illinois Environmental Protection Agency.

Stephanie Flowers

Assistant Counsel

DATED: 4-17-14
Illinois Environmental Protection Agency

1021 North Grand Avenue East

P.O. Box 19276

Springfield, Illinois 62794-9276

(217) 782-5544

Stephanie.Flowers@Illinois.gov

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

| ASCEND R.L.B., INC. |) | |
|--------------------------------|---|--------------------------|
| |) | |
| Petitioner, |) | |
| v. |) | PCB No. 2014-122 |
| |) | (Petition for Water Well |
| ILLINOIS ENVIRONMENTAL |) | Setback Exception) |
| PROTECTION AGENCY, |) | |
| JOHN TIERNEY AND VERA TIERNEY, |) | |
| |) | |
| Respondents. |) | |

AGENCY RESPONSE TO PETITION FOR WATER WELL SETBACK EXCEPTION

NOW COMES the Illinois Environmental Protection Agency ("Agency"), by and through one of its attorneys, Stephanie Flowers, and respectfully submits its AGENCY RESPONSE TO PETITION FOR WATER WELL SETBACK EXCEPTION ("Response") according to 35 Ill. Adm. Code 106.306(a). This Response is in reply to the Petition filed with the Illinois Pollution Control Board ("Board") on March 27, 2014, by Petitioner ASCEND R.L.B., INC. ("Ascend") requesting a Water Well Setback Exception pursuant to Section 14.2 of the Illinois Environmental Protection Act ("Act"), 415 ILCS 5/14.2.

INTRODUCTION

- 1. Section 14.2(a) of the Act establishes a minimum setback zone for the location of each new potential source or new potential route as follows:
 - (a) Except as provided in subsections (b), (c) and (h) of this Section, no new potential route or potential primary source or potential secondary source may be placed within 200 feet of any existing or permitted community water supply well or other potable water supply well.

Ascend proposes to build a septic system on property it owns that is adjacent to property owned by the Respondents John and Vera Tierney. The septic system is proposed to be installed within 200 feet of a potable water well located on the property of Respondents John and Vera Tierney ("Tierney well"). The septic system falls within the definition of a "new potential route" to groundwater pursuant to Section 3.350 of the Act.

- 2. Section 14.2(b) of the Act contains a description of the information that must be provided to the Agency and a well owner to obtain a waiver from the minimum setback zone prohibitions of Section 14.2(a). Section 14.2(b) further describes the criteria on which the Agency must base its decision on issuance of a letter of concurrence to the owner of a potential route or a potential source. The owner of the potential route or potential source must adequately describe the possible effect of the potential source or potential route on the well and adequately describe any technology-based controls that will minimize the risk. Ascend did provide the required information to the Agency and based on the criteria described in the Act the Agency issued a letter of concurrence dated October 2, 2013.
- 3. Should a well owner choose not to grant a waiver, Section 14.2(c) of the Act provides a process by which the owner of a potential route or a potential source may petition the Board for an exception to the minimum setback zone prohibitions of Section 14.2(a) of the Act. Section 14.2(c) states the required information that must be included in an exception petition, and the demonstrations that a petitioner is required to make in order for the Board to grant an exception. Section 14.2(c) requires the petitioner to file a petition with both the Board and the Agency. The petitioner is also required to show proof that all water supplies affected by the proposed exception have been notified and provided a copy of the petition. The petition must also contain a general description of the potential impacts of the potential source or potential

route on groundwater and the potable well, and an explanation of the applicable technology that will be used to minimize risk. The Act states that the Board shall grant an exception upon presentation of adequate proof that: compliance with the setback zone would pose an arbitrary and unreasonable hardship; petitioner will use best available technology; the maximum feasible setback zone will be utilized; and the location of the potential source or route does not constitute a significant hazard to the potable water supply well.

PETITION

4. The Agency received the Petition for the Setback Exception on March 31, 2014. It has been given Agency file number 107-14.

NOTIFICATION OF WATER SUPPLY

5. A certificate of service was included with the petition stating that Respondent John Tierney and Respondent Vera Tierney, whose potable water supply well is the affected water supply for which a waiver was not granted, have been provided with a copy of the petition.

GENERAL DESCRIPTION OF POTENTIAL IMPACTS

6. The Agency believes the petitioner has adequately described the potential impacts of the potential route on groundwater and the potable well. The petitioner acknowledges some risk from the operation of the potential route. However, the petitioner states that the risk will be minimal due to the construction of the Tierney well and the natural geologic materials located in the subsurface. The Agency reviewed well logs available in the general area of the subject property, which indicate that 60 to 90 feet of clay is typically encountered between the surface

and the aquifer being used by local wells. Clay is a low permeability material that impedes the movement of groundwater and any contaminants that may be contained in the groundwater. This determination is further supported by the soils assessment completed by the Lake County Health Department. The Health Department determined that a "limiting layer" exists at 26 inches or less below land surface. A limiting layer is a low permeability layer that impedes the flow of effluent from the seepage field. The low permeability layer will impede the flow of effluent into the ground, hence the reason a mound system must be used instead of a below grade leach field.

ARBITRARY AND UNREASONABLE HARDSHIP

7. The petitioner states that denial of the exception would pose an arbitrary and unreasonable hardship. To support this statement the Agency believes additional information should be provided by the petitioner indicating the additional cost of extending a sewer to the property relative to the cost of the development as proposed. Further, the Agency believes a comparison of the economic benefit the petitioner will realize if the property is developed as a commercial property instead of residential properties is relevant to the petitioner's argument. The petitioner should also provide evidence that there was a reasonable expectation that the property could be developed as a commercial site.

BEST AVAILABLE TECHNOLOGY CONTROLS

8. The petitioner has committed to having inspections of the system done twice yearly by a licensed professional. In addition, the proposed system will be installed by a licensed installer, per the design requirements of the Lake County Health Department. The Agency does not specialize in septic systems, however the Agency is generally aware that the mound system is

not a new or experimental design. The Agency agrees that regular inspection and maintenance is the best available technology for managing a septic system. The Agency believes that in addition to having regular inspections by a licensed professional, the petitioner must commit to following the recommendations for service and repairs that the inspector makes.

In paragraph 11(c) of the petition, where the petitioner states, "Sometimes, during high use, wastewater can flow out of the tank before it has time to separate from the sludge," the Agency would like clarification on whether the condition being described applies only to "conventional" systems, presumably meaning anaerobic systems, or if this statement also applies to the aerobic

The Agency requests the following clarification:

9.

system being installed.

MAXIMUM FEASIBLE ALTERNATIVE SETBACK

10. The Agency agrees that the petitioner has located the potential route as far from the greatest number of potable wells possible, considering the site configuration and well locations.

ENVIRONMENTAL IMPACT/SIGNIFICANT HAZARD TO THE POTABLE WATER SUPPLY WELL

11. In most instances, the Agency's finding that the petitioner has adequately described the potential impacts of the potential route on groundwater and the subject potable well as minimal would render a related determination that there is no significant hazard. However, in this instance, the Agency believes it would be remiss if the potential for surface discharge is not also considered. The petitioner did provide a discussion that the single 500 gallon per day

commercial septic system would produce less effluent than two 300 gallon per day residential

septic systems that could theoretically be installed on a property of this size. The Agency is

aware that the size of a commercial septic system is based on the type of business that the system

will serve. The petitioner should provide information demonstrating that the 500 gallon per day

system is the appropriate size for the planned development on the property. An appropriately

sized system with proper maintenance should not pose a significant hazard.

CONCLUSION

12. If the Board grants the exception, the Agency recommends that the petitioner

offer to have the Tierney well sampled by an experienced third party, at the petitioner's expense,

for bacteria and nitrate prior to operating the proposed septic system. As the Tierney well is

privately owned, the Agency further recommends that the petitioner coordinate any such

sampling with the Lake County Health Department, provided the Tierney's are willing to grant

access to their well.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL

PROTECTION AGENCY

Stephanie Flowers

Assistant Counsel

Division of Legal Counsel

Dated: 4-17-14

ILLINOIS ENVIRONMENTAL

PROTECTION AGENCY

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

217/782-5544

THIS FILING IS SUBMITTED ON RECYCLED PAPER

6