

**INDIANA WELLHEAD PROTECTION PHASE II APPLICATION**

State Form 53117 (R / 3-10)

Indiana Department of Environmental Management

**Instructions** - Complete all sections of this application. Use the attached checklist to compile all the information required for Phase II submission per 327 IAC 8-4.1-8 and 8-4.1-9. This application must be attached to the Phase II Wellhead Protection Plan submittal.

**General information**

Date submitted (month/day/year)

System name

System PWSID number

Population served

WHP contact person with personal (Mr./Ms.) and professional title

Mailing address (number, street, city, state, ZIP code)

Telephone number (with area code):

E-mail address

Delineation contact person

Affiliation or company

Mailing address (number, street, city, state, ZIP code)

Telephone Number (with area code)

E-mail address

Include delineation contact person in IDEM communications?  Yes  No

Number of wellfields \_\_\_\_\_ Total number of wells \_\_\_\_\_

Does system use other sources of water (i.e. surface water, purchased water)?  Yes  No

If so, what percentage of each? Ground water \_\_\_\_\_ Surface water \_\_\_\_\_ Purchased \_\_\_\_\_

**Signature block**

I certify the information in this wellhead protection application is complete and accurate to the best of my knowledge.

\_\_\_\_\_  
Signature of responsible official or designated agent\_\_\_\_\_  
Date (month, day, year)**IDEM use only**

Date application received (month, day, year)

Do delineations overlap other community WHPA's?  Yes  No

If yes, list PWSIDs



<b>Instructions</b> - Indicate in the "Applicant Use" column if any changes were made and the page number or other appropriate reference where the specified information is located.	Applicant Use		IDEM Use	
	Changes made from Phase I? (yes/no)	Location in packet? (page # or appendix)	Information present?	Reviewer
<b>I. WHPA delineation using the model method 327 IAC 8-4.1-7 (If approved to used fixed radius delineation, skip to page 4, section III)</b>				
(a) Requires a report with a narrative description of the regional hydrogeologic setting, the conceptual model, and modeling efforts which includes				
(1) Analysis of hydrogeologic Setting and the Conceptual Model				
(A) A map of the area of interest				
(B) Review of published hydrogeologic and geologic interpretations of the area of interest				
(C) Geologic cross sections showing				
(i) hydrostratigraphic units				
(ii) water levels				
(iii) relationship of surface water bodies to the hydrostratigraphic units				
(iv) pumping wells with screened intervals				
(D) Well logs and records used in cross section development				
(E) Map(s) of the proposed WHPA illustrating: NOTE: All maps must be to scale between 1" = 400' to 1" = 1000' OR in digital format using DXF format and all data using UTM NAD 83 projection.				
(i) location of CPWSS wells				
(ii) location of high capacity wells registered as significant water withdrawal facilities				
(iii) surface water features				
(iv) thickness and extent of hydrostratigraphic units				
(v) regional ground water levels				
(vi) bedrock topography				
(F) Summary of raw data used in the development of the conceptual model				
(G) Discussion of hydrogeologic parameters				
(H) Discussion of the ground water flow system including				
(i) distribution of recharge				
(ii) current CPWSS pumping rates and planned changes in pumping rates				
(iii) pumping rates of neighboring high-capacity wells				
(2) Presentation and Discussion of Modeling Effort				
(A) Rationale for the delineation method selected				
(B) Tabulated summary of model input parameters showing the range over which parameters were varied				
(C) Example input file				

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<b>I. WHPA delineation using the model method 327 IAC 8-4.1-7 (continued)</b>			
(D) Map(s) illustrating			
(i) the domain of the modeled area within the area of interest			
(ii) location of any boundary conditions used			
(iii) calibration target locations if used			
(iv) modeled potentiometric surfaces			
(v) resulting WHPA boundaries			
(E) Discussion of			
(i) assumptions used in modeling effort			
(ii) changes made to initial conditions			
(iii) calibration analysis if used			
(iv) water budget of the model if available			
(v) effects of uncertainty in input parameters and boundary conditions on modeled WHPA boundaries.			
<b>II. Professional certification 328 IAC 8-4.1-8(2)</b>			
Verification that delineation was performed by or under the supervision of a Certified Professional Geologist (other if applicable)			
<b>III. WHPA delineation using the fixed radius method: 327 IAC 8-4.1-7(b)</b>			
(b) A copy of IDEM approval letter for use of fixed radius method			
(1) Map(s) illustrating			
(A) WHPA boundary			
(B) CPWSS pumping well locations			
(C) location of wells in the WHPA registered as significant water withdrawal facilities			
(2) A topographic map of the area			
(3) Well logs for the CPWSS pumping well(s)			
<b>IV. Local planning team (LPT) representation 327 IAC 8-4.1-4</b>			
(a) Verification that the CPWSS coordinated, formed or participated in the LPT (e.g., copies of meeting minutes, agendas, sign-in sheets);			
(b) Names and affiliations of all LPT representatives			
Identification of affected party represented on LPT			
(c) Copies of public notice indicating the formation of the LPT.			

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V. Inventory of potential sources of contamination: 327 IAC 8-4.1-8(3)			
(A) A narrative description of land use within the WHPA			
(B) Map(s) with potential sources of contamination plotted, showing their locations relative to the WHPA			
(C) A table containing information describing the potential sources of contamination which includes			
(i) facility identification number(s)			
(ii) facility name(s) and location(s)			
(iii) site description(s)			
(iv) any environmental permits issued for the site(s) including permit number and issuing agency			
(v) types of contamination at the site			
(vi) operating status of site			
VI. Management plan requirements: 327 IAC 8-4.1-8(4)			
(A) Must include a plan to manage the sanitary setback area which contains			
(i) a description of the measures to manage the areas consistent with the requirements of 327 IAC 8-3			
(ii) a description of measures to prohibit the storage and mixing of chemicals, other than those used for drinking water treatment or pesticides regulated by the Pesticide Review Board:			
(iii) a description of the provisions to secure the wellhead to prevent unauthorized access			
(iv) guidelines that employ best management practices for transportation routes within the sanitary setback area			
(B) A separate plan to manage the WHPA which contains			
(i) a description of the management or monitoring measures for all potential sources of contamination. Measures must consider			
(AA) location(s) of potential sources of contamination			
(BB) type(s) of potential sources of contamination			
(CC) hydrogeologic characteristics of the WHPA			
(ii) a verification that CPWSS production wells comply with state construction standards and permit requirements			
(iii) a copy of the Standardized Monitoring Framework received by IDEM for the contaminants associated with identified potential sources of contamination			
(iv) methods or procedures for maintaining and updating records concerning changes in potential sources of contamination within the WHPA			
(v) a description of methods used to identify abandoned wells not in compliance with IC 25-39-4-6 and 310 IAC 16-10			
(vi) a description of how use, application, storage, mixing, loading, transportation, and disposal of pesticides complies with IC 15-3-3.5 and 3.6			

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<b>VI. Management plan requirements: 327 IAC 8-4.1-8(4) (continued)</b>				
(vii) a description of how property owners, mineral owners and leaseholders of record are notified that they are located in a WHPA				
(viii) a description of how owners and operators of identified potential sources of contamination are provided access to a copy of the WHPP				
(ix) a description of the public outreach program to educate the public and owners or operators of potential sources of contamination about the consequences of ground water contamination and methods available to avoid contamination				
(x) the locations of wellhead protection signs along major thoroughfares along the perimeter of the WHPA				
(xi) a description of any other management measures required to comply with this rule				
<b>VII. Contingency plan requirements: 327 IAC 8-4.1-8(5)</b>				
(A) A copy of the local responder training plan				
(B) A description of the procedures to be used in emergency response to leaks, spills or illegal discharges				
(C) A copy of the list of information provided to local responders, which must include				
(i) location of the WHPA boundaries				
(ii) names of CPWSS operators to contact in case of emergency				
(iii) twenty-four (24) hour telephone numbers for				
(AA) IDEM Office of Environmental Response				
(BB) state and local city/county police and fire/hazmat team				
(CC) city or county disaster services agency				
(DD) water supply owner, superintendent and operator;				
(EE) city or county hospital				
(D) An identification and description of potential alternate sources of water				
(E) A description of the procedures and methods to be used in notifying critical water users of an emergency				
(F) A copy of the procedures to follow in an emergency and the locations and description of the availability of the complete contingency plan.				

Please submit this application along with the Phase II Wellhead Protection Plan to:

Indiana Department of Environmental Management  
Office of Water Quality - Ground Water Section  
100 N. Senate Avenue, RM 1255  
MC 66-33-2  
Indianapolis, IN 46204-2251

For more information call (317) 232-8728 or (800) 451-6027 toll-free in Indiana  
Web access at [www.idem.IN.gov/4289.htm](http://www.idem.IN.gov/4289.htm)