Reset Form

INDIANA WELLHEAD PROTECTION PHASE II APPLICATION

State Form 53117 (R2 / 6-20)
INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

INSTRUCTIONS: The purpose of the Phase II Wellhead Protection plan is to document the implementation of the Phase I plan. Complete all sections of this application. Use the checklist below to compile all the information required for Phase II submission per 327 IAC 8-4.1-9 and 327 IAC 8-4.1-10. Submittal instructions are at the end of this form.

GENERAL INFORMATION

Name of Public Water Supply		
PWSID Number	**Population Served**	
Date Submitted *(MM/DD/YYYY)* / /		
Name of Wellhead Protection Contact Person	**Professional Title**	
Mailing Address *(number and street)*		
City	**State**	**ZIP Code**
Telephone Number *(with area code)* ( )		
E-mail Address		
Name of Delineation Contact Person		
Affiliation or Company		
Mailing Address *(number and 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 or purchased water)***?** ☐ **Yes** ☐ **No**		
If so, What Percentage of Each? **Groundwater**	**Surface Water**	**Purchased**

SIGNATURE BLOCK

I swear or affirm, under penalty of perjury as specified by IC 35-44.1-2-1 and other penalties specified by IC 13-30-10, that the statements and representations in this application are true, accurate, and complete.

Signature of Responsible Official or Designated Agent	**Date** *(MM/DD/YYYY)* / /
Professional Title	

IDEM USE ONLY

Date Application Received *(MM/DD/YYYY)* / /	
Do Delineations Overlap Other Community WHPA's? ☐ **Yes** ☐ **No**	
If Yes, List PWSIDs	

LOCATION OF WELLS *(Please use UTM if available; attach additional sheets as necessary.)*				
Well Identification Number and/or Name	**Wellfield Name**	**UTM-N**	**UTM-E**	**New Well Since Phase I?** *(Yes or No)*

Please Identify the Source of Your Location Information *(i.e. GPS, map, etc.)*:

INSTRUCTIONS: Complete the "Applicant Use" columns. *NOTE: **All maps** must use UTM NAD 83 projection and be drawn to a scale between 1" = 400' to 1" = 1000' and **all topographic maps** must be United States Geologic Survey (USGS) seven and one-half (7.5) minute series, per 327 IAC 8-4.1-6.*	**Applicant Use**		**IDEM Use**	
	Changes made from Phase I? *(Yes, No, N/A)*	**Location in packet?** *(page number or appendix)*	**Information present?** *(Yes, No, N/A)*	**Item Number**
I. Wellhead Protection Area (WHPA) Delineation Using the Model Method: 327 IAC 8-4.1-5; 327 IAC 8-4.1-7; 327 IAC 8-4.1-9(1); and 327 IAC 8-4.1-10(a)(1) *(If approved to use fixed radius delineation, skip to page 4, section III.)*				
(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:				1
(A) A map of the area of interest.				2
(B) Review of published hydrogeologic and geologic interpretations of the area of interest.				3
(C) Geologic cross sections showing:				
(i) Hydrostratigraphic units.				4
(ii) Water levels.				5
(iii) Relationship of surface water bodies to the hydrostratigraphic units.				6
(iv) Pumping wells with screened intervals.				7
(D) Well logs and records used in cross section development.				8
(E) Map(s) of the proposed WHPA illustrating:				
(i) Location of Community Public Water Supply System (CPWSS) wells.				9
(ii) Location of high capacity wells registered as significant water withdrawal facilities.				10
(iii) Surface water features.				11
(iv) Thickness and extent of hydrostratigraphic units.				12
(v) Regional groundwater levels.				13
(vi) Bedrock topography.				14
(F) Summary of raw data used in the development of the conceptual model.				15
(G) Discussion of hydrogeologic parameters.				16
(H) Discussion of the groundwater flow system including:				
(i) Distribution of recharge.				17
(ii) Current CPWSS pumping rates and planned changes in pumping rates. ***Attach pumping data summary from last five (5) years (average daily rate and/or annual total).***				18
(iii) Pumping rates of neighboring high-capacity wells.				19
(2) Presentation and discussion of modeling effort:				
(A) Rationale for the delineation method selected.				20
(B) Tabulated summary of model input parameters showing the range over which parameters were varied.				21
(C) Example input file.				22
(D) Map(s) illustrating:				
(i) The domain of the modeled area within the area of interest.				23
(ii) Location of any boundary conditions used.				24
(iii) Calibration target locations if used.				25
(iv) Modeled potentiometric surfaces.				26
(v) Resulting WHPA boundaries.				27

	Applicant Use		IDEM Use	
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I. WHPA Delineation Using the Model Method: 327 IAC 8-4.1-5; 327 IAC 8-4.1-7; 327 IAC 8-4.1-9(1); and 327 IAC 8-4.1-10(a)(1) *(continued)*				
(E) Discussion of:				
(i) Assumptions used in modeling effort.				28
(ii) Changes made to initial conditions.				29
(iii) Calibration analysis if used.				30
(iv) Water budget of the model if available.				31
(v) Effects of uncertainty in input parameters and boundary conditions on modeled WHPA boundaries.				32
II. Professional Certification: 327 IAC 8-4.1-8(2)				
Verification that delineation was performed by or under the supervision of a Licensed Professional Geologist *(other if applicable)*.				33
III. WHPA Delineation Using the Fixed Radius Method: 327 IAC 8-4.1-5; 327 IAC 8-4.1-7; 327 IAC 8-4.1-9(1); and 327 IAC 8-4.1-10 *(If approved to use Model method for delineation, skip to page 4, section IV.)*				
(b) A copy of IDEM approval letter for use of fixed radius method.				34
(1) Map(s) illustrating:				
(A) WHPA boundary.				35
(B) CPWSS pumping well locations.				36
(C) Location of wells in the WHPA registered as significant water withdrawal facilities.				37
(2) A United States Geological Survey (USGS) topographic map of the area.				38
(3) Well logs for the CPWSS pumping well(s). ***Attach pumping data summary from last five (5) years (average daily rate and/or annual total).***				39
IV. Local Planning Team (LPT) Representation: 327 IAC 8-4.1-4 and 327 IAC 8-4.1-8(1)				
(a) Verification that the CPWSS coordinated and formed or participated in the LPT *(i.e. copies of meeting minutes, agendas, sign-in sheets, etc.).*				40
(b) Names and affiliations of all LPT representatives;				41
(A) Identification of affected party represented on LPT.				42
(c) Copies of public notice indicating the formation of the LPT.				43
V. Inventory of Potential Sources of Contamination: 327 IAC 8-4.1-8(3); 327 IAC 8-4.1-9(2); and 327 IAC 8-4.1-10(a)(2)				
(A) A narrative description of land use within the WHPA.				44
(B) Map(s) with potential sources of contamination plotted, showing their locations relative to the WHPA.				45
(C) A table containing information describing the potential sources of contamination, which includes:				46
(i) Facility identification number(s).				47
(ii) Facility name(s) and location(s).				48
(iii) Site description(s).				49
(iv) Any environmental permits issued for the site(s), including permit number and issuing agency.				50
(v) Types of contamination at the site.				51
(vi) Operating status of site.				52

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VI. Management Plan Requirements: 327 IAC 8-4.1-8(4); 327 IAC 8-4.1-9(3); and 327 IAC 8-4.1-10(a)(3)				
(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.				53
(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.				54
(iii) A description of the provisions to secure the wellhead to prevent unauthorized access.				55
(iv) Guidelines that employ best management practices for transportation routes within the sanitary setback area.				56
(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:				57
(AA) Location(s) of potential sources of contamination;				58
(BB) Type(s) of potential sources of contamination;				59
(CC) Hydrogeologic characteristics of the WHPA.				60
(ii) A verification that CPWSS production wells comply with state construction standards and permit requirements.				61
(iii) A copy of the Standardized Monitoring Framework received by IDEM for the contaminants associated with identified potential sources of contamination.				62
(iv) Methods or procedures for maintaining and updating records concerning changes in potential sources of contamination within the WHPA.				63
(v) A description of methods used to identify abandoned wells not in compliance with IC 25-39-4-6 and 310 IAC 16-10.				64
(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.				65
(vii) A description of how property owners, mineral owners and leaseholders of record are notified that they are located in a WHPA.				66
(viii) A description of how owners and operators of identified potential sources of contamination are provided access to a copy of the Wellhead Protection Plan (WHPP).				67
(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 groundwater contamination, and methods available to avoid contamination.				68
(x) The locations of wellhead protection signs along major thoroughfares along the perimeter of the WHPA.				69
(xi) A description of any other management measures required to comply with this rule.				70

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VII. Contingency Plan Requirements: 327 IAC 8-4.1-8(5) and 327 IAC 8-4.1-9(4)				
(A) A copy of the local responder training plan.				71
(B) A description of the procedures to be used in emergency response to leaks, spills, or illegal discharges.				72
(C) A copy of the list of information provided to local responders, which must include:				
(i) Location of the WHPA boundaries.				73
(ii) Names of CPWSS operators to contact in case of emergency.				74
(iii) Twenty-four (24) hour telephone numbers for:				
(AA) IDEM Office of Emergency Response.				75
(BB) State, local, and city/county police and fire/hazmat team.				76
(CC) City or county disaster services agency.				77
(DD) Water supply owner, superintendent, and operator.				78
(EE) City or county hospital.				79
(D) An identification and description of potential alternate sources of water.				80
(E) A description of the procedures and methods to be used in notifying critical water users of an emergency.				81
(F) A copy of the procedures to follow in an emergency and the locations and description of the availability of the complete contingency plan.				82

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

E-mail: GWsection@idem.in.gov
Mail: Indiana Department of Environmental Management
Drinking Water Branch – Groundwater Section
100 North Senate Avenue, IGCN 1201
Mail Code 66-33
Indianapolis, IN 46204-2251
Fax: 317-234-7462

We encourage you to learn more about how to protect your water supply at the source by going to our Wellhead Protection Program web page https://www.in.gov/idem/cleanwater/2456.htm.

If you have questions please call the Groundwater Section at 317-234-7477.