## CRITERIA FOR A PHASE 2 SOURCE WATER PROTECTION (SWP) PLAN <u>DRAFT 05-09</u>

- 1) A SWP Community Planning Team
  - a) Required participants (If you cannot get representatives from these groups to participate, please call the IDNR SWP Program at 515-281-0932 to discuss other options.)
    - i) A minimum of 1 city or governing entity representative in addition to the city water operator.
    - ii) A USDA-NRCS and/or County SWCD representative
    - iii) At least one land owner and/or operator from the 2, 5, or 10 year capture zone areas
  - b) In addition, an IDNR field office representative should attend at least one SWP planning team meeting.
  - c) In addition, suggested participants include: the county sanitarian, the community historian, and other local, state, and federal elected officials.
  - d) Planning Team members contact information shall be included in the plan.
- 2) Verify and add information to the Source Water 'Phase 1' report and drill logs:
  - a) Include all known public/private wells in the 2, 5, or 10 year capture zones, including all available drill logs.
  - b) Include IDNR Contaminated Sites (CS's) and Leaking Underground Storage Tanks (LUST) section's information (contact IDNR CS's/LUST sections if needed). CS's website: <a href="http://www.iowadnr.gov/land/consites/index.html">http://www.iowadnr.gov/land/consites/index.html</a>. LUST's website:
    - http://programs.iowadnr.gov/ustlust/pages/advanced.aspx as well as: http://www.iowadnr.com/land/ust/index.html
  - c) Include present and available historical locations of Ag Chemical/Fertilizer dealerships and applicators. If available and applicable, include county spill reports.
  - d) Include present and available historical raw water well sampling data.
  - e) Include most recent Sanitary Survey (available from IDNR Water Supply Operations and/or SWP Database Tracker website located at: http://gsbdata.igsb.uiowa.edu/sourcewater/).
  - f) Include present and available historical land use data within the capture zone. It is suggested that local residents and past water operators, as well as the county USDA-Service Center office, be contacted to verify land use within the capture zone areas. Web-based mapping applications may also be a useful information source to obtain some of this information. Historical aerial photography from the 1930s onward should be reviewed for historical sources of contamination.

- 3) Assessment of potential risk:
  - a) At a minimum: review and update, as needed, the ranking prepared within the IDNR SWP Phase 1 Report. Please contact Chad Fields (319-335-2083) if further assistance or clarification is needed.
  - b) In addition, recommend: identify and rank the community's point and non-point sources of potential risks. The list should be submitted to the IDNR SWP program for review. Email the list to: Chad.Fields@dnr.iowa.gov. Verify the following SWP Phase 1 Report information: Potential Contaminant Source Inventory and Assessment, the Active/Inactive Well Data, Land Use Coverage, and Source Water Protection Area Delineation. Modify and or enhance the ranking as needed and consult with Chad Fields of the IDNR SWP program regarding the assessment of the potential risks.
  - c) If applicable, identify specific sources of potential or actual water quality problems (nitrate, benzene, bacteria, etc.). This may include evaluating raw water samples from each public well to identify if all wells are contaminated or if the contaminant is present in a specific well. Please contact the SWP Coordinator (Rebecca.Ohrtman@dnr.iowa.gov) for raw water monitoring plan assistance. It is recommended to conduct raw water monitoring in each active public well if the public water supply's finished water is in jeopardy of exceeding an MCL or is continuing to trend upward in a specific contaminant.
  - d) In addition, it may be helpful to access the IDNR SWP website for additional guidance information. The website is: <a href="http://www.iowadnr.com/water/watershed/sourcewater.html">http://www.iowadnr.com/water/watershed/sourcewater.html</a>
- 4) Identify Best Management Practices (BMP's) and their locations that, if implemented, can decrease risk for the community water supply. Include planning for future/long term water needs and potential well locations. The practices should be categorized as: "Proactive" and/or "Reactive". Please visit the IDNR SWP website for a list of potential SWP BMP's: <a href="http://www.iowadnr.com/water/watershed/sourcewater.html">http://www.iowadnr.com/water/watershed/sourcewater.html</a>
  The IDNR SWP program will assess these practices prior to plan approval to provide input as to whether these practices will decrease risk. If it is determined these practices decrease risk and are adequately implemented the SWP program will acknowledge to EPA the CWS has successfully implemented the SWP plan.
- 5) Develop a SWP Work Plan that prioritizes practices to be implemented
  - a) Identify potential funding sources for implementing BMP's.
  - b) Who, What, When, Where i.e. person(s) responsible for implementing practices, types of practices, the BMP's date of implementation, expected date of completion, location of BMP's, and follow-up, etc.
  - c) I.D. length of time practices will stay in place maintenance agreements, etc.
- 6) Develop an Emergency Response/Long Term Source Water Protection Plan:
  - a) Provide an affidavit indicating the community possesses an Emergency Response Plan (ERP). Please see IDNR SWP website for the affidavit template and ERP example.
  - b) Recommend including future/long term planning for community water needs.

## FUTURE RECOMMENDATIONS:

- Develop a Work Plan that includes implementing BMP's identified in Step 4 above.
- Review SWP plan on a bi-annual basis and update work plan as needed.