Refer to the following table to determine which meteorological dataset should be used in AERMOD dispersion modeling analyses conducted in Iowa. Some counties are subdivided into river valley and the remainder of the county. River valley areas are defined by the edge of their corresponding flood plain.

County	Portion of County	Representative Meteorological Dataset
Adair	Entire County	KDSM (Des Moines)
Adams	Entire County	KHNR (Harlan)
Allamakee	Mississippi River Valley	Refer to Technical Support Document
	Remainder of County	KALO (Waterloo)
Appanoose	Entire County	KOTM (Ottumwa)
Audubon	Entire County	KHNR (Harlan)
Benton	Entire County	KCID (Cedar Rapids)
Black Hawk	Entire County	KALO (Waterloo)
Boone	Entire County	KAMW (Ames)
Bremer	Entire County	KALO (Waterloo)
Buchanan	Entire County	KALO (Waterloo)
Buena Vista	Entire County	KSPW (Spencer)
Butler	Entire County	KALO (Waterloo)
Calhoun	Entire County	KFOD (Fort Dodge)
Carroll	Entire County	KSPW (Spencer)
Cass	Entire County	KHNR (Harlan)
Cedar	Entire County	KIOW (Iowa City)
Cerro Gordo	Entire County	KMCW (Mason City)
Cherokee	Entire County	KSPW (Spencer)
Chickasaw	Entire County	KALO (Waterloo)
Clarke	Entire County	KLWD (Lamoni)
Clay	Entire County	KSPW (Spencer)
Clayton	Mississippi River Valley	Refer to Technical Support Document
	Remainder of County	KIOW (Iowa City)
Clinton	Mississippi River Valley	KMLI (Moline)
	Remainder of County	KDVN (Davenport)
Crawford	Entire County	KHNR (Harlan)
Dallas	Entire County	KDSM (Des Moines)
Davis	Entire County	KOTM (Ottumwa)
Decatur	Entire County	KLWD (Lamoni)
Delaware	Entire County	KIOW (Iowa City)
Des Moines	Entire County	KBRL (Burlington)
Dickinson	Entire County	KSPW (Spencer)
Dubuque	Mississippi River Valley	Refer to Technical Support Document
	Remainder of County	KDBQ (Dubuque)
Emmet	Entire County	KEST (Estherville)
Fayette	Entire County	KALO (Waterloo)
Floyd	Entire County	KMCW (Mason City)
Franklin	Entire County	KMCW (Mason City)

County	Portion of County	Representative Meteorological Dataset
Fremont	Missouri River Valley	KOMA (Omaha)
	Remainder of County	KHNR (Harlan)
Greene	Entire County	KAMW (Ames)
Grundy	Entire County	KMIW (Marshalltown)
Guthrie	Entire County	KDSM (Des Moines)
Hamilton	Entire County	KMIW (Marshalltown)
Hancock	Entire County	KMCW (Mason City)
Hardin	Entire County	KMIW (Marshalltown)
Harrison	Missouri River Valley	KOMA (Omaha)
	Remainder of County	KHNR (Harlan)
Henry	Entire County	KBRL (Burlington)
Howard	Entire County	KALO (Waterloo)
Humboldt	Entire County	KFOD (Fort Dodge)
Ida	Entire County	KSPW (Spencer)
Iowa	Entire County	KCID (Cedar Rapids)
Jackson	Mississippi River Valley	Refer to Technical Support Document
	Remainder of County	KDBQ (Dubuque)
Jasper	Entire County	KDSM (Des Moines)
Jefferson	Entire County	KOTM (Ottumwa)
Johnson	Entire County	KIOW (Iowa City)
Jones	Entire County	KIOW (Iowa City)
Keokuk	Entire County	KOTM (Ottumwa)
Kossuth	Entire County	KEST (Estherville)
Lee	Entire County	KBRL (Burlington)
Linn	Entire County	KCID (Cedar Rapids)
Louisa	Entire County	KIOW (Iowa City)
Lucas	Entire County	KOTM (Ottumwa)
Lyon	Entire County	KFSD (Sioux Falls)
Madison	Entire County	KDSM (Des Moines)
Mahaska	Entire County	KOTM (Ottumwa)
Marion	Entire County	KDSM (Des Moines)
Marshall	Entire County	KMIW (Marshalltown)
Mills	Missouri River Valley	KOMA (Omaha)
	Remainder of County	KHNR (Harlan)
Mitchell	Entire County	KMCW (Mason City)
Monona	Missouri River Valley	KSUX (Sioux City)
	Remainder of County	KHNR (Harlan)
Monroe	Entire County	KOTM (Ottumwa)
Montgomery	Entire County	KHNR (Harlan)
Muscatine	Entire County	KIOW (Iowa City)
O'Brien	Entire County	KSPW (Spencer)
Osceola	Entire County	KSPW (Spencer)
Page	Entire County	KHNR (Harlan)

County	Portion of County	Representative Meteorological Dataset
Palo Alto	Entire County	KEST (Estherville)
Plymouth	Entire County	KFSD (Sioux Falls)
Pocahontas	Entire County	KSPW (Spencer)
Polk	Entire County	KDSM (Des Moines)
Pottawattamie	Missouri River Valley	KOMA (Omaha)
	Remainder of County	KHNR (Harlan)
Poweshiek	Entire County	KMIW (Marshalltown)
Ringgold	Entire County	KLWD (Lamoni)
Sac	Entire County	KSPW (Spencer)
Scott	Mississippi River Valley	KMLI (Moline)
	Remainder of County	KDVN (Davenport)
Shelby	Entire County	KHNR (Harlan)
Sioux	Entire County	KFSD (Sioux Falls)
Story	Entire County	KAMW (Ames)
Tama	Entire County	KMIW (Marshalltown)
Taylor	Entire County	KLWD (Lamoni)
Union	Entire County	KLWD (Lamoni)
Van Buren	Entire County	KOTM (Ottumwa)
Wapello	Entire County	KOTM (Ottumwa)
Warren	Entire County	KDSM (Des Moines)
Washington	Entire County	KOTM (Ottumwa)
Wayne	Entire County	KLWD (Lamoni)
Webster	Entire County	KFOD (Fort Dodge)
Winnebago	Entire County	KMCW (Mason City)
Winneshiek	Entire County	KALO (Waterloo)
Woodbury	Missouri River Valley	KSUX (Sioux City)
	Remainder of County	KSPW (Spencer)
Worth	Entire County	KMCW (Mason City)
Wright	Entire County	KMCW (Mason City)