

APPENDIX C – ATTACHMENT 3

Glossary

Abandoned/Not Capped Well: a well taken offline and currently not in use. The well is still open and accessible. Depending on the circumstances, the well possibly could be used in the future.

Aquifer: a geological formation under the Earth's surface capable of storing and transmitting useable quantities of water.

Capped Well: a well that has a tight fitting seal placed on top of the well to prohibit contaminants from entering the well and from entering the aquifer.

Class B Recycling Facility: Class B materials are source separated recyclable material which is subject to Department approval prior to receipt, storage, processing or transfer at a recycling center in accordance with N.J.S.A. 13:1E-99.34b, and which includes, but is not limited to, the following: non-putrescible, waste concrete, asphalt, brick, block, asphalt-based roofing scrap and wood waste; non-putrescible, waste materials other than metal, glass, paper, plastic containers, corrugated and other cardboard resulting from construction, remodeling, repair and demolition operations on houses, commercial buildings, pavements and other structures; separated whole trees, tree trunks, tree parts, tree stumps, brush and leaves provided that they are not composted; scrap tires; and separated petroleum contaminated soil.

Class C Recycling Facility: Class C materials are source separated compostable material which is subject to Department approval prior to the receipt, storage, processing or transfer at a recycling center in accordance with N.J.S.A. 13:1E-99.34b, and which includes, but is not limited to, organic materials such as: food waste, vegetative food waste and yard trimmings (a compost facility.)

Classification Exception Area (CEA): serves as an institutional control by providing notice that there is ground water pollution in a localized area caused by a discharge at a contaminated site. The area and depth of ground water pollution is determined based on actual ground water contamination, as well as, fate and transport modeling. A ground water classification exception area is established as part of a remedial action for ground water at a contaminated site when the ground water does not meet the ground water quality standards, pursuant to N.J.A.C. 7:9-6.

Combined Sewer Overflow (CSO): is designed to carry both sanitary sewage and stormwater at all times. When it rains this system sometimes lacks the necessary capacity to carry all of the sewage and stormwater, causing an overflow into a water body. The overflow may contain pathogens, floatable debris, toxic metals, settleable solids, toxic organic chemicals, nutrients, and organic contaminants.

Community Water System (CWS): a public water system that has at least 15 service connections used by year around residents, or regularly serves at least twenty-five year round residents. Examples of a community water system are mobile home communities, municipalities, and subdivisions with their own water systems.

Conceptual Explanatory Variable: a factor that has been shown in a previous scientific investigation to be related to, or is expected to have an effect on, the concentrations of a constituent. Conceptual variables that did not produce significant univariate statistical relations may, however, produce a significant relation when used with other variables in multivariate statistical tests.

Confined Aquifer: an aquifer in which groundwater is stored in more permeable geologic units bounded between less permeable layers, such as clay.

Consumer Confidence Report (CCR): an annual report containing water quality information, developed by a public community water system, which is mailed to the system's customers. The regulations defining the format and content of the CCR can be found in the National Regulations, 40 CFR and N.J.A.C 7:10 –5.

Contaminant: any physical, chemical, biological or radiological substance in water.

Currently Known Extent (CKE): are geographically defined areas within which the local ground water resources are known to be compromised because the water quality exceeds drinking water and ground water quality standards for specific contaminants. CKEs are used by New Jersey Department of Environmental Protection staff, water purveyors, and local officials to make decisions concerning appropriate treatment and/or replacement of contaminated drinking water supplies.

Discharge Prevention and Countermeasures Plans and Discharge Cleanup and Removal Plans (DPCC): facilities containing a combined above-ground and below-ground (buried) total of 200,000 gallons or more of hazardous substances, including petroleum products, are required to prepare and submit a Discharge Prevention Containment and Countermeasure (DPCC) Plan and a Discharge Cleanup and Removal (DCR) Plan to the DEP.

Disinfection Byproduct Precursors (DBP Precursors): the breakdown products of decaying vegetation that chlorine disinfectants react with to form disinfectant byproducts, classes of chemicals regulated in drinking water. Control of the precursors is one strategy for decreasing the occurrence of the disinfectant byproducts in treated drinking water. Common disinfectant byproducts are trihalomethanes and haloacetic acids.

Emergency Well: a standby well used on a temporary basis only if or when a problem occurs to the primary water source.

Entry Point to the Distribution System (EPTDS): a location in the public water system where water enters into the distribution system. For community water systems that treat their drinking water before it enters the distribution system, the EPTDS refers to a location in the system after the treatment has occurred. Many small community and noncommunity water systems are not treated, so the EPTDS refers to a location after the well. Required monitoring often takes place at the Entry Point to the Distribution System.

Explanatory Variable: a variable that can be used to predict the presence of a contaminant or the potential presence of a contaminant in ground water or surface water.

Global Positioning System (GPS): a technology that consists of a series of orbiting satellites that enable users with GPS receivers to determine their position anywhere on or near the earth's surface.

Ground Water (GW): water that has infiltrated through the soil and is stored in opening or voids in rocks and soil below the Earth's surface.

Ground Water Under the Direct Influence of Surface Water (GUDI): are wells found to be influenced by surrounding surface water bodies, and are classified according to site specific water quality measurements, according to the surface water treatment rule available at <http://www.epa.gov/OGWDW/mdbp/ieswtrfr.pdf>.

Hydrologic Unit Code (HUC): used as the base data-set for the surface water delineations. Hydrologic unit codes identify drainage basins in a nested group from large to small. The larger the HUC number the smaller the drainage basin. For the source water assessment program HUC 14 was used.

Inorganics: mineral based chemicals that are both naturally occurring and from man-made sources; chemicals that are not hydrocarbons. Common sources of inorganic chemicals in the environment include discharges from manufacturing plants, releases from contaminated sites, past land uses, and naturally occurring sources. Examples of inorganic compounds include; but are not limited to, arsenic, lead, and mercury.

Interim Well: a well approved to be utilized on a temporary basis. For example, an interim well may be used during the drilling of a replacement well for the permanent well.

Known Contaminated Site List (KCSL): a list consisting of sites and properties within the state where contamination of soil or ground water has been identified or where there has been, or there is suspected to have been, a discharge of contamination. This list of Known Contaminated Sites may include sites where remediation is either currently under way, required but not yet initiated or has been completed.

Maximum Contaminant Level (MCL): the maximum permissible level of a contaminant in water measured at the point of entry to the distribution system or at the free-flowing outlet of the ultimate user of a public water system or other water system to which State primary drinking water regulations apply. Any contaminant added to the water under circumstances controlled by the user, except a contaminant resulting from corrosion of piping and plumbing caused by water quality, is excluded from this definition.

New Jersey Pollutant Discharge Elimination System (NJPDES): assure treatment and discharge of wastewater (and its residual) and storm water from various types of facilities and activities is performed properly. NJPDES permits are issued to limit the mass and concentration of pollutants, which may be discharged into ground water and surface water.

New Jersey Pollutant Discharge Elimination System: Discharge to Ground Water (NJDPES/DGW): are issued to sanitary and industrial facilities that have ongoing, operational discharges of wastewater to ground water, for the purpose of monitoring and limiting the mass and concentrations of pollutants discharged to ground water. These types of activities include surface impoundments; infiltration/percolation lagoons; overland flow systems; and spray irrigation systems. NJPDES/DGW permits are also issued for various types of subsurface disposal systems that are classified as underground injection control (UIC).

New Jersey Pollutant Discharge Elimination System: Discharge to Stormwater (NJDPES/Stormwater): are issued to individual dischargers who discharge into stormwater and do not qualify for a general permit (Basic Industrial Stormwater, Concrete Products, Construction and Mining Activities, and Scrap Metal permits.)

New Jersey Pollutant Discharge Elimination System: Discharge to Surface Water (NJPDES/DSW): regulate facilities that discharge domestic and industrial wastewater directly into surface waters of the state. These dischargers, or "permittees" as they are referred to in the Site Remediation Program, included various industrial, federal, state, county and municipal facilities, private companies, private residential developments, hospitals, and schools.

Noncommunity Water System (NCWS): is a public water system used by individuals other than year around residents for at least 60 days of the year. Noncommunity water systems are further defined into two categories; the first, *non-transient, non-community (NTNCWSs)* includes systems serving at least 25 people (the same people) at least six months of the year, such as some churches, schools, and factories. The second, *transient non-community (TNCWSs)*, includes facilities such as roadside stops, commercial campgrounds, hotels, and restaurants that have their own water supplies and serve a transient population at least 60 days per year.

Nonpoint Source Pollution: contamination which does not come from one specific source, instead it is a collection of contaminant sources from a vast area.

Nontransient Noncommunity Water System (NTNCWS): is a public water system that serves at least 25 of the same persons over six months per year. Schools, factories, and office buildings that have their own water supply are examples of nontransient noncommunity water systems.

Not in Use/Capped Well: a well not being used in which a cap was installed. The cap may be removed for future use of the well.

Not in Use/Contaminated Well: a well not being used due to ground water contamination. For example, the well may be offline until remediation is designed and installed.

Not in Use/Mechanical Well: a well currently not being used due to mechanical problems. For example, if the pump is not working, the well is taken offline until the necessary repairs are made.

Not in Use/Unspecified Well: a well currently not in use. The reason the well is not being used is unknown to DEP.

Nutrients: chemicals that are associated with increased growth of plants and/or animals. These chemicals occur naturally in the environment or can be man-made. Common types of nutrients include nitrogen and phosphorous.

Other Well: a well category in which a well does not fall under the other well type categories.

Pathogens: disease causing microorganisms such as bacteria, protozoa, and viruses.

Permanent Well: a well used year around on a regular basis, and is currently in use.

Pesticides: mainly manmade chemicals used to control bacteria, fungi, weeds, rodents, and insects.

Point Source Pollution: contamination that comes from one specific source, for example a pipe, sewer, or container.

Potential Contaminant Source Inventory (PCSI): a list of the activities and land uses within the delineated source water assessment area that might contribute to contamination of a water source. Potential contaminant sources are identified using existing databases.

Public Water System (PWS): a system for the provision to the public of water for human consumption through pipes or other constructed conveyances, if such system has at least fifteen service connections or regularly serves at least twenty-five individuals.

Pump Capacity: the maximum amount of water a well can pump provided in gallons per min (gpm). This is the maximum pumping rate of the installed pump. Pump capacity was a factor used to delineate ground water source water assessment area when average actual pumping rates were unavailable. To run the ground water delineation model, pump capacity in gpm was converted to cubic feet a day.

Pumping Rate: the measure of the amount of water withdrawn from a well during actual conditions. The pumping rate is provided in either gallons per minute (gpm), million gallons per day, or cubic feet per day. Pumping rate was the preferred value used to delineate source water assessment areas. The maximum yearly pumping rate plus a 25% safety factor (not to exceed installed pump capacity) was used to delineate source water assessment area. When this number was not available, the pump capacity value was used.

Purchased Ground Water: bulk finished ground water obtained from another water provider for the purpose of drinking water.

Purchased Surface Water: bulk finished surface water obtained from another water provider for the purpose of drinking water.

Radionuclides: a category of contaminant that is both naturally occurring and from man-made sources and is characterized by the emission of alpha, beta, and/or gamma radiation. Common sources of radionuclides in the environment include the decay of naturally occurring minerals, leaching of subsurface material (for example rocks and sedimentary materials) into ground water, and improper disposal of radioactive waste.

Radon: a naturally-occurring, radioactive gas that is colorless and odorless.

Recharge Well: a well in which water is pumped into during a period of low demand. The water is stored as ground water until it is needed during a peak demand.

Reserve Well: a well used short-term for back-up in cases where the demand may be increased.

Reservoir: an area in which water is collected and stored for use.

Resource Recovery Facility (RRF): any place, equipment, device or plan designed and/or operated to separate or process solid or liquid waste into usable secondary materials, including fuel and energy.

Seasonal Well: a well used on a regular basis during a particular season. For example, a shore community may activate a well only for use during the summer to serve the increase in seasonal population.

Sewage Treatment Plant (STP): a facility designed for chemical, biological, and mechanical processes applied to an industrial or municipal discharge or to any other sources of contaminated water in order to remove, reduce, or neutralize contaminants prior to discharge to a receiving water.

Site Remediation Program (SRP): within the DEP is responsible for overseeing a variety of activities governed by laws such as the Resource Conservation and Recovery Act (RCRA), Federal Superfund Program, New Jersey's Industrial Site Recovery Act (ISRA), New Jersey's Underground Storage of Hazardous Substances Act (UST), New Jersey's Solid Waste Management Act, and New Jersey's Water Pollution Control Act. A main responsibility of the program is to oversee the cleanup of the Comprehensive Site List database that contains more than 30,000 contaminated sites in New Jersey.

Solid and Hazardous Waste Facilities (SHW): consist of Recycling Facilities, Resource Recovery Facilities, Solid Waste Landfills, and Transfer Facilities.

Solid Waste Landfill (SWL): for the purpose of the Source Water Assessment Process, landfills are broken into three broad categories: those that are currently operational, those that were in operation as of 1982 but have ceased since then, and those that ceased operation prior to 1982.

Solid Waste Resource Recovery Facility (SWRRF): See "Resource Recovery Facility".

Solid Waste Transfer Facility (SWTF): See "Transfer Facilities".

Source Water Assessment Area: the surface and subsurface area surrounding a well or surface water intake, supplying a public water system, through which potential contaminants may move toward and/or reach the well or intake.

Surface Water (SW): precipitation that has not evaporated into the atmosphere or infiltrated into the soil but has run off into bodies of water such as streams, rivers, and lakes. Natural ground water discharges to surface water make up an important portion of surface water flows.

Surface Water Intake: a structure designed to collect and convey surface water to another location for treatment.

Susceptibility: is a way of measuring the potential exposure of a drinking water supply source to contamination. A public water system's susceptibility rating is a combination of how "sensitive" a source is to contamination and how frequently a contaminant occurs or is used near the source (known as "intensity of use").

Synthetic Organic Compounds (SOCs): for the purposes of New Jersey source water assessments, manmade compounds that are organic, but do not include the VOCs and organic pesticides that are defined separately in this report. Common sources of SOC in the environment include chemical manufacturing plants, pharmaceutical plants, sewage treatment plants, and discharges from contaminated sites.

Tentatively Identified Compounds (TICs): compounds that can be seen using analytical testing but can not be identified and the concentration can not be confirmed. Generally a TIC is low in concentration, below a part per billion.

Time of Travel (TOT): the average amount of time water takes to move from point to the well.

Transfer Facility: is used to consolidate solid wastes collected in a given area. The solid waste is consolidated into it larger vehicles for transportation to distant disposal facilities. They can range in size from a small sole-source facility that handles less than fifty tons of solid waste per day to large regional facilities that process over one thousand tons per day. When transfer station is run properly, there should be no discharges to ground water or surface water, unless they posses a NJPDES permit.

Transient Noncommunity Water System (TNCWS): a public water system that does not fall within the definition of a nontransient water system. Transient noncommunity water systems include rest stop areas, restaurants, and motels that have their own water supply.

Treatment Plant: See “Entry Point to the Distribution System”.

Tributary: a smaller sized river or stream that flows into a larger river or stream.

Unconfined Aquifer: is an aquifer that is not bounded by impermeable layers, but instead has a water table open to the atmosphere.

Underground Storage Tank (UST): a tank located all or partially under ground designed to store petroleum products or chemical solutions. Regulated underground storage tanks are required to register under the Underground Storage of Hazardous Substances Act.

Volatile Organic Compounds (VOCs): manmade compounds that are organic and are characterized by their ability to be removed from water by evaporation. VOCs are the most common organic contaminants in ground water in New Jersey. Common types of VOCs are solvents, degreasers, and gasoline components.

Well: a bored, drilled or driven shaft hole into the earth in which groundwater is pumped. A well can range from a few feet to a few miles in depth, but wells in New Jersey range from a few feet to almost 2,000 feet in depth.

Well Head Protection Area (WHPA): another name for a source water assessment area for ground water sources. This area is the surface and subsurface area that supplies water to the well.