

# NJDEP Technical Guidance Document Review Form

**Document: "FSPM Chapter 1 - The Sampling Plan "**

*Comment Period: December 2, 2021 to January 7, 2022*

**NJDEP Committee Chairpersons: Crystal Pirozek and Biff Lowry**

Comment #	Page	Section	Subsection	COMMENTS	RESPONSE
1	1-14	All		The document would benefit from the inclusion of a list of all acronyms at the beginning. The information presented needs to be consistent e.g., include URLs, Year of Reference and the full Reference title and organization. Also, the discussion of Conceptual Site Model does not appear in the text. It is suggested that an initial step in the process is to identify the Conceptual Site Model to inform decisions regarding receptors, sampling, locations, separate media and areas of investigation, etc.	Will add acronyms list to beginning of documents for reference.
2	2	1.1		In the list of lists including "Soil Investigation Technical Guidance", "Ground Water Technical Guidance", etc. some introductions to the links have colons and others do not. It should be consistent.	agreed to change
3	2	1.1		At the bottom of page two, there is no space between the "OSHA:" and the link.	agreed to change
4	2	1.1		It would be helpful to identify the associated regulatory programs under which the site is being investigated. Does the term Site refer to Superfund, RCRA, or other programs, or does it have a specific definition. Currently, the definition is not clear.	agreed to leave "site" so that the text can reference multiple programs.
5	2	1.1		It may be helpful to discuss the development of a Conceptual Site Model here and also discuss the possibility of multiple Conceptual Site Models depending on the media impacted e.g., soil, groundwater, etc. and the nature of the investigation.	The DEP has guidance for the CSM, the FSPM Discusses it briefly in Ch 6 but discussing it in depth is not within the scope of this manual.
6	2	1.1		The discussion of establishing the sampling and data quality objectives needs to indicate that this is an iterative process where the Sampling Plans may need to be updated as new data is collected.	Details are discussed in Chapter 2 Quality Assurance, 2.3 Data Quality Objectives. Also the triad approach (section1.2) is an iterative process.
7	2	1.1		Second Paragraph - Suggest introducing the need to establish Data Quality Objectives for the planned activities. Suggest indicating that an integral part of any sampling program is planning, scoping, and problem formulation including the development of Data Quality Objectives.	Details are discussed in Chapter 2 Quality Assurance, 2.3 Data Quality Objectives.
8	2	1.1		The section that lists reference documents also needs to list the DEP's official Quality Management Plan document as well, with a link to the document at <a href="https://www.nj.gov/dep/enforcement/oqa/docs/qmp.pdf">https://www.nj.gov/dep/enforcement/oqa/docs/qmp.pdf</a> . This is the main document requiring QAPPs and adherence to QA/QC and should be referenced.	The QMP is discussed in Chapter 2 Quality Assurance and the link is provided.

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9	3	1.2		Will there be any guidance added for the readers looking for other program sampling approaches? There should be at least one sentence referencing them to useful information.	The FSPM applies to all programs but does not provide program specific approaches.
10	3	1.2		Suggest defining systematic planning, dynamic work plans and real-time measurements consistent with the initial definitions in the Triad Resource Center.	The cluin and itrc websites were provided for more information.
11	3	1.3		U.S. Government and NJDEP Agencies - Suggest including EPA's webpages for Superfund Sites. RCRA facilities and other EPA programs depending on the definition of "site" listed above. Suggest including links to the various programs listed.	agreed to leave general EPA link so that it can reference multiple programs.
12	3	1.3		Section 1.3 references historic sources of information and references the NJDEP PAR Guidance. However, in this section is a "list of potential sources of historical information" that the NJDEP references for gathering background information. This list does not correspond to the NJDEP PAR Guidance and therefore sends conflicting signals with regards to those sources that need to be reviewed to meet the requirements of a NJ PAR. This "list of potential sources of historical information" should be struck from the FSPM.	This not a list that "needs to be reviewed". The sentence before the list says "This list is not required or meant to be exhaustive". Also, the NJDEP PA Guidance does not have a list of potential sources of historical information to conflict with.
13	3	1.3		The second sentence in this section is a run-on sentence. A suggestion on splitting it into two sentences: "Per the PA Guidance, the purpose is to provide the investigator with a list of resources and framework on how to use the resources to conduct a preliminary assessment. This assessment must meet the diligent inquiry requirements of the Technical Requirements for Site Remediation (Technical Regulations) at N.J.A.C. 7:26E-3.1 and 3.2 to determine if there may be any potentially contaminated areas of concern that require further investigation."	agreed to change
14	3	1.3		Perhaps a link directly to the NJ-Geoweb and a sentence on its use should be placed in the second paragraph of this section. Right now, this paragraph reads like DEP GIS data can only be used by downloading it instead of through a convenient web browser application.	agreed to add, also added in section 1.4
15	3	1.3		The fourth sentence within the third paragraph of this section should be revised to say "An example would be F001 waste which is classified as chlorinated solvents."	agreed to change
16	4	1.3		Under the list titled "State of New Jersey", the third one down "NJ Geological Survey" should be "NJ Geological and Water Survey".	agreed to change
17	5	1.3		It should be made clearer that the link for Princeton University Library under Other Sources is referring to their Sanborn Fire Insurance Maps collection because, in my experience, they are a widely used invaluable tool for gaining knowledge on site history.	agreed to change
18	5	1.4		First paragraph - Define CAFRA.	agreed to change
19	5	1.4		Second paragraph - Reword the following sentence "Defining what kind of environmental system the site is a part of is extremely important to the success of achieving the sampling activities" How about the following suggestion: " <b>To successfully achieve sampling objectives, it is extremely important to define what kind of environmental system the site encompasses.</b> "	reworded sentence.

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20	5	1.4		Please spell out acronyms before using them. (CAFRA, ISRA in section 1.5)	agreed to change
21	5	1.4		The last sentence on this page has extraneous commas, it should say "With this knowledge, it will be easier to develop a complete site-specific sampling plan."	agreed to change
22	5	1.5		Sampling locations should be based on background information, interviews with site workers and physical site visits in order to put a sampling plan together.	In section 1.3 the user is referred to the NJDEP PA Guidance which discusses these issues. Also, background is covered again in section 1.3, and site visits in section 1.4.
23	6	1.5		Should a note on sediment sampling and a reference to the Ecological Evaluation Technical Guidance be added to the first paragraph in this section?	added to end of paragraph
24	6	1.5		fourth paragraph - Remove hyphen from "down-stream"	agreed to change
25	6	1.5		second paragraph - Define who is being referred to as the "investigator" e.g., Project Manager, Sampler, etc.. Define ISRA. Suggest explaining how the random numbers are used in the analysis.	The generic term "investigator" was used because it can apply to anyone involved in the investigation (our intent). Defining the term further would only limit who it applies to. Agreed to spell out ISRA. It is beyond the scope of the FSPM to explain how random numbers are used in analysis.
26	6	1.5		Paragraph five - Also suggest indicating development of statistical analyses for use in risk assessment may have specific numbers of samples to be used in the assessment.	Added sentence to look into specific program guidance for additional information.
27	6	1.5		Between subsections 1.4 and 1.5, as well as between 1.6 and 1.7, there is only one line skipped while there are 2 lines skipped between other subsections.	agreed to change
28	7	1.5		In the last paragraph of section 1.5, there needs to be a space between the link, period, and start of the next sentence in " <a href="http://www.state.nj.us/dep/gis.Review">http://www.state.nj.us/dep/gis.Review</a> ". Since there is no space, the link also not work.	agreed to change
29	7	1.5		Second paragraph - Suggest including a sentence that indicates the size of the site needs to be considered in determining the number of samples needed to be representative of the contamination.	Added sentence to look into specific program guidance for additional information. In additional Chapter 6 discusses more specific sampling information.
30	7	1.5		Second paragraph - "historically applied pesticide technical guidance"-not sure if a word is missing?	No words are missing. The names of the guidance documents have been capitalized.
31	7	1.5		Depending on your opinion on the Oxford Comma, a comma could be added after "Guidance" on the first sentence on this page which started on page 6.	agreed to change

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32	7	1.5		The second to last sentence in this section is a sentence fragment. It should instead say "SRWMPs <i>Guidance for the Submission and Use of Data in GIS Compatible Formats Pursuant to Technical Requirements for Site Remediation</i> (TECHGIS2) can be reviewed at at <a href="https://www.nj.gov/dep/srp/regs/techgis/techgis2.pdf">https://www.nj.gov/dep/srp/regs/techgis/techgis2.pdf</a> ."	agreed to change
33	7	1.6		Sample Methodology and Matrix – The following should be added: "To prevent the possible cross-contamination of samples, the sampling investigation should begin at the least contaminated or background areas of the site and proceed to the areas suspected of being the most highly contaminated."	Agreed to change and inserted the sentence into 1.6
34	8	1.7		First paragraph - Suggest indicating that the identification of the laboratory should occur early in the planning process to assure the appropriate expertise is available when the samples are collected. Consideration also needed to be given to specialized analytical techniques such as those needed for PCBs, dioxins, etc.	reworded sentence.
35	8	1.7		First paragraph - When the type of certification is discussed it must be clear that the lab must possess <b>NJ</b> certification within one of the two programs listed. Simplying having NELAP certification with another state does not mean they are approved to conduct NJ samples; a lab still must apply to NJ and obtain NJ certification through our NJ-NELAP program before submitting data. The way currently written it implies if they have accreditation from another NELAP accreditation body that they are automatically certified with NJ and that is not true, they must still be listed in our database and approved by us. Change the language to state: "Laboratories submitting analytical data to the State of New Jersey must hold current <b>NJ</b> certification where applicable under the Regulations Governing the Certification of Laboratories and Environmental Measurements N.J.A.C. 7:18 and/or under the <b>NJ</b> -National Environmental Laboratory Accreditation Program (NELAP).	reworded and clarified paragraph. Removed reference to NELAP and referenced Ch 2 for additional information.
36	8	1.7		The list of categories included here is not correct and is outdated. You will need to reference NJAC 7:18 section 2.4. This should either be a list of all the categories (by matrix and technical area) or a list of the programs that require certification. What is currently listed there are not our "categories" but are the regulatory programs so saying "categories" in this section is incorrect.	changed categories to regulatory programs to make accurate
37	8	1.7		2nd Paragraph first sentence - Change "samplers collecting" to "samplers analyzing." OQA does not certify for collection, only analysis. The only sample collection certification we offer is in support of the drinking water programs private well testing act requirements. No other sample collection processes are certified through the OQA.	changed to reflect current website
38	8	1.7		2nd paragraph 2nd to last sentence - Add bolded words to the sentence " Regardless of whether a company or organization is or is not a laboratory, <b>matrix, parameter and method specific</b> certification must be obtained." Otherwise, this sentence is quite vague. Certification is only required for those who are analyzing samples and generating compliance data.	agreed to add

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39	9	1.8	3	Please add bolded texts to sentence: Prior to securing the services of a laboratory, it is important to know what services they provide for meeting these electronic data requirements and are certified by the NJDEP OQA for the <b>matrix and</b> parameters being investigated.	agreed to add
40	9	1.8	4	should you also reference the DEPs GIS rules of NJAC 7:1D for the GIS coordinates,state plane, etc. requirements	agreed to add
41	9	1.8	4	The last sentence in this sub-section has an extraneous comma after "in".	agreed to change
42	10	1.9		1st sentence at top of page - Replace "performance evaluation samples" with " <b>proficiency testing</b> samples"	removed performance evaluation samples because the section applies to in the field samples
43	10	1.9		There is an extraneous period after "Chapter 2" in the last sentence.	agreed to change
44	10	1.10		In the second to last sentence in this section there are extraneous spaces after "air monitoring" and "hot work". In addition, an optional Oxford Comma could be added after "emergency contacts".	agreed to change
45	10	1.10		Suggest highlighting the need for HAZWOPER Training, refreshers, and specialized training and documentation is necessary and providing references to Chapter 4 for detailed discussions..	added reference to chapter 4 for additional training requirements
46	10	1.10		In the sentence beginning with "Typically, a Health and Safety Program will address the following areas:..." there is an extra space after 'air monitoring" and "hot work".	agreed to change
47	10	1.11		The last sentence of the chapter does not seem to flow and condense the chapter as a whole.	removed 1.11
48	10	Ref.		Suggest including website links to EPA's <a href="http://www.epa.gov/quality">www.epa.gov/quality</a> webpage.	agreed to add
49	10	Ref.		Under "References", the NJDEP lists the exact same references as was provided as part of the August 2005. Did the NJDEP not reference more recent documents as part of the development of the revised FSPM? This does not seem likely. The NJDEP should update their "References" as appropriate.	references removed
50	10	Ref.		Under "References", the following documents are indicated: 1) NJDEP, Remedial Investigation Guide, March 1990, Prepared by the Division of Responsible Party Site Remediation (DRPSR), CN 028, Trenton, NJ 08625 and 2) NJDEP, Environmental Cleanup Responsibility Act (ECRA) Cleanup Plan Guide, Prepared by the DRPSR, Industrial Site Evaluation Element, CN 028, Trenton, NJ 08625. An internet search was conducted, the results of which did not locate these documents. Provided that these will continue to be reference material for the updated FSPM, the NJDEP should locate these documents, scan them, and put them online (perhaps on the NJDEP's Guidance Webpage, <a href="https://www.nj.gov/dep/srp/guidance/">https://www.nj.gov/dep/srp/guidance/</a> or the NJDEP's Guidance Archive Webpage, <a href="https://www.nj.gov/dep/srp/guidance/archive/">https://www.nj.gov/dep/srp/guidance/archive/</a> ).	references removed

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51	10	Ref.		the first reference included in this section to the "national environmental laboratory accreditation conference doc is outdated and no longer correct. If you are trying to make reference to the requirements for our NJ-NELAP program the document is now the NELAC Institute (TNI) Standards, 2016. Either update or you can remove the reference as you already reference our NJAC 7:18 requirements which also already reference the TNI standards.	references removed
52	10	Ref.		the DEP QMP should be included as a reference in the list	references removed
53	10	Ref.		In the fifth reference "USEPA Guidance for Choosing a Sampling Design..." there should be a left paranthesis before the "G5S". Currently there is only a right paranthesis.	references removed