FIELD PARAMETER ON-SITE INSPECTION CHECKLIST

Laboratory Name _____ Cert # _____

Lab Contact _____

Inspector(s) _____

INSPECTION TYPE

☐ Initial ☐ Maintenance ☐ Follow-up ☐ Abbreviated ☐ Requested

LABORATORY CLASSIFICATION

☐ Commercial ☐ Industrial ☐ Municipal ☐ Other _____

Performed on Per Fee Basis? ☐ Yes ☐ No

COMPLIANCE PROGRAMS

☐ NPDES ☐ Groundwater ☐ UST ☐ Land Application ☐ Pretreatment ☐ Other _____

NPDES Permit #(s) _____

PARAMETERS

☐ pH ☐ Temperature ☐ Settleable Solids ☐ Dissolved Oxygen ☐ Conductivity ☐ Total Residual Chlorine

ENTRANCE REMARKS

☐ Attachment I Verified ☐ Laboratory / Contact Information Verified

NC compliance data analyzed and reported? ☐ Yes ☐ No

Analyses performed by other NC certified labs? ☐ Yes ☐ No

List _____

QUALITY CONTROL

Are automatic pipettors used?	☐ Yes	☐ No
If so, are they calibrated every 12 months?	☐ Yes	☐ No
Are error corrections made properly?	☐ Yes	☐ No
Are manufacturer expiration dates observed?	☐ Yes	☐ No
Does the lab have a documented system of traceability for all chemicals, reagents, standards and consumables that meets NC WW/GW LC policy requirements?	☐ Yes	☐ No
Is a best effort made to perform analyses in a manner and location where sources of contamination or error will not be introduced (e.g. dirty work area, weather conditions, dirty cuvettes, etc.)?	☐ Yes	☐ No

COMMENTS

_____

Do any Findings require a Notice of Finding for Immediate Response (NOFIR)? ☐ Yes ☐ No

Inspector's Signature _____ Date _____

* If Applicable

DISSOLVED OXYGEN

Approved Procedure On File ☐ Yes ☐ No Meter Type(s) _____

DOCUMENTATION

			COMMENTS
Indelible Ink Used	☐ Yes	☐ No	
Analyzed In-Situ/ On Site	☐ Yes	☐ No	
Analysis - Date	☐ Yes	☐ No	
Analysis - Time	☐ Yes	☐ No	
Collection - Date *	☐ Yes	☐ No	
Collection - Time *	☐ Yes	☐ No	
Facility Name	☐ Yes	☐ No	
Sample Site	☐ Yes	☐ No	
Analyst's Initials	☐ Yes	☐ No	
Meter Calibration	☐ Yes	☐ No	
Meter Calibration Time	☐ Yes	☐ No	
Temperature *	☐ Yes	☐ No	
Barometric Pressure *	☐ Yes	☐ No	
Elevation *	☐ Yes	☐ No	
Salinity *	☐ Yes	☐ No	
% Saturation *	☐ Yes	☐ No	
True Value of Post Analysis Check *	☐ Yes	☐ No	
Value Obtained for Post Analysis Check *	☐ Yes	☐ No	
Reported in mg/L	☐ Yes	☐ No	
Instrument Identification/ SN	☐ Yes	☐ No	
Parameter Analyzed	☐ Yes	☐ No	
Data Qualifier(s) *	☐ Yes	☐ No	
Equipment Maintenance Log (Recommended)	☐ Yes	☐ No	
Condition of Probe/Well	☐ Good	☐ Fair	☐ Poor
Is an LDO probe used?	☐ Yes	☐ No	
Is the LDO probe calibrated or verified each day of use?	☐ Yes	☐ No	

COMMENTS

* If Applicable

TOTAL RESIDUAL CHLORINE
DPD

Approved Procedure On File ☐ Yes ☐ No Meter Type(s) _____

Program # (may also note wavelength) _____

DOCUMENTATION

Indelible Ink Used	☐ Yes	☐ No	Value Obtained for Check Std	☐ Yes	☐ No
Analyzed In-Situ/ On Site	☐ Yes	☐ No	Value Obtained for Reagent Blank *	☐ Yes	☐ No
Analysis - Date	☐ Yes	☐ No	Reported in mg/L or µg/L	☐ Yes	☐ No
Analysis - Time	☐ Yes	☐ No	TV of Post Analysis Check Standard *	☐ Yes	☐ No
Collection - Date *	☐ Yes	☐ No	Value Obtained for Post Analysis Check Standard *	☐ Yes	☐ No
Collection - Time *	☐ Yes	☐ No		☐ Yes	☐ No
Facility Name	☐ Yes	☐ No	Traceability of consumables	☐ Yes	☐ No
Sample Site	☐ Yes	☐ No	Instrument ID	☐ Yes	☐ No
Analyst's Initials	☐ Yes	☐ No	Parameter Analyzed	☐ Yes	☐ No
Meter Calibration	☐ Yes	☐ No	Data Qualifier(s) *	☐ Yes	☐ No
Meter Calibration Time	☐ Yes	☐ No	Equipment Maint. Log (Recommended)	☐ Yes	☐ No
TV of Cal/ Cal Verification Stds	☐ Yes	☐ No	Condition of Cells: ☐ Good	☐ Fair	☐ Poor
TV of Daily Check Std	☐ Yes	☐ No			

STANDARDS

Option 1 Three-point calibration that brackets sample range (each day of use). May not be Gel Standards.

Conc. 1 _____ Conc. 2 _____ Conc. 3 _____ 2nd Source Chk Std _____

Option 2 Five-point calibration, CCV with each use. Curve Established or verified at least every 12 months.

Date Curve Created or Verified _____

True Values	Conc. 1	Conc. 2	Conc. 3	Conc. 4	Conc. 5
Observed Values	Conc. 1	Conc. 2	Conc. 3	Conc. 4	Conc. 5

Is the curve acceptable? (< 50 µg/L = ± 25% of true value, ≥ 50 µg/L = + 10%) ☐ Yes ☐ No

CCV value: _____ CCV (Mid-range) acceptance criteria: ± 10% True Value

BLANKS

Is the meter properly zeroed?	☐ Yes	☐ No	_____
If standards are prepared with reagent water, then is a reagent blank analyzed?	☐ Yes	☐ No	_____
If so, is the reagent blank <50% of the established PQL?	☐ Yes	☐ No	_____

MATERIALS

Aqueous/Gel/Sealed Standards _____	Initial Verification	☐ Yes	☐ No	Date	_____
Exp. Date _____	Annual Verification	☐ Yes	☐ No	Date	_____
Lot # /ID _____	Verified to Specific Meter:				_____

DPD Total Cl Powder	Exp. Date _____	Buffer Total Cl Liquid	Exp. Date _____
DPD Total Cl Liquid	Exp. Date _____	Potassium Permanganate	Exp. Date _____

COMMENTS

_____

_____

_____

_____

* If Applicable

TOTAL RESIDUAL CHLORINE
AMPEROMETRIC-POTENTIOMETRIC

Standard Method/ Hach Method _____

Electrode _____ Meter _____ Titrator _____

DOCUMENTATION

Indelible Ink Used	☐ Yes	☐ No	Value Obtained for Reagent Blank	☐ Yes	☐ No
Analyzed In-Situ/ On Site	☐ Yes	☐ No	Reported in mg/L or µg/L	☐ Yes	☐ No
Analysis - Date	☐ Yes	☐ No	TV of Post Analysis Check Standard. *	☐ Yes	☐ No
Analysis - Time	☐ Yes	☐ No	Value Obtained for Post Analysis Check Standard. *	☐ Yes	☐ No
Collection - Date *	☐ Yes	☐ No			
Collection - Time *	☐ Yes	☐ No	Traceability of consumables	☐ Yes	☐ No
Facility Name	☐ Yes	☐ No	Instrument ID	☐ Yes	☐ No
Sample Site	☐ Yes	☐ No	Parameter Analyzed	☐ Yes	☐ No
Analyst's Initials	☐ Yes	☐ No	Data Qualifier(s) *	☐ Yes	☐ No
TV of Daily Check Standard	☐ Yes	☐ No	Equipment Maint. Log (Recommended)	☐ Yes	☐ No
Value Obtained for Check Standard	☐ Yes	☐ No	Condition of Equipment	☐ Good ☐ Fair	☐ Poor

MATERIALS

Dispensed Burette ☐ Yes ☐ No Dispensed Digital ☐ Yes ☐ No

Reagents ☐ Purchased ☐ In-house Note _____

☐ PAO ☐ $AgNO_3$ ☐ Buffer Solution ☐ NaCl Solution ☐ HNO_3 ☐ H_2SO_4 1+1 ☐ H_2O_2 30% ☐ NaOH

Chemicals and Reagents within expiration ☐ Yes ☐ No Notes _____

In-house reagents standardized ☐ Yes ☐ No Notes _____

End points plotted and TRC calculated as specified by method or manufacturer ☐ Yes ☐ No

COMMENTS

_____

* If Applicable

SETTLEABLE SOLIDS

Approved Procedure On File	☐ Yes	☐ No					
Imhoff Cone	☐ Yes	☐ No	Condition	☐ Good	☐ Fair	☐ Poor	

DOCUMENTATION

			COMMENTS
Indelible Ink Used	☐ Yes	☐ No	
Collection - Date	☐ Yes	☐ No	
Collection - Time	☐ Yes	☐ No	
Analysis - Date	☐ Yes	☐ No	
Analysis - Time (Start & End)	☐ Yes	☐ No	
Stir @ 45 minutes documented	☐ Yes	☐ No	
Facility Name	☐ Yes	☐ No	
Sample Site	☐ Yes	☐ No	
Analyst's Initials	☐ Yes	☐ No	
Sample Volume Analyzed	☐ Yes	☐ No	
Reported as mL/L	☐ Yes	☐ No	
Parameter Analyzed	☐ Yes	☐ No	
Data Qualifiers *	☐ Yes	☐ No	

COMMENTS

* If Applicable

pH

Approved Procedure On File	☐ Yes	☐ No	Meter Type(s)						
Calibration Buffers	1		2		3*		Check Buffer **		
Buffer Exp. Date	4		7		10		Other:		<4 or >10
Buffer Lot #s/IDs	4		7		10		Other:		<4 or >10

DOCUMENTATION

			COMMENTS
Indelible Ink Used	☐ Yes	☐ No	
Analyzed In-Situ/ On Site	☐ Yes	☐ No	
Analysis - Date	☐ Yes	☐ No	
Analysis - Time	☐ Yes	☐ No	
Collection - Date *	☐ Yes	☐ No	
Collection - Time *	☐ Yes	☐ No	
Facility Name	☐ Yes	☐ No	
Sample Site	☐ Yes	☐ No	
Analyst's Initials	☐ Yes	☐ No	
Meter Calibration	☐ Yes	☐ No	
Meter Calibration Time	☐ Yes	☐ No	
TV of Calibration Buffers	☐ Yes	☐ No	
TV of Check Standard Buffer	☐ Yes	☐ No	
Value Obtained for Check Standard Buffer	☐ Yes	☐ No	Buffer check acceptance criteria is + 0.1 units.
TV of Post Analysis Check Standard Buffer *	☐ Yes	☐ No	
Value Obtained for Post Analysis Check Buffer *	☐ Yes	☐ No	
Reported to 0.1 pH s.u.	☐ Yes	☐ No	
Reported as S.U.	☐ Yes	☐ No	
Traceability of consumables	☐ Yes	☐ No	
Instrument ID	☐ Yes	☐ No	
Parameter Analyzed	☐ Yes	☐ No	
Data Qualifier(s) *	☐ Yes	☐ No	
Equipment Maint. Log (Recommended)	☐ Yes	☐ No	
Probe rinsed between readings	☐ Yes	☐ No	

9045D - water < 20% of total volume / **9040C** - water > 20% of total volume

Meter Calibration Time	☐ Yes	☐ No	Is an adequate sample of slurry prepared?	☐ Yes	☐ No
List buffers used (Need 12.45 or 13 buffer for VAR options 6 and 12)					
Collection & Analysis Time(s)	☐ Yes	☐ No	Is the temperature correction applied per Vector Attraction Reduction (VAR) option 6?	☐ Yes	☐ No
***15 minute hold time met?	☐ Yes	☐ No			

COMMENTS

** If calibrated with 3 buffers check is still required. *** Changed from 24 hours to 15 minutes in SW-846 Update IV.

* If Applicable

TEMPERATURE

Approved Procedure On File ☐ Yes ☐ No Meter Type(s) _____

☐ Glass Thermometer ☐ Digital Thermometer ☐ pH Meter ☐ D.O. Meter ☐ Other

DOCUMENTATION

			COMMENTS
Indelible Ink Used	☐ Yes	☐ No	
Analyzed In-Situ/ On Site	☐ Yes	☐ No	
Analysis - Date	☐ Yes	☐ No	
Analysis - Time	☐ Yes	☐ No	
Collection - Date *	☐ Yes	☐ No	
Collection - Time *	☐ Yes	☐ No	
Facility Name	☐ Yes	☐ No	
Sample Site	☐ Yes	☐ No	
Analyst's Initials	☐ Yes	☐ No	
Temp Correction Applied	☐ Yes	☐ No	
Reported as ^{o}C	☐ Yes	☐ No	
Temp. Corr. Posted on Meter/Hard Copy	☐ Yes	☐ No	
Correction noted even if it is 0°	☐ Yes	☐ No	
Therm./Meter Sensor(probe) Checked vs NIST Annually	Date _____ ☐ Yes	☐ No	
Instrument ID	☐ Yes	☐ No	
Parameter Analyzed	☐ Yes	☐ No	
Data Qualifier(s) *	☐ Yes	☐ No	
Equipment Maintenance Log (Recommended)	☐ Yes	☐ No	
NIST Documentation Available	☐ Yes	☐ No	Thermometer I.D. _____

Thermometer readings must be less than 1°C from the NIST Thermometer. REQUIRED for certified data (NCLC Policy).

COMMENTS

* If Applicable

CONDUCTIVITY

Approved Procedure On File ☐ Yes ☐ No Meter Type(s) _____

Meter Calibrated ☐ Yes ☐ No *Calibration with one standard and analysis one Q.C. standard is acceptable.

KCl Cal Std Conc _____ KCl QC Check Std Conc _____

KCl Cal Std Lot#/ID _____ KCl QC Check Std Lot#/ID _____

QC Check Standard ± 10% ☐ Yes ☐ No _____

It is recommended that the meter be calibrated or checked in the expected sample concentration range(s).

DOCUMENTATION

			COMMENTS
Indelible Ink Used	☐ Yes	☐ No	
Analyzed In-Situ/ On Site	☐ Yes	☐ No	
Analysis - Date	☐ Yes	☐ No	
Analysis - Time	☐ Yes	☐ No	
Collection - Date *	☐ Yes	☐ No	
Collection - Time *	☐ Yes	☐ No	
Facility Name	☐ Yes	☐ No	
Sample Site	☐ Yes	☐ No	
Analyst's Initials	☐ Yes	☐ No	
Meter Calibration	☐ Yes	☐ No	
Meter Calibration Time	☐ Yes	☐ No	
TV of Cal Standard	☐ Yes	☐ No	
TV of Cal Check Standard	☐ Yes	☐ No	
Value Obtained for Check Standard	☐ Yes	☐ No	
TV of Post Analysis Check Standard *	☐ Yes	☐ No	
Value Obtained for Post Analysis Check Standard *	☐ Yes	☐ No	
Reported as µmhos/cm or µS	☐ Yes	☐ No	
Traceability of consumables	☐ Yes	☐ No	
Instrument ID	☐ Yes	☐ No	
Parameter Analyzed	☐ Yes	☐ No	
Data Qualifier(s) *	☐ Yes	☐ No	
Equipment Maint. Log (Recommended)	☐ Yes	☐ No	
Does the meter have ATC	☐ Yes	☐ No	
Does the meter have Auto Cell Constant	☐ Yes	☐ No	
Automatic Temperature Compensator (ATC) Checked Annually	Date _____ ☐ Yes	☐ No	

If the meter does not have ATC and/or ACC how are the temperatures and cell constants factored? _____

COMMENTS

_____

_____

_____

_____

* If Applicable