

### Proposed List of Critical MDC 4.0 (MDC-FTP) Errors

Code or RT	Error Description	Prevent Submission?
601	CALIBRATION_GAS_LEVEL (Invalid Value)	YES
601	INSTRUMENT_SPAN (Invalid Value)	YES
601	INDICATOR_OF_ABORTED_TEST (Invalid Value)	YES
601	INJECTION_DATE (Invalid Value)	YES
601	REFERENCE_VALUE (Invalid Value)	YES
610	OPERATING_LEVEL (Invalid Value)	YES
610	RUN_STATUS_FLAG (Invalid Value)	YES
610	RUN_NUMBER (Invalid Value)	YES
610	REFERENCE_METHOD_VALUE (Invalid Value)	YES
610	MONITORING_SYSTEM_VALUE (Invalid Value)	YES
610	UNITS_OF_MEASURE (Invalid Value)	YES
610	RUN_END_DATE (Invalid Value)	YES
610	RUN_END_TIME (Invalid Value)	YES
610	RUN_START_DATE (Invalid Value)	YES
610	RUN_START_TIME (Invalid Value)	YES
611	REFERENCE_METHOD_USED (Invalid Value)	YES
614	PERCENT_CO2_DRY (Invalid Value)	YES
614	PERCENT_O2_DRY (Invalid Value)	YES
614	PERCENT_MOISTURE (Invalid Value)	YES
614	BAROMETRIC_PRESSURE (Invalid Value)	YES
614	STACK_STATIC_PRESSURE (Invalid Value)	YES
614	NUMBER_OF_TRAVERSE_POINTS (Invalid Value)	YES
614	STACK_DIAMETER_AT_TEST_PORT (Invalid Value)	YES
615	STACK_TEMPERATURE (Invalid Value)	YES
615	PROBE_VELOCITY_CALIBRATION_COEFFICIENT (Invalid Value)	YES
615	PITCH_ANGLE_OF_FLOW (Invalid Value)	YES
615	YAW_ANGLE_OF_FLOW (Invalid Value)	YES
615	NEAR_WALL_IDENTIFIER (Invalid Value)	YES
900-1	Missing RT 900 (ARP)	YES
900-2	Invalid Certification Code RT 900 (ARP)	YES
900-3	Missing Signature Date RT 900 (ARP)	YES
900-4	Missing First Name of DR RT 900 (ARP)	YES

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<b>Code or RT</b>	<b>Error Description</b>	<b>Prevent Submission?</b>
900-5	Missing Last Name of DR RT 900 (ARP)	YES
900-8	Signature Date is Invalid RT 900 (ARP)	YES
930-1	Missing RT 930 (NBP)	YES
930-2	Invalid Certification Code RT 930 (NBP)	YES
930-3	Missing Signature Date RT 930 (NBP)	YES
930-4	Missing First Name of AAR RT 930 (NBP)	YES
930-5	Missing Last Name of AAR RT 930 (NBP)	YES
930-8	Signature Date is Invalid RT 930 (NBP)	YES
940-1	Missing RT 940 (NBP)	YES
940-2	Invalid Certification Code RT 940 (NBP)	YES
940-3	Missing Signature Date RT 940 (NBP)	YES
940-4	Missing First Name of AAR RT 940 (NBP)	YES
940-5	Missing Last Name of AAR RT 940 (NBP)	YES
940-8	Signature Date is Invalid RT 940 (NBP)	YES
ARP-1	System Parameter Inappropriate for ARP/SUBH	NO
ARP-11A	Primary Monitoring System Missing for Methodology	NO
ARP-11B	Monitoring System Missing for Methodology	NO
ARP-11C	Primary Monitoring System Missing for Methodology	NO
ARP-11C1	Primary Monitoring System Missing for Methodology	NO
ARP-11C2	Primary Monitoring System Missing for Methodology	NO
ARP-11D	Monitoring System Missing for Methodology	NO
ARP-11D1	Monitoring System Missing for Methodology	NO
ARP-11D2	Monitoring System Missing for Methodology	NO
ARP-11E	Primary Monitoring System Missing for Methodology	NO
ARP-11F	Monitoring System Missing for Methodology	NO
ARP-11G	Primary Monitoring System Missing for Methodology	NO
ARP-11H	Monitoring System Missing for Methodology	NO
ARP-11I	Primary Monitoring System Missing for Methodology	NO
ARP-11J	Monitoring System Missing for Methodology	NO
ARP-14A	Missing RT 585 for ARP Unit	YES
ARP-14B	Missing CEM Methodology for ARP Unit	YES
ARP-28A	Invalid LME Default	NO

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<b>Code or RT</b>	<b>Error Description</b>	<b>Prevent Submission?</b>
ARP-28B	Inappropriate LME Default	NO
ARP-28C	Inappropriate LME Default Rate	NO
ARP-29	Missing RT 536	NO
ARP-3A	Missing NOx Formula for Unit	NO
ARP-3B	Missing NOx Formula for Stack	NO
ARP-56	Not Enough Units Associated with CS	NO
ARP-7	Formula Inconsistent with Type of System/Component	NO
ARP-8C	Zero NOx MER or MPC in GNOX/ONOX Record	YES
LIN-11	Invalid Zero Gas Level	NO
LIN-12	Too Few Gas Injections	NO
LIN-1A	Component Not Found in MP File	YES
LIN-1B	Component Type Inappropriate for Linearity Check	YES
LIN-22	Passed Result Reported Inconsistent with Failing Recalculated	YES
LIN-3	Simultaneous Gas Injections	YES
LIN-4	Inappropriate Gas Injections Sequence	NO
LIN-5	Too Many Gas Levels	NO
LIN-6A	Inappropriate Gas Levels (ARP/SUBH)	NO
LIN-6B	Inappropriate Gas Levels (OTC)	NO
LIN-8	Reference Values Inconsistent with Calibration Gas Levels	YES
NBP-12	Missing DAHS Component	YES
NBP-14A	Invalid Component ID Format	YES
NBP-14B	Invalid System ID Format	YES
NBP-16	System Missing Required Component	YES
NBP-18A	NOx System Missing NOx Component	YES
NBP-18B	NOx System Missing Required Component	YES
NBP-31	No System to Support Formula Code	NO
NBP-34	No Corresponding System for Span Record	NO
NBP-37A	RT 530 SO2/NOx/Flow MPC/MEC and MPF Check	YES
NBP-37B	Span Equal to Zero	YES
NBP-40A	NOx MER Equal to Zero	YES
NBP-42A	High Scale Span Value < Low Scale Span Value	YES
NBP-44	Invalid Units of Measure for NOx/SO2	YES

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<b>Code or RT</b>	<b>Error Description</b>	<b>Prevent Submission?</b>
NBP-45	Invalid Units of Measure for O2/CO2	YES
NBP-46	Invalid Units of Measure for Flow	YES
NBP-61	HI Methodology Missing	NO
NBP-68	NOx Methodology Missing	YES
NBP-6A	Internal Dates Not in Order	YES
NBP-7	Invalid Unit Class	NO
RATA-1A	System Not Found in MP	YES
RATA-1B	Type of System Should Not Have RATA	YES
RATA-1C	Type of System Should Not Have RATA (NBP)	YES
RATA-28C	Reported BAF Inconsistent with Recalculated BAF	YES
RATA-29A	Reported Multi-load BAF Inconsistent with Recalculated BAF	YES
RATA-3	Units of Measure Inconsistent with Type of System	YES
RATA-30A	Reported Passed RA Inconsistent with Failing Recalculated RA (Single Load)	YES
RATA-30B	Reported Passed RA Inconsistent with Failing Recalculated RA (Multiple Load)	YES
RATA-33A	Reference Method for Flow RATA Inappropriate for RTs 614/515	YES
RATA-33B	Reference Method Code for Flow RATA Invalid	YES
RATA-33C	Missing RT 611 for Flow RATA	YES
RATA-33D	Method Codes in RT 611 and 614 Inconsistent	YES
RATA-33E	Reference Method for Flow RATA Not Found	YES
RATA-33F	Reference Method Not Determined for Flow RATA	YES
RATA-34	Insufficient # of RTs 614	NO
RATA-35A	RT 614 Stack Diameter < 3.3	NO
RATA-36A	Invalid WAF Reported for non-2H Method	YES
RATA-36B	Calculated WAF for the Operating Level Not Reported	YES
RATA-37A	Invalid Default WAF Reported for non-2FH/2GH Method	YES
RATA-37B	Both Calculated and Default WAFs Reported	YES
RATA-37C	Inappropriate Default WAF Reported (Not 0.990 or 0.9950)	YES
RATA-37D	No Calculated or Default WAF Reported for Method 2H	YES
RATA-39	# of Traverse Records Inconsistent with # of Points Reported	YES
RATA-4	Simultaneous or Concurrent Runs	YES
RATA-40A	Duplicate Traverse Points IDs	YES
RATA-41A	Inconsistent Probe Types	YES

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Code or RT	Error Description	Prevent Submission?
RATA-41B	Inappropriate Probe Types for Method 2F	YES
RATA-41C	Inappropriate Probe Types for Method 2G	YES
RATA-41D	Inappropriate Probe Types for Method 2	YES
RATA-43A	Neither Average Velocity DP or Sq Root of DP Differences Reported	YES
RATA-43B	Both Average Velocity DP or Sq Root of DP Differences Reported	YES
RATA-44C	No Replacement Velocity for Exterior Method 1 Traverse Point Reported	YES
RATA-44E	Exterior Method 1 Traverse Point Does Not Have 2 Wall Effect Measurement Points	YES
RATA-46C	Replacement Velocity Reported for Non Exterior Method 1 Point	YES
RATA-47	# of Traverse Points < 14	NO
RATA-48C	Average Recalculated Velocity < 29 ft/sec	NO
RATA-50B	Four Ext Method 1 Points Not Identified	YES
RATA-51B	Wall Effects Runs Not Identified for Method 2H	YES
RATA-51C	Wall Effect Runs Not Identified for Method 2F, 2G or 2H	YES
RATA-51D	Number of Traverse Points Differs for Runs Used to Calculate WAF	NO
RATA-51H	Reported Default WAF but One or More Runs Used More than 16 Traverse Points	NO
RATA-54B	Default WAF < > 0.9900/0.9950	YES
RATA-6	Too Many Runs Excluded	YES
RATA-7	Fewer Than 9 Runs Included	NO
RATA-8	Runs Out-of-sequence or Missing	YES
TEST-1	Time Validation (Improperly formatted time)	YES
TEST-2	Comparison of Start and End Times	YES
TEST-3	Program Criteria Check	YES
TEST-4	Future Date Check	YES