ELGIN – MIDDLESEX PUMP STATION –
AYLMER SECONDARY SYSTEM PUMP STATION
2010 COMPLIANCE REPORT

Facility Names: Elgin-Middlesex Pump Station:
Aylmer Secondary Water System Booster Pump Station

Mailing Address: Elgin Area Primary Water Supply System
43665 Dexter Line.
P.O. Box 160
Port Stanley, ON N5L 1J4

Rated Capacity	17280 m^3/day
Average Daily Flow	3634 m^3/day
Max. Daily Flow	5223 m^3/day
Source Water	Elgin Area Primary Water Supply System

CONTACT INFO:

Contract Administration:
c/o City of London, Regional Water Supply Division
235 North Centre Road, Suite 200, London, Ontario N5X 4E7
Contact: Mr. Andrew Henry, P.Eng. Manager of Regional Water Supply
(519) 930-3505

Operator:
American Water Canada Corp.
43665 Dexter Line, P.O. Box 160, Port Stanley, Ontario N5L 1J4
Contact: Mr. Vaughan Martin - Project Director (519) 782-3101

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Certificate of Approval:

No. 8312-7RDRJ3 05-20-09 Aylmer Secondary Water Supply System

Treated Water Requirements:

Effective as of June 1, 2003 the Ontario government enacted new drinking water regulations under the Safe Drinking Water Act, 2002. The Drinking Water Systems Regulation (O.Reg. 170/03) replaced the Drinking Water Protection Regulation for Larger Waterworks (O. Reg. 459/00) and the Drinking Water Protection Regulation for Smaller Waterworks Serving Designated Facilities (O. Reg. 505/01).

Staff Complement and Training:

In 2010, the Aylmer facilities at the Elgin-Middlesex Pump Station (EMPS) were operated and maintained under the operating authority, American Water Canada Corp. (AW Canada). AW Canada operational and maintenance staff, are based at the Elgin Area Primary Water Supply System (EAPWSS) located in Port Stanley, Ontario, and share their time between the two facilities. Employees responsible for the operations and maintenance of the facility included five (5) full time equivalent operations staff and two (2) full time equivalent maintenance staff. This complement does not include Regional Water Supply staff, that manage the contract on behalf of the Joint Board.

Two (2) water supervision managers and one (1) administrative assistant shared their work hours between the Lake Huron Primary Water Supply System (LHPWSS) and the Elgin Area Primary Water Supply System (EAPWSS). An additional water supervision manager is stationed full time at the EAPWSS and EMPS. A portion of all 3 manager's time spent on the EAPWSS is shared with the EMPS.

In 2010, all AW Canada employees received Director Approved and practical on-the-job training which contributed to annual MOE training requirements.

History of Facility:

The EMPS is occupied by three booster stations that comprise an integrated booster station consisting of two in-ground storage reservoirs, each having a capacity of 27.3 million liters. The site upon which the three booster stations is situated is owned by the Elgin Area Primary Water Supply System and includes the original St. Thomas pump station, constructed in 1970, that services St. Thomas, and sections of the Municipalities of Central Elgin and Southwold. Two additional pump stations were completed in 1994 that service the Town of Aylmer, Municipality of Malahide, as well as, The City of London.

The Aylmer Pumping Station is comprised of two high-lift pumps that deliver water through a transmission main that services the Aylmer Secondary Water Supply System. Until December 16, 2010 the Aylmer pump station utilized an on-site sodium hypochlorite re-chlorination facility prior to delivering water into the transmission system. A gas re-chlorination facility was commissioned at the Elgin-Middlesex Pump Station in 2010. This facility replaced the sodium hypochlorite system in providing re-chlorination for water being directed to the Aylmer Secondary System.

In the event of a power failure, an on-site generator can provide sufficient standby power to operate the facility and run the Aylmer pumps.

Remote monitoring and control of all three pump stations is performed by staff at the Elgin Area Primary Water Supply System (EAPWSS) near Port Stanley, Ontario. Remote monitoring and control capabilities are made possible via the EAPWSS and the Elgin-Middlesex Pumping Station (EMPS) SCADA systems.

Process Description:

The Elgin Middlesex Pump Station (EMPS) receives treated water from the Elgin Area Primary Water Supply System, which pumps water from a water treatment plant located on the shores of Lake Erie to the east of the town of Port Stanley. Water from the plant is pumped into the site reservoir where it is subsequently fed via a series of headers to each of the pumping stations serving Aylmer, London and St. Thomas.
The Aylmer pumps are single speed pumps, each having a rated capacity of 8.64 ML/d.

Post-Treatment:

Until December 16, 2010, a sodium hypochlorite disinfection system was shared amongst the City of St. Thomas and the Town of Aylmer. Sodium hypochlorite was pumped via four chemical metering pumps, two rated at 20.4 L/h, and two rated at 60 L/h through a series of valves and appurtenances to provide re-chlorination capabilities for the booster station.
Currently, the St. Thomas and Aylmer pump stations both utilize a new gas re-chlorination facility. The facility was commissioned in December 2010 and consists of two scaled 150 lb gas chlorine cylinders and three chlorinators equipped with booster pumps. The three chlorinators redundantly serve the ASWSS and STSAWSS and have a pumping capacity of 1kg/h.

High Lift Pumping Station:

The three high lift pumping stations provide redundant pumping capacity into the Town of Aylmer, City of St. Thomas, as well as, the City of London. Conditions of the consolidated Certificate of Approval require that the Aylmer pumps do not exceed a maximum flow rate of 17,280 m^3/d. See Appendix B for the 2010 Total Daily Flows and Appendix C for the 2010 Instantaneous Peak Flow Rates for the Aylmer Pump Station at the EMPS.

Recent Improvements and Projects:

Gas Chlorination

The use of liquid sodium hypochlorite has been problematic at this facility. This disinfection system was originally designed to 'top-up' chlorination of the water supplies to Aylmer, St. Thomas and London. Since the facility was constructed, the need for 'top-up' chlorination has been far less than originally estimated. This has resulted in operational concerns, including the need to address the fact that the sodium hypochlorite loses strength with age. A study was started in 2007 and considered options to improve operations and the efficiency of the chlorination process. Construction of the gas chlorination facility took place during 2010. The gas chlorination system was commissioned in December of 2010.

Maintenance:

Site maintenance is carried out by AW Canada field services staff currently based at the Elgin Area Primary Water Supply System located near Port Stanley. Specialty maintenance services are provided, on an as needed basis by external service providers. All maintenance scheduling is monitored through a computerized maintenance management system.

In addition to the routine preventative maintenance program, a number of maintenance projects were completed at the EMPS. A summary of non-routine preventative maintenance is available in Appendix D, The 2010 Annual Report.

Sampling Procedures:

All samples collected by licensed AW Canada personnel are submitted to CALA accredited laboratories for both bacterial and chemical analysis.

A water distribution sample is taken twice per week at the inlet to the reservoir and submitted for bacteriological analysis. The treated water entering the Aylmer Secondary distribution system is sampled weekly and submitted to an external laboratory for bacteriological analysis. Chlorine residual, for the water entering all three distribution systems, is monitored continuously from the Elgin Area Primary Water Supply System by means of the regional SCADA system.
On a quarterly basis the distribution water entering the reservoir, as well as the water entering the Aylmer Secondary distribution system is sampled and submitted to an accredited laboratory for THM concentrations. Twice annually, the distribution water entering the reservoir is sampled and submitted to an accredited laboratory for lead concentrations. All water quality sampling at the Elgin Middlesex Pumping Station was performed in accordance with Ontario Regulation 170/03.

Flow Measurement and Water Quality Monitoring:

Flow is measured at several points in the process utilizing a number of different devices, including differential pressure transmitters and flow transmitters. Chlorine residual levels are monitored by an on-line analyzer located at the point of entry into the Aylmer Secondary Water Supply System. These devices were calibrated in 2010 by licensed AW Canada staff and contractors. See Appendix A for a summary of 2010 water quality data.

Statement of Comparison:

The Certificate of Approval for the Aylmer Secondary Water Supply System sets out a rated capacity for the pumps of 17,280 m^3/day, whereby, instantaneous peak flow capacity is rated at 200 L/s. The system's maximum total daily flow in 2010 was 5,223 m^3/day, approximately 30% of the systems rated capacity. The average total daily flow witnessed by the system in 2010 was 3634 m^3/day, approximately 21% of the rated capacity.
The system's maximum instantaneous peak flow in 2010 was 173 L/s, 87% of the rated capacity. See Appendix B for 2010 total daily flow values and Appendix C for 2010 daily instantaneous peak flow rates.

Ministry of the Environment Inspections :

The Ontario Ministry of the Environment (MOE) conducts an inspection of the Elgin Middlesex Pump Station – Aylmer Secondary Pump Station annually. A MOE inspection took place in May 2010. The final inspection report was issued on July 19,2010. A total of two (2) non-compliances were identified in the inspection report, one (1) related to the operation and maintenance of the EMPS – Aylmer Pump Station. The final inspection rating received for the 2010-2011 reporting year was 98.70%. A summary of the non-compliances and corrective action required by the MOE related to the operation and maintenance of the EMPS can be found in Appendix E.

Benefiting Municipalities:

Following the adoption of the Municipal Water and Sewer Transfer Act in 1997, the Ontario Ministry of the Environment transferred the ownership of the three booster stations from the Province of Ontario to the water systems' benefiting municipalities. As a result the Aylmer Secondary Water System Booster Pumping Station and associated equipment is owned by the Aylmer Secondary Water Supply System Joint Board of Management, while the Elgin-Middlesex Secondary Water System Booster Pump Station is owned by the Elgin Middlesex Secondary Water System (City of London). The St. Thomas Secondary Water System Booster Pumping Station and associated appurtenances are owned by the St. Thomas Secondary Water System Joint Board of Management. Jointly these water systems benefit, and are managed on behalf of, the communities of Aylmer, Central Elgin, London, Malahide, Southwold and St. Thomas. A list of municipalities that receive water directly and indirectly from the Aylmer System at the EMPS is provided in Appendix E. American Water Canada Corporation currently operates and maintains the Elgin Middlesex Pump Station, under contract to the Aylmer Secondary Water Supply System, The Corporation of the City of London and the St. Thomas Secondary Water Supply System, with these contracts being administered by the City of London on behalf of the various water systems.

This report was prepared by American Water Canada Corporation, on behalf of the Aylmer Secondary Water Supply System Joint Board of Management.

APPENDIX A – 2010 WATER QUALITY SUMMARY

MONTH	POST TREATMENT
	Free Cl_2 mg/L
January	
Minimum	1.09
Maximum	3.23
Average	1.50
February	
Minimum	1.00
Maximum	2.61
Average	1.17
March	
Minimum	0.86
Maximum	5.00
Average	1.19
April	
Minimum	0.82
Maximum	2.90
Average	1.21
May	
Minimum	0.78
Maximum	5.00
Average	1.46
June	
Minimum	0.64
Maximum	5.00
Average	2.65
July	
Minimum	0.83
Maximum	5.00
Average	2.59
August	
Minimum	0.65
Maximum	5.00
Average	1.78
September	
Minimum	0.64
Maximum	5.00
Average	1.84
October	
Minimum	0.79
Maximum	5.00
Average	1.86
November	
Minimum	0.81
Maximum	5.00
Average	1.91
December	
Minimum	0.84
Maximum	5.00
Average	2.09
Yearly Minimum	0.64
Yearly Maximum	5.00
Yearly Average	1.59

Note: (i) Chlorine residuals obtained from SCADA.

APPENDIX B
AYLMER TOTAL DAILY FLOW - 2010

Date	January m^3	February m^3	March m^3	April m^3	May m^3	June m^3	July m^3	August m^3	September m^3	October m^3	November m^3	December m^3	
1	3,121	3,594	3,491	3,959	3,721	4,288	3,910	4,092	4,043	3,590	3,532	3,207	
2	3,421	3,630	3,609	3,702	3,541	3,834	4,058	3,916	4,320	3,477	3,546	3,483	
3	3,305	4,251	3,370	3,754	3,706	3,762	4,211	4,251	4,083	3,213	3,102	3,169	
4	3,432	3,841	3,867	3,516	3,680	3,976	4,335	3,638	3,570	2,879	3,466	3,244	
5	3,418	3,788	3,397	3,817	3,693	3,789	5,123	4,036	3,308	2,504	3,475	3,211	
6	3,495	3,364	3,722	3,216	3,440	3,761	5,223	3,181	4,070	2,448	3,406	3,058	
7	3,200	3,535	3,388	3,637	3,865	3,916	4,576	3,702	3,987	2,676	3,452	3,256	
8	3,583	3,607	3,809	3,283	3,335	4,040	4,738	3,768	3,838	3,104	3,440	3,231	
9	3,305	3,589	3,750	3,270	3,416	3,113	4,019	4,079	3,774	3,606	3,419	3,188	
10	3,440	3,546	3,505	2,942	3,824	3,432	3,890	3,566	4,372	3,046	3,633	3,356	
11	3,664	3,572	3,583	2,402	3,528	3,906	3,982	4,043	3,833	3,603	3,305	3,314	
12	3,476	3,572	3,511	3,122	3,562	3,630	3,466	4,259	3,799	3,691	2,901	3,319	
13	3,522	3,554	3,315	3,648	3,504	3,598	3,986	4,109	3,988	3,233	3,480	3,158	
14	3,663	3,330	3,268	3,856	3,745	4,079	3,719	4,018	4,375	3,564	3,178	3,254	
15	3,706	3,638	3,476	3,656	2,988	4,014	4,344	3,968	4,271	3,503	3,585	3,580	
16	3,638	3,456	3,302	3,605	3,171	3,729	3,906	3,899	3,592	3,486	3,337	3,291	
17	3,345	3,484	3,548	3,350	4,234	3,956	3,802	4,342	3,733	3,341	3,311	3,430	
18	3,627	3,553	3,090	3,441	3,551	4,009	3,769	4,153	3,830	3,776	3,530	3,836	
19	3,638	3,628	3,350	3,673	3,354	4,350	3,731	3,848	3,668	3,390	3,213	3,052	
20	3,388	3,626	3,322	3,816	4,204	4,220	3,747	4,498	3,974	3,476	3,364	3,115	
21	3,619	3,635	3,269	3,320	3,921	4,807	4,124	3,736	4,078	3,560	3,142	2,630	
22	3,635	3,267	3,692	3,765	3,493	4,704	3,866	3,856	3,758	3,522	3,465	2,941	
23	3,441	3,582	3,335	3,275	3,615	4,537	4,015	3,605	4,319	3,220	3,141	3,234	
24	3,513	3,502	3,508	3,701	4,112	4,451	3,555	3,658	3,884	3,565	3,470	3,366	
25	3,630	3,372	3,682	3,376	4,595	4,577	3,728	3,671	3,520	3,632	3,605	2,681	
26	3,565	3,626	3,271	3,707	4,160	4,252	4,110	4,195	3,576	3,593	3,307	3,120	
27	3,554	3,488	3,504	3,294	4,371	3,802	3,961	3,838	3,617	3,604	3,213	3,000	
28	3,449	3,620	3,178	3,734	4,205	3,910	4,211	3,910	3,333	3,221	3,265	3,094	
29	3,608		3,586	3,728	4,033	3,954	3,897	3,833	3,426	3,311	3,382	2,988	
30	3,876		3,787	3,579	4,002	3,816	4,147	4,587	3,581	3,445	3,266	3,131	
31	3,550		3,684		4,062		3,704	4,232		3,241		2,918	
Total	108,827	100,250	108,169	105,144	116,631	120,212	125,853	122,487	115,520	103,520	100,931	98,855	1,326,399
Minimum	3,121	3,267	3,090	2,402	2,988	3,113	3,466	3,181	3,308	2,448	2,901	2,630	2,402
Maximum	3,876	4,251	3,867	3,959	4,595	4,807	5,223	4,587	4,375	3,776	3,633	3,836	5,223
Average	3,511	3,580	3,489	3,505	3,762	4,007	4,060	3,951	3,851	3,339	3,364	3,189	3,634

APPENDIX C
AYLMER DAILY INSTANTANEOUS PEAK FLOW - 2010

Date	January L/s	February L/s	March L/s	April L/s	May L/s	June L/s	July L/s	August L/s	September L/s	October L/s	November L/s	December L/s	
1	135	136	135	135	133	173	135	135	136	135	133	132	
2	135	135	135	135	134	135	135	135	141	134	134	132	
3	137	137	137	135	136	136	135	135	143	135	135	133	
4	137	134	136	134	135	134	135	135	135	135	134	134	
5	135	136	137	135	136	135	136	135	134	134	136	133	
6	136	136	136	136	135	136	136	135	135	134	136	134	
7	136	136	137	135	135	137	135	135	136	135	134	132	
8	136	136	136	135	133	138	135	135	137	134	135	132	
9	143	136	137	134	134	135	135	135	136	134	136	131	
10	136	136	148	134	134	139	135	134	135	135	136	132	
11	136	136	135	136	134	145	134	135	143	135	135	133	
12	135	135	135	136	136	135	143	135	135	134	133	133	
13	137	136	137	137	134	134	135	134	137	135	132	133	
14	136	137	135	135	134	142	135	135	137	134	134	132	
15	136	137	135	134	134	134	136	135	137	135	134	132	
16	136	134	136	134	134	138	135	135	137	134	134	130	
17	136	136	136	135	144	143	135	135	136	134	133	132	
18	135	136	135	135	135	136	134	134	139	148	134	132	
19	136	137	135	136	133	137	134	135	137	135	133	133	
20	136	137	136	135	134	135	134	135	140	134	133	133	
21	136	136	136	134	135	135	136	135	137	134	134	130	
22	135	136	135	135	133	136	135	135	135	134	134	132	
23	137	136	136	148	134	135	136	135	139	135	134	133	
24	136	136	135	136	135	134	135	137	137	134	137	133	
25	135	136	136	134	147	134	136	137	137	134	133	132	
26	136	136	136	148	145	134	136	133	137	134	132	132	
27	136	135	137	147	145	134	137	138	136	134	135	133	
28	136	135	137	136	134	135	135	136	136	134	134	133	
29	136		135	147	134	143	143	138	138	134	134	134	
30	137		134	135	134	135	134	139	135	135	134	133	
31	134		135		134		135	142		134		131	
Minimum	134	134	134	134	133	134	134	133	134	134	132	130	130
Maximum	143	137	148	148	147	173	143	142	143	148	137	134	173
Average	136	136	136	137	136	138	136	136	137	135	134	132	136

APPENDIX D – 2010 ANNUAL REPORT

Ontario **Drinking-Water Systems Regulation O. Reg. 170/03**

Drinking-Water System Number:	260004722
Drinking-Water System Name:	**Elgin Middlesex Pumping Station (EMPS) – Aylmer Secondary Water Supply System**
Drinking-Water System Owner:	Aylmer Secondary Water Supply System Board of Management c/o Township of Malahide
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2010 through December 31, 2010

Complete if your Category is Large Municipal Residential or Small Municipal Residential

Does your Drinking-Water System serve more than 10,000 people? Yes [X] No [ ]

Is your annual report available to the public at no charge on a web site on the Internet? Yes [X] No [ ]

Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.

Lake Huron and Elgin Area Water Supply Systems
c/o Regional Water Supply Division
235 North Centre Road London, ON. N5X 4E7
http://www.watersupply.london.ca

Elgin Area Water Treatment Plant
43665 Dexter Line, Union, ON

Complete for all other Categories.

Number of Designated Facilities served:

N/A

Did you provide a copy of your annual report to all Designated Facilities you serve?
Yes [ ] No [ ]

Number of Interested Authorities you report to: N/A

Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility?
Yes [ ] No [ ]

List all Drinking-Water Systems (if any), which receive all of their drinking water from your system:

Systems that receive their drinking water directly from the Aylmer EMPS:

Drinking Water System Name	Drinking Water System Number
Aylmer Secondary Water Supply System	260004722

Systems that receive their drinking water indirectly from the Aylmer EMPS:

Drinking Water System Name	Drinking Water System Number
Municipality of Central Elgin	260004761
Malahide Distribution System	260004774
Aylmer Distribution System	260002136

Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water?

Yes [X] No [ ]

Indicate how you notified system users that your annual report is available, and is free of charge.

- **[X] Public access/notice via the web**
- **[X] Public access/notice via Government Office**
- **[ ] Public access/notice via a newspaper**
- **[X] Public access/notice via Public Request**
- **[ ] Public access/notice via a Public Library**
- **[X] Public access/notice via other method ____News Release**

Describe your Drinking-Water System

The Elgin Middlesex Pumping Station (EMPS) receives water from the Elgin Area Primary Water Supply System, which is located to the east of Port Stanley. Through various secondary water supply systems, the EMPS serves the Cities of London and St. Thomas, Town of Aylmer, and Municipalities of Central Elgin, Malahide and Southwold.

The EMPS is a shared facility encompassing a twin celled reservoir with a total capacity of 54,600m^3. Booster pumps are dedicated to directing water to the City of London, St. Thomas Secondary and/or Aylmer Secondary Water Supply Systems. A gas chlorine system is utilized to provide re-chlorination for water being directed to the St. Thomas and Aylmer Secondary Supply Systems. The facility also houses a 600kW standby diesel generator that provides emergency power and can be used to pump water into the St. Thomas and Aylmer systems during a power interruption.

Three pipelines exit the EMPS: one exits to the south of the EMPS property and extends west to service the St. Thomas Secondary System; the second services the City of London distribution system; the third pipeline services the municipalities on the Aylmer Secondary System.

List all water treatment chemicals used over this reporting period

12% Sodium Hypochlorite
Gas Chlorine

Were any significant expenses incurred to?

- **[X]** Install required equipment
- **[X]** Repair required equipment
- **[X]** Replace required equipment

Please provide a brief description and a breakdown of monetary expenses incurred

- Air Handling Unit fan motor was replaced
- Numerous repairs to Sodium Hypochlorite (12%) feed line
- Repairs made to valves
- Installed Gas Chlorination system to replace Sodium Hypochlorite system.
- SCADA upgrades

Notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre

Incident Date	Parameter	Result	Unit of Measure	Corrective Action	Corrective Action Date
N/A	N/A	N/A	N/A	N/A	N/A

Microbiological testing done under the Schedule 10, 11 or 12 of Regulation 170/03, during this reporting period.

	Number of Samples	Range of E.Coli Results (CFU/100 mL) (min #)-(max #)	Range of Total Coliform Results (CFU/100 mL) (min #)-(max #)	Number of Heterotrophic Plate Count (HPC) Samples	Range of HPC Results (CFU/1 mL) (min #)-(max #)
Distribution	53	(0) – (0)	(0) – (0)	53	(<10) – (20)

Operational testing done under Schedule 7, 8 or 9 of Regulation 170/03 during the period covered by this Annual Report.

Analyte	Number of Grab Samples (Continuous Monitoring)	Min	Max	Avg
Free Chlorine Residual (mg/L)	105120	0.64	5.00	1.75

Note: *The free chlorine residual spiked on several occasions during 2010. Each spike corresponded with a pump start-up. None of the spikes lasted longer than 5 minutes after pump start-up.*

Summary of Organic parameters sampled during this reporting period or the most recent sample results

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
THM (NOTE: result value is based on latest annual average)	January 5, 2010 April 6, 2010 July 20, 2010 October 5, 2010	0.0170	mg/L	NO

APPENDIX E - MINISTRY OF THE ENVIRONMENT INSPECTION SUMMARY

Ministry of the Environment (MOE) Inspection Report – Issued July 19, 2010

Summary of Non-compliances

#	MOE Inspection Module	MOE Non-compliance (Summary)	Corrective Action Required by MOE (Summary)
NC #1	Log Books	During the review of the AW Canada logbook maintained at the Elgin-Middlesex Pumping Station, it was observed that the logbook did not meet the requirements specified in O. Reg. 128/04 s. 27 (5) 1., 4., 5. and 6. Many entries state an unusual or abnormal situation but there is no explanation provided by the author of the entry with regards to the action taken and any conclusions drawn from the observation. In some cases there is no indication of the person who gave an instruction to depart from normal operating procedures.	Integrate record-keeping requirements under O. Reg 128/04 s. 27 (5) into the training program for operational staff. Provide confirmation that operational staff have been trained in record-keeping requirements as per O. Reg. 128/04. Submit to the MOE inspector, the curriculum with the specifics of the training including an operator sign-off sheet.