

A.L. 5 ta' l-2006**ATT TA' L-2003 DWAR IS-SAHHA PUBBLIKA
(ATT NRU. XIII TA' l-2003)****Regolamenti ta' l-2006 dwar il-Kontroll tal-Leġjonella**

BIS-SAHHA tas-segħtat mogħtija bl-artiklu 26 (i) ta' l-Att ta' l-2003 dwar is-Sahha Pubblika, il-Ministru tas-Sahha, l-Anzjani u l-Kura fil-Komunita' għamel dawn ir-regolamenti li ġejjin:—

1. It-titolu ta' dawn ir-regolamenti hu **Regolamenti ta' l-2006** Titolu.
dwar il-Kontroll tal-Leġjonella.
2. F'dawn ir-regolamenti, kemm-il darba r-rabta tal-kliem ma Tifsir.
teħtieġ xort'ohra:—

“l-Att” tfisser Att dwar is-Sahha Pubblika;

“bioċida” tfisser aġent fiżiku jew kimiku kapaci li joqtol mikro-organizmi, inkluza l-Leġjonella;

“*cooling tower*” tfisser apparat li l-użu prinċipali tiegħu hu li jkessah l-ilma b'kuntatt dirett bejn dak l-ilma u kurrent ta' arja;

“fond” tinkludi kull fond mhux domestiku użat għal jew f'konnessjoni mal-ġestjoni ta' negozju jew kummerċ (kemm bi qliegh kemm mhux) u għandu jinkludi kull faċilita' għall-kura tas-sahha u skola;

“funtana ta' l-ilma” tfisser kull għamla ta' ilma li tkun tinsab f'żona msemmija;

“*heterotrophic colony count*” tfisser kalkolu ta' l-ghadd ta' unitajiet vijabbli ta' batterji għal kull millilitru ta' ilma magħmul bl-użu tal-metodu tal-*pour plate*, *spread plate* jew *membrane filter test* (magħrufin ukoll bħala *total bacterial count*, *total plate count* jew *viable bacterial count test*);

“ilma” tfisser ilma provdut mis-sistema prinċipali ta' distribuzjoni ta' l-ilma jew ilma provdut minn provditur ta' l-ilma

privat awtorizzat jew permezz ta' provista ta' l-ilma approvata mis-Suprintendent jew mill-awtoritajiet kompetenti rilevanti;

“is-Suprintendent” tfisser is-Suprintendent tas-Sahha Pubblika;

“kondensatur evaporattiv” tfisser apparat li l-ghan prinċipali tiegħu hu li jkessah likwidu billi jgħaddi dak il-likwidu minn go sistema li tbiddel is-shana li hi nnifisha tiġi mkessha b'kuntatt li tagħmel ma' ilma li jkun għaddej minn kurrent ta' arja;

“kurrent” tfisser raxx ta' ilma li johroġ mis-sistema tal-hruġ ta' l-arja tas-sistema tal-*cooling tower*;

“laboratorju akkreditat” tfisser laboratorju li jieħu sehem fi skema esterna ta' valutazzjoni kwalitattiva biex tiġi iżolata il-legjonella mill-ilma u l-interpretazzjoni tar-rizultati ssir minn mikrobiologu li jkollu esperjenza;

“legjonella” tfisser batterju tat-tip *Legionella*;

“linji gwida” tfisser il-*European Guidelines for Control and Prevention of Travel Associated Legionnaire's Disease* magħmula mill-*European Working Group for Legionella Infections (EWGLI)* u approvati mill-*Committee for the Epidemiological Surveillance and Control of Communicable Diseases* fil-Komunita, mwaqqaf bid-Deciżjoni 2119/98/KE tal-Parlament Ewropew u tal-Kunsill;

“persuna responsabbli” tinkludi lill-persuna li tkun proprjetarja, tmexxi jew tikkontrolla s-sistemi tal-*cooling tower*, jew il-kondensaturi evaporattivi, jew sistemi ta' ilma shun u kiesah, jew funtani ta' l-ilma jew għadd minn dawn is-sistemi fl-istess fond;

“*sentinel taps*” tfisser, f'sistema ta' ilma shun, l-ewwel u l-aħħar vitien fuq sistema ta' ċirkolazzjoni mill-ġdid. Għal sistemi ta' l-ilma kiesah (jew sistemi ta' ilma shun li ma jiċċirkolawx mill-ġdid), il-vitien l-aktar viċini jew il bogħod mit-tank tal-ħażna. L-għażla ta' *sentinel taps* tista tinkludi wkoll vitien li huma kunsidrati li jirrappreżentaw riskju partikolari;

“sistema li tbiddel is-shana” tfisser apparat biex jittrasferixxi s-shana minn bejn likwidi li ma jkunux f'kuntatt dirett ma' xulxin;

“sistema ta’ ilma kiesah” tfisser l-installazzjoni ta’ impjant, kanen u aċċessorji fejn l-ilma kiesah ikun mahżun, mqassam u sussegwentament mbattal;

“sistema ta’ ilma shun” tfisser provvista ta’ ilma fil-kanen, inkluż kull *thermostatic mixing valve*, li jkun disinjat biex jissupplixxi ilma b’temperatura ta’ bejn it-30°C u s-60°C;

“sistemi ta’ *cooling tower*” jinkludu:-

(a) *cooling tower*, jew għadd ta’ *cooling towers* mqabbdin flimkien li jużaw l-istess ċirkolazzjoni mill-ġdid ta’ l-ilma; u

(b) kull makkinarju li jintuża biex jopera l-*cooling towers*; u

(ċ) kull tank, kannu, valvola, pompa jew sistema ta’ kontrolli assoċjati;

“spa pool” tinkludi banju jew *pool* żgħira fejn l-ilma shun jiġi ċirkolat mill-ġdid u kontinwament, minn ġo ġettijiet b’veloċità qawwija hafna jew bl-injezzjoni ta’ arja biex tqanqal l-ilma;

“tiddisinfetta” tfisser li tagħmel proċess mahsub biex joqtol jew ineħhi mikro-organizmi patoġeniċi;

“tnaddaf” tfisser biex tehles milli jidher ċaflis, ragħwa, hama (inklużi l-alga u l-fungi), sadid, tartru, hmieg, u kull depożitu jew akkumululu ta’ impuritajiet jew materjal barrani iehor;

“uffiċjal awtorizzat” tfisser kull persuna kwalifikata kif imiss li tkun awtorizzata mis-Suprintendent biex taqdi funzjonijiet taht dawn ir-regolamenti u tinkludi kull uffiċjal nominat;

“żona msemmija” tfisser kull proprjetà jew parti minn proprjetà li l-membri tal-pubbliku jew x’uhud minnhom ikollhom aċċess għalihom, kemm jekk bi hlas kemm jekk mhux.

3. (1) L-installazzjoni ta’ sistema tal-*cooling tower* u ta’ kondensatur evaporattiv f’bini ġdid għall-kura tas-sahha jew skejjel hu projbitt.

Installazzjoni ta’ sistemi ta’ *cooling tower* u kondensatur evaporattiv godda.

(2) L-installazzjoni ta' sistema ġdida ta' *cooling tower* jew ta' kondensatur evaporattiv f' postijiet ohra għandu jiġi ristrett għal dawk il-kazijiet biss fejn ebda sistema ohra ta' tkessih niexef m'hiex possibbli bhala alternattiva.

Disinn u kostruzzjoni ta' sistema ta' *cooling tower* u kondensatur evaporattiv.

4. (1) Fi stadju ta' installazzjoni ta' sistema ta' *cooling tower* jew kondensatur evaporattiv, għandha ssir spezzjoni minn persuni kompetenti sabiex il-*cooling tower* u l-kondensatur evaporattiv ikunu ta' riskju minimu għas-saħħa ta' l-okkupanti ta' dak il-fond u tal-membri tal-pubbliku.

(2) Is-sistemi ta' tkessieh għandhom jiġu disinjati u mibnijin hekk li jnaqqsu mir-rilaxx tal-kurrent u jghinu biex l-apparat ikun sigur, jitnaddaf b'mod regolari u jiġi disinfezzjati.

Il-pożizzjoni ta' *cooling towers* u kondensaturi evaporattivi.

5. Il-*cooling tower* jew l-kondensatur evaporattiv għandhom ikunu jinsabu f'pożizzjoni ta' l-inqas hames metri bogħod mill-aperturi mnejn tidhol l-arja u tiċċirkola, twieqi miftuħin u żoni okkupati, bankini mnejn jgħaddi l-pubbliku, żoni tat-traffiku, żoni fejn jista' jidhol il-pubbliku, mnejn toħroġ l-arja mill-kċejjen, sistemi li jhaddmu l-arja jew żoni ohra fejn in-nutrijenti li jiġu min dawn is-sistemi jistgħu jagħtu lok għat-tkabbir tal-legjonella.

Il-provista ta' l-ilma.

6. Il-provista ta' l-ilma kostitwit għandha tiġi provduta jew mis-sistema prinċipali ta' distribuzzjoni ta' l-ilma jew minn distributtur ta' l-ilma awtorizzat jew minn provista ta' l-ilma approvata mis-Suprintendent.

Kif jiskula l-ilma.

7. (1) L-ilma mahmuġ mill-*cooling towers* u minn kondensaturi evaporattivi għandu jiskula għal ġo d-drenaġġ pubbliku skond ma huwa approvat mill-awtoritajiet kompetenti rispettivi.

(2) Il-konċentrazzjoni ta' kimika fl-ilma mahmuġ għandha tkun fil-limiti stabbiliti mill-awtoritajiet kompetenti rispettivi.

Approvazzjoni u operazzjoni.

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8. (1) *Cooling towers* u kondensaturi evaporattivi għandhom jiġu awtorizzati, approvati u ċertifikati minn inġinier kompetenti li jkollu *warrant* skond l-Att dwar il-professjoni ta' l-Inġiniera, qabel ma dawn jintużaw, sabiex jiġi żgurat li dawn joperaw sew u b'mod sigur.

(2) Is-sistema kollha ta' l-arja kondizzjonata ma għandu jkun fiha ebda skart u hmieġ ġej mill-kostruzzjoni, u għandha tiġi mnaddfa qabel ma tibda taħdem.

(3) Ghandhom jittieħdu prekawzzjonijiet biex jiġu kontrollati r-riskji matul l-awtorizzazzjoni, startjar u thaddim normali tas-sistema skond il-linji gwida.

9. (1) Il-persuna responsabbli għandha d-dmir li tiżgura li:
- (a) kull sistema ta' *cooling tower* jew kondensatur evaporattiv li jintużaw issirihom manutenzjoni u jiġu ttestjati skond il-linji gwida; Manutenzzjoni u testjar ta' *cooling towers* u
Kondensaturi evaporattivi.
- (b) l-ilma tas-sistema tal-*cooling tower* jew tal-kondensatur evaporattiv ikun miżmum f'kundizzjoni nadifa;
- (ċ) l-ilma tas-sistema tal-*cooling tower* jew tal-kondensatur evaporattiv ikun trattat kontinwament; Il-kwalità u u kif jiġi trattat.
- (i) b'xi wieħed jew aktar mill-bioidi biex jikkontrolla b'mod effettiv it-tkabbir ta' mikro-organizmi, inkluża l-*legjonella*; u
- (ii) b'kimiċi jew aġenti oħra biex titnaqqas il-formazzjoni tal-*gebla*, korrużjoni u thammig;
- (d) bio-dispersiv kompattibli mal-kloru jiġi miżjud ma' l-ilma li jiċċirkola mill-*gdid* tas-sistema tal-*cooling tower* jew tal-kondensatur evaporattiv, u li s-sistema tiġi mbagħad disinfejtata, mnaddfa u terġa tiġi disinfejtata mil-*gdid*; Disinfettar, tindif u disinfejtat mil-*gdid*.
- (i) immedjatament qabel ma tiġi startjata wara l-awtorizzazzjoni, jew f'kull perjodu li tieqaf taħdem li jdum aktar minn xahar; u
- (ii) f'intervalli ta' mhux aktar minn sitt xhur.
- (e) is-sistema tal-*cooling tower* jew il-kondensatur evaporattiv tiġi spezzjonata skond il-linji gwida u Skeda 1; Spezzjonijiet u testjar ta' rutina.
- (f) ta' l-inqas darba fix-xahar, jittieħed kampjun ta' l-ilma li jiċċirkola mill-*gdid* tas-sistema tal-*cooling tower* u l-kondensatur evaporattiv f'laboratorju akkreditat biex jiġi ttestjat l-*ghadd* tal-kolonji eterotrofiċi u ta' l-inqas darba kull sitt xhur għal *legjonella*; Frekwenza ta' kampjuni mikrobiologiċi.
- (g) għandu jittieħed kampjun ta' l-ilma qabel ma tithallat id-doża tal-bioċida skond il-linji gwida. Tehid ta' kampjuni ta' l-ilma.

Livelli ta' azzjoni wara monitoraġġ mikrobioloġiku ta' sistemi ta' *cooling tower* u kondensaturi evaporativi.

10. (1) Il-persuna responsabbli ghandha tiżgura li l-azzjonijiet wara l-monitoraġġ mikrobioloġiku tal-*cooling towers* u l-kondensaturi evaporattivi jkunu skond il-proċeduri indikati fi Skeda 2 li tinsab ma' dawn ir-regolamenti.

(2) Il-persuna responsabbli ghandha tinforma immedjatament lis-Suprintendent b'kull sitwazzjoni li hemm provdut dwarha fi Skeda 2 li tinsab ma' dawn ir-regolamenti.

(3) Il-persuna responsabbli ghandha taghmel kull monitoraġġ u tiehu kull azzjoni korrettiva kif jista' jiġi ordnat mis-Suprintendent.

(4) Is-Suprintendent jista' jitlob kull sistema jew parti minnha jinghalqu sakemm l-azzjonijiet kollha meħtieġa bhala rimedju jkunu saru mill-persuna responsabbli u sakemm ir-riżultati tal-kampjuni mikrobioloġiċi ta' sistema jkunu reġghu lura ghal-livelli aċċettati u rakkomandati skond ma hemm indikat fi Skeda 2 li tinsab ma' dawn ir-regolamenti.

Manutenzjoni u ttestjar ta' sistemi ta' l-ilma shun u kiesah.

11. (1) Il-persuna responsabbli ghandha tiżgura li:

(a) kemm-il darba s-sistema ma tinghalaqx jew ma titbattalx mill-ilma jew xort'ohra ma tintużax, kull sistema ta' l-ilma shun u kiesah li dik il-persuna responsabbli jkollha, tkun timmaniġġa jew tikkontrolla, ghandha tinzamm u tiġi ttestjata bil-mod stabbilit b'dawn ir-regolamenti u skond il-linji gwida;

Proċeduri ta' startjar.

(b) is-sistema ta' l-ilma shun u kiesah tiġi disinfeettata jew bis-shana jew bil-klorinazzjoni u mnaddfa immedjatament qabel ma tkun se tiġi startjata għall-ewwel darba wara li tkun ġiet awtorizzata, jew magħluqa għal perjodu ta' aktar minn xahar;

Disinfettar ta' rutina.

(ċ) is-sistema ta' l-ilma shun u kiesah tkun disinfeettata b'xi wiehed jew aktar minn dawn il-metodi li ġejjin:

(i) mill-inqas darba fix-xahar bis-shana jew klorinazzjoni; jew

(ii) kontinwament b'livell ta' klorinazzjoni baxx u awtomatiku; jew

(iii) kontinwament bi trattament ta' dawl ultra-vjolett; jew

(iv) metodu approvat fil-linji gwida.

(d) is-sistema ta' ilma shun u kiesah ghandha tigi spezzjonata u ssirilha manutenzjoni skond id-direttivi mahruġin magħhom u skond id-direttivi msemija f'Skeda 1 u 3;

Testjar u spezzjonijiet ta' rutina.

(e) meta bioċidi jkunu qegħdin jintużaw fit-trattament ta' sistemi ta' l-ilma, dawn għandhom jiġu kontrollati bir-reqqa u verifikati mill-inqas darba fil-ġimgħa jew skond ma jiġi indikat sa biex jiġi żgurat li jkunu qegħdin joperaw korrettament;

Trattamenti bioċidi.

(f) ta' l-inqas darba kull sitt xhur għandu jittiehed kampjun ta' ilma mis-sistema ta' l-ilma shun u kiesah u dan jintbagħat f'laboratorju akkreditat għal ittestjar u rapportar tal-legjonella.

Il-frekwenza ta' kampjuni mikrobiologiċi.

12. (1) Il-persuna reponsabbli għandha tiżgura li l-azzjonijiet wara l-monitoraġġ mikrobiologiċu tas-sistemi ta' l-ilma shun u kiesah ikunu skond il-proċeduri li hemm fi Skeda 4 li tinsab ma' dawn ir-regolamenti.

Livelli ta' azzjoni wara monitoraġġ mikrobiologiċu.

(2) Il-persuna responsabbli għandha minnufih tinforma lis-Suprintendent bis-sitwazzjoni li hemm provdut dwarha fi Skeda 4 li tinsab ma' dawn ir-regolamenti.

(3) Il-persuna responsabbli għandha tagħmel kull monitoraġġ ieħor u tiegħu kull azzjoni rimedjali oħra kif tista' tkun ordnata mis-Suprintendent.

(4) Is-Suprintendent jista' jehtieg li s-sistemi jew parti mis-sistemi jingħalqu sakemm ikunu ttie' du l-azzjonijiet rimedjali kollha mill-peruna responsabbli u sakemm ir-riżultati tal-kampjuni mikrobiologiċi jkunu ġew lura għal-livelli aċċettabli kif inhuma rakkomandati fi Skeda 4 li tinsab ma' dawn ir-regolamenti.

13. (1) Il-persuna responsabbli għandha d-dmir tiżgura li:

Manutenzjoni u ttestjar ta' funtani ta' l-ilma.

(a) kull funtana ta' l-ilma li taqa' taht ir-responsabbiltà tagħha tinżamm u tigi ttestjata skond il-linji gwida u Skeda 1;

(b) jittieħdu kampjuni ta' l-ilma mill-funtana:

Tehid ta' kampjuni mikrobiologiċi.

(i) ta' l-inqas darba fix-xahar bil-għan li jiġi stabbilit l-għadd tal-kolonji eterotrofiċi; u

(ii) ta' l-inqas darba kull sitt xhur bil-għan li jinkixfu l-batterji tal-legjonella.

(2) Il-persuna responsabbli ghandha minnufih tinforma lis-Suprintendent bis-sitwazzjoni li hemm provdut dwarha fi Skeda 2 li tinsab ma' dawn ir-regolamenti.

Avviz biex issir spezzjoni, testijiet jew manutenzjoni ta' funtani ta' l-ilma.

(3) Is-Suprintendent jista' jehtieg lill-persuna responsabbli li taghmel testijiet u manutenzjoni ta' funtani ta' l-ilma skond ma Suprintendent jista' jqis li jkun mehtieg.

Manutenzjoni u ttestjar ta' sistemi ohra ta' riskju.

14. (1) Il-persuna responsabbli ghandha d-dmir li tizgura li kull *spa pool* u kull tip iehor ta' sistema ta' l-ilma li taqa' taht ir-responsabbilta' tieghu, ghandha tinzamm u tigi ttestjata skond il-linji gwida u fi Skeda 1.

(2) *Spa pools* li jkunu għall-wiri fi hwienet ta' bejgh bl-imnut jew f'xi esibizzjoni ghandhom jigu trattati bhal li kieku dawn kienu qeghdin fil-fatt jintuzaw.

Evalwazzjoni ta' riskju.

15. (1) Il-persuna responsabbli ghandha:

(a) taghmel evalwazzjoni ta' riskju biex jigi identifikat u evalwat ir-riskju ta' esposizzjoni għall-batterji tal-leġjonella minn attivitajiet ta' xogħol u sistemi ta' l-ilma fil-fond li jkollha taht ir-responsabbilta' tagħha skond kif dawn huma identifikati fil-linji gwida; u

(b) tidentifika kull mizura neccessarja ta' prekawzzjoni li ghandha tittiehed; u

(c) tirrevedi l-evalwazzjoni ta' riskju jew ta' kull sena jew kull meta s-sitwazzjoni tinbidel jew meta għal xi raġuni jew ohra l-evalwazzjoni oriġinali tista' ma tkunx aktar valida; u

(d) iżzomm dokumentazzjoni kompleta ta' l-evalwazzjoni ta' riskju.

Mizuri ta' kontroll.

(2) Meta l-evalwazzjoni ta' riskju turi li x'aktarx se jkun hemm riskju li ma jkunx jista' jigi eliminat, il-persuna responsabbli ghandha tadotta pjan skema li jispecifika l-mizuri li ghandhom jittiehdu biex jigi mnaqqas ir-riskju ta' espożizzjoni.

Awditjar estern.

(3) Hi persuna kompetenti indipendenti li ghandha ta' l-inqas darba kull sentejn taghmel l-awditjar ta' l-evalwazzjoni ta' riskju u tat-thaddim tal-mizuri ta' kontroll.

(4) Kull *record* dwar il-manutenzjoni u l-evalwazzjoni ta' riskju ghandu jinżamm ghal perjodu ta' mhux inqas minn hames snin.

16. (1) Jekk tfaqqa' marda tal-leġjonella jew ikun hemm suspett li din tkun faqqgħet, il-persuna responsabbli għandha tgħarraf b'dan lis-Suprintendent minnufih. Pjan ta' azzjoni f'każ li tfaqqa' marda.

(2) Fl-eventwalità jew fuq suspett li tkun faqqgħet il-marda tal-leġjonella, il-persuna responsabbli għandha timplimenta kull struzzjoni li s-Suprintendent jista' jirrikmanda.

17. (1) Ikun id-dmir tas-Suprintendent li jinvestiga kull każ jew suspett tal-marda tal-leġjonella f'kull fond u li jara li jittiehdu kampjuni u ssir analizi ta' kampjuni mehtieġa biex jiġi investigat dak il-każ jew suspett ta' każ. Dmirijiet tas-Suprintendent.

(2) L-ispejjeż kollha li jsiru għall-elevazzjoni, trasport, preparazzjoni u analiżi ta' kampjuni f'każ ta' l-ewwel investigazzjoni ta' każ jew suspett ta' każ tal-marda tal-leġjonella għandhom jiġġarbu mis-Suprintendent.

(3) Jekk ir-riżultati ta' l-ewwel kampjuni jindikaw il-preżenza ta' l-ispeċi tal-leġjonella, jew l-investigazzjoni isseħħ fi żmien erba' u għoxrin xahar minn l-ewwel każ jew każ suspett avżat, l-ispejjeż ta' kampjuni ta' prosegwiment jew ta' l-ewwel kampjuni, skond il-każ, għandhom jiġġarbu mill-persuna responsabbli: Investigazzjonijiet ta' prosegwiment.

Iżda l-persuna responsabbli mill-fond għandha tiffirma *a priori* d-dikjarazzjoni hawn annessa bhala Skeda 5 ma' dawn ir-regolamenti fejn jiġi konfermat li tkun qieghda taċċetta li thallas l-ispejjeż kollha dovuti lis-Suprintendent.

(4) Kull min jonqos milli jikkonforma ruħu mad-disposizzjonijiet tas-subregolament (3) ta' dan ir-regolament ikun hati ta' reat u l-qorti, minbarra li tinfliggi l-piena, għandha tobbliga lit-tali jhallas l-ispejjeż dovuti.

18. (1) Fil-każ li l-persuna responsabbli tonqos milli ssegwi l-istruzzjonijiet imsemmija fir-regolamenti preċedenti, jew jekk is-Suprintendent jara li r-riskju ta' infezzjoni bil-leġjonella f'dak il-fond partikolari jkun sinifikanti, huwa jista' jordna li dak il-fond, parti mill-fond jew xi sistema relatata ma' l-ilma, għandhom jingħalqu immedjatament sakemm jiġi kontrollat ir-riskju ta' xi infezzjoni. Gheluq tal-fond.

Avviż ta' infurzar.

(2) Is-Suprintendent għandu jgħid avviż ta' infurzar lill-persuna responsabbli u dan għandu jkun fil-forma speċifikata fi Skeda 6 li tinsab ma' dawn ir-regolamenti, jew f'kull forma modifikata oħra skond ma s-Suprintendent jista' jqis li jkun adatt fiċ-ċirkostanzi partikolari.

(3) Għaladarba l-fond, parti mill-fond jew xi sistema relatata ma' l-ilma jkunu għew magħluqin b'avviż ta' infurzar maħruġ mis-Suprintendent, l-istess avviż ta' infurzar jista' jiġi biss revokat għaladarba jkun għe konfermat mis-Suprintendent li r-riskju ta' xi infezzjoni jkun għe kkontrollat.

Nuqqas ta' konformità ma' l-avviż ta' infurzar.

(4) Kull min jonqos milli jikkonforma ruħu ma' l-avviż ta' infurzar maħruġ taħt is-subregolament (2) ta' dan ir-regolament, ikun hati ta' reat taħt l-Att.

Reati.

19. Kull min jikser xi disposizzjoni ta' dawn ir-regolamenti ikun hati ta' reat taħt l-Att.

SKEDA 1

FREKWENZI TA' SPEZZJONI RAKKOMANDATI GHALL-EVALWAZZJONI TA' RISKJU

LISTA TA' KONTROLLI 1: INSTALLAZJONIJIET GHAT-TKESSIH TA' L-ILMA

SISTEMA/SERVIZZI	INKARIGU	FREKWENZA
<i>Cooling tower</i> u kondensaturi evaporattivi	Monitoraġġ tal-kwalità ta' l-ilma, l-użu ta' l-ilma u l-użu ta' bioċida/kimika biex tiġi evalwata u żgurata l-effettività tar-reġim tat-trattament ta' l-ilma, inklużi l-parametri ewlenin kimiċi u mikrobioloġiċi u osservazzjonijiet tal-kondizzjoni interna ta' l-għadira, <i>pack</i> u ilma	Kull sitt xhur
	Funzjoni ta' kontroll ċentrali, kalibrazzjoni tas- <i>sensor</i> konduttiv, funzjoni ta' <i>blowdown</i> , uniformità fid-distribuzzjoni ta' l-ilma, il-kundizzjoni ta' <i>sprays/troughs</i> , <i>eliminators</i> , <i>pack</i> , għadira, <i>immersion heaters</i> , fann u apparat li-jtaffi l-hoss	Kull xahar sa tlett xhur, skond ir-riskju
	Tindif u disinftar ta' <i>cooling towers</i> /kondensaturi evaporattivi, <i>make up tanks</i> u sistemi assoċjati, inklużi l-uċuħ mxarrba kollha, hekk li titnehħa l-gebla kollha fejn dan ikun meħtieġ. Il- <i>packs</i> għandhom jiġu maqluġha u mnaddfa meta dan ikun prattikabli	Kull sitt xhur

LISTA TA' KONTROLLI 2: SERVIZZI TA' ILMA SHUN U KIESAĦ

SERVIZZI	INKARIGU	FREKWENZA
Servizzi ta' ilma shun	Aghmel mezz li l-kampjuni jittiehdu mil- <i>heaters</i> ta' l-ilma shun, biex tiġi osservata l-kondizzjoni ta' l-ilma mid- <i>drain</i> .	Kull sitt xhur
	Ivverifika t-temperaturi tal- <i>flow</i> u irritorn fil- <i>calorifiers</i>	Kuljum
	Ivverifika t-temperatura sa minuta biex tara jekk tkunx lahqet il-50°C fis- <i>sentinal taps</i>	Kull gimgha
	Ivverifika vizwalment l-uċuħ interni tal- <i>water heaters</i> għal-gebla u l-hama.	Kull sena
	Ivverifika l-vitien rappreżentattivi għat-temperatura bħalma hu indikat hawn qabel fuq bażi ta' rotazzjoni	Kull xahar
Servizzi ta' ilma kiesaħ	Ivverifika t-temperatura ta' l-ilma fit-tank il bogħod mill-balla u innota it-temperatura massima reġistrata minn termometri fissi għat-temperaturi massimi/minimi meta dawn ikunu mwahhla	Kull sitt xhur
Nota: Jista' jkun li din it-temperatura ma tinlaħaqx f' Malta matul ix-xhur tas-sajf	Ivverifika li t-temperatura tkun anqas minn 20°C wara s- <i>sentinal taps</i> jinfethu għal żewġ minuti	Kull gimgha
	Spezzjona vizwalment it-tankijiet ta' l-ilma kiesaħ u għamel xogħol rimedjali meta dan ikun meħtieġ	Kull sitt xhur
	Ivverifika l-vitien rapreżentattivi għat-temperatura bħalma hu indikat hawn qabel fuq bażi ta' rotazzjoni	Kull xahar
Mnejn johroġ l-ilma tad-doxxa	Żarma, nadaf u neħhi il-gebla mnejn johroġ l-ilma tad-doxxa u manek	Kull tlett xhur, jew qabel jekk ikun hekk meħtieġ
Žbokki li ma tantx jintużaw	Ifflaxxa sew u itfa fid- <i>drain</i>	Kull gimgha

LISTA TA' KONTROLI 3: SISTEMI OHRA TA' RISKJU

SISTEMA/SERVIZZ	INKARIGU	FREKWENZA
<i>Spray humidifiers, air washers u wet scrubbers</i>	Naddaf u iddisinfetta <i>spray humidifiers/air washers</i> u <i>make up tanks</i> inklużi l-uċuħ kollha mxarrba, u titneħħa l-gebla fejn ikun meħtieġ	Kull sitt xhur
	Ikkonferma l-operazzjoni tat-trattament ta' l-ilma mhux kimiku (jekk preżenti)	Kull ġimgħa
<i>Water softeners</i>	Nadaf u iddisinfetta rezina u tankijiet ta' ilma salmastru – ivverifika mal-manifattur x'tip ta' kimika tista' tintuża biex jiġi disinfettat il-qigh tar-rezina	Kif ikun rakkomandatt mill-manifattur
Doxxox ta' emerġenza u <i>sprays</i> għat-tbahbih ta' l-ghajnejn	Ifflaxxa sew u itfa fid- <i>drain</i>	Kull sitt xhur jew aktar frekwenti jekk ikun hekk rakkomandat mill-manifattur
Sistemi ta' bexxiexa u romblu ta' manka	Meta tkun preżenti għal testijiet ta' bexxiexa u romblu ta' manka żgura ruħek li jkun hemm riskju minimu ta' esposizzjoni għall- <i>aerosols</i>	Kull tlett xhur
Sistemi li jkesshu torn u għodda ta' makkinarju	Naddaf u iddisinfetta is-sistemi ta' hażna u ta' distribuzzjoni	Kull sitt xhur
Banjijiet <i>spa</i>	Ivverifika il-filtri – filtri tar-ramel għandhom jiġu <i>backwashed</i> ta' kuljum	Kuljum
	Ivverifika t-trattament ta' l-ilma – <i>pools</i> għandhom jiġu trattati kontinwament b'bioċida ossidanti	Tlett darbiet kuljum
	Naddaf u iddisinfetta s-sistema kollha	Kull ġimgħa
Sistemi ta' tbexxix fl-ortikultura	Naddaf u iddisinfetta il-pajpijiet ta' distribuzzjoni, <i>spray heads</i> u <i>make up tanks</i> , inklużi l-uċuħ mxarrba kollha, u neħħi l-gebla fejn ikun neħtieġ	Kull sena
Funtani u apparat ieħor ta' l-ilma (partikolarment fuq ġewwa)	Naddaf u iddisinfetta kull għadira, <i>spray heads</i> u <i>make up tanks</i> , inklużi l-uċuħ mxarrba kollha, u neħħi l-gebla fejn ikun meħtieġ	Kull ġimgħa

SKEDA 2

LIVELLI TA' AZZJONI WARA LI JSIR MONITORAĠĠ MIKROBIOLOĠIKU GHAS-SISTEMI TAL-COOLING TOWERS U TAL-KONDENSATORI EVAPORATIVI

GHADD TAL-KOLONJA ETEROTROFIKA ¹ CFU/ML F' 30°C (INKUBAZZJONI TA' MILL-INKAS 48 SIEGHA)	BATTERJI TAL-LEĠJONELLA CFU/LITRU ²	AZZJONI RIKJESTA FUQ IS-SISTEMA	AVVIŻ LIS-SUPRINTENDENT
≤10,000	≤1000	Sistema taht kontrol	Xejn
>10,000 u sa 100,000	>1000 u sa 10,000	Erga irrevedi il-program operattiv – L-ghadd ghandu jigi konfermat billi immedjatement jergghu jittiehdu kampjuni. Jekk l-istess numru jerga' jinstab, il-mizuri ta' kontroll u evalwazzjoni ta' riskju ghandhom jergghu jigu riveduti biex tigi identifikata kull azzjoni rimedjali.	Wara li jittiehdu l-kampjuni u jigi konfermat l-istess numru, is-Suprintendent ghandu jigi informat bil-miktub fi żmien 24 siegħa li jasal ir-rapport tal-laboratorju u ghandu jinkludi kopji ta' riżultati tal-laboratorju flimkien mal-mizuri ta' kontroll li jkunu qeghdin jittiehdu mill-persuna responsabbli biex jirrimedja s-sitwazzjoni.
>100,000	>10,000	Impliment azzjoni ta' azzjoni korrettiva – Ghandhom immedjatement jergghu jittiehdu l-kampjuni. Wara ghandha tkun <i>shot dosed</i> b'biocida kif support bhala prekawzjoni. L-evalwazzjoni ta' riskju u il-mizuri ta' kontroll ghandhom jigu riveduti biex jigu identifikati azzjonijiet rimedjali.	Galadarba r-riżultati mikrobiologiċi jindikaw dawn il-livelli ta' ghadd ta' batterji, il-persuna responsabbli ghandha tinforma fi żmien 24 siegħa minn x'hin tirċievi r-rapport tal-laboratorju, lis-Suprintendent billi ċempillu jew bil-miktub fi żmien 48 siegħa, u dak ir-rapport ghandu jinkludi kopji tar-riżultati tal-laboratorju flimkien mal-mizuri ta' kontroll li jkunu qeghdin jittiehdu biex is-sitwazzjoni tigi rimedjata.

¹ L-ghadd tal-kolonja jigi determinat bi *pour plate method* skond ISO 6222(20) jew bi *spread plate method* fuq il-yeast extract agar² determinat skond ISO 11731(19)

SKEDA 3
KONTROLL TA' TEMPERATURA GHAS-SISTEMI TA' ILMA SHUN U KIESAH

FREKWENZA	IYVERIFIKA	LIVELL LI JRID JINTLAHAQ		NOTI
		ILMA KIESAH	ILMA SHUN	
Kull gimgha	<i>Sentinal taps</i>	It-temperatura ta' l-ilma ghandha tkun taht 20°C jew inqas wara li l-ilma jithalla niezel ghal mill-inqas zewg minuti	It-temperatura ta' l-ilma ghandha tkun ta' l-inqas 50°C f' minuta li l-ilma jibda jinzel	Dan it-test jizgura li t-temperatura tal-provvista u tarritorm f'kull dawra jibqa' ma tinbidilx, jigifieri kull dawra tkun qed tiffunzjona kif mehteg
Kull xahar	Jekk hemm, l- <i>input ghat-themostatic mixer valves</i> (TMV) fuq baži ta' sentinella		it-temperatura tal-provvista ta' l-ilma ghat-TMV ghandha mill-inqas tkun ta' 50°C sa minuta minn meta jibda niezel l-ilma	Mod kif tista' tkejjel dan huwa billi jintuza <i>surface temperature probe</i> .
	l-ilma li johrog u li jerga lura ghal water heater		l-ilma li johrog ghandu jkun mill-inqas 60°C, u jirritorna f' temperatura ta' mill-inqas 50°C	Jekk ikun hemm wiehed imwahhal, <i>pocket ghat-termometru</i> fil-wicc tal-hazna tal- <i>heater</i> ta' l-ilma shun u fuq ir-ritorn huma punti tajbin mnejn tista' titkejjel it-temperatura ezatta. Jekk ikun hemm <i>pocket</i> bhal dak installat, dan il-kejl jista' jsir u jigi mniżzel minn <i>building management system</i> .
Kull sitt xhur	Id-dhul mnejn jidhol l-ilma kiesah (ta' l-inqas darba fix-xitwa u darba fis-sajf)	Preferibilmment l-ilma ghandu jkun inqas minn 20°C il-hin kollu		Normalment l-iktar post konvenjenti biex jitkejjel huwa fejn ikun hemm il-hrug tal-balla ghal got-tank tal-hazna ta' l-ilma kiesah
Kull sitt xhur	Ghadd ta' vitien rappreżentattivi fuq baži ta' rotazzjoni	It-temperatura ta' l-ilma ghandha tkun 20°C jew inqas wara li l-ilma jithalla niezel ghal zewg minuti	It-temperatura ta' l-ilma ghandha tkun ta' l-inqas 50°C fi zmien minuta minn meta l-ilma jibda niezel. Id-differenza bejn l-oghla u l-inqas temperatura mehuda tal-vitien wara minuta ma ghandiex tkun ta' iktar minn 10°C	Din il-verifika tiżgura li s-sistema kollha tkun qed taqdem sew

SKEDA 4

LIVELLI TA' AZZJONI WARA LI JSIR MONITORAĠĠ MIKROBIOLOGIKU ĠHAS-SISTEMI TA' L-ILMA SHUN U KIESAH

BATTERJI TAL-LEĠJONELLA CFU/LITRU ¹	AZZJONI MEHTIEĠA FUQ IS-SISTEMA	AVVIŻJONIS-SUPRINTENDENT
≤1000	Sistema taht kontroll	Xejn
>1000 u sa 10,000	<p>Jew:</p> <p>(i) Jekk kampjun wiehed biss jew tnejn ikunu pożittivi, għandhom jergġu jittiehdu kampjuni tas-sistemi. Jekk l-għadd ikun l-istess, il-miżuri ta' kontroll għandhom jiġu riveduti u għandha ssir evalwazzjoni tar-riskju biex tiġi identifikata kull azzjoni rimedjali;</p> <p>(ii) Jekk il-maġġoranza ta' kampjuni tkun pożittiva, is-sistema tista tiġi kolonizzata, forsi fuq livell baxx, bil-leġjonella. Id-disinfettar tas-sistema għandu jiġi kunsidrat, iżda wkoll il-miżuri ta' kontroll għandhom jiġu riveduti u ssir evalwazzjoni tar-riskju biex tiġi identifikata kull azzjoni rimedjali oħra li tista' tkun meħtieġa.</p>	<p>Wara li jittiehdu il-kampjuni mill-ġdid u jiġi konfermat li l-għadd ikun l-istess, is-Suprintendent għandu jiġi informat bil-miktub fi żmien 24 siegħa minn meta jirċievi r-rapport tal-laboratorju, kif ukoll kopji tar-riżultati tal-laboratorju flimkien mal-miżuri ta' kontroll li l-persuna responsabbli tkun qegħda tiehu biex tirrimedja s-sitwazzjoni.</p>
>10,000	Il-kampjuni tas-sistema għandhom jergġu jittiehdu u immedjatament il-miżuri ta' kontroll jiġu riveduti biex tiġi identifikata l-azzjoni rimedjali, kif ukoll il-possibilità ta' disinfezzar tas-sistema.	Ġaladarba r-riżultati mikrobiologici jindikaw dawk il-livelli ta' għadd ta' batterji, il-persuna responsabbli għandha fi żmien 24 siegħa li tirċievi r-rapport tal-laboratorju, tinforma lis-Suprintendent billi ċċempillu, u bil-miktub fi żmien 48 siegħa, u dak ir-rapport għandu jinkludi kopji tar-riżultati tal-laboratorju flimkien mal-miżuri ta' kontroll li jkunu qegħdin jittiehdu biex is-sitwazzjoni tiġi rimedjata.

¹ determinat skond ISO 11731(19)

SKEDA 5

DIKJARAZZJONI TA' KONFERMA TA' HLAS DOVUT LIS-SUPRINTENDENT TAS-SAHHA PUBBLIKA

Suprintendent tas-Sahha Pubblika

Diviżjoni tas-Sahha

Jien, hawn taht fil-kapaċità tiegħi ta'(**kariga**) ta' (**isem tal-fond**) hawn niddikjara li nhallas, fi żmien xaħar minn meta nirċivi l-fattura, l-ispejjeż kollha li d-Diviżjoni tas-Sahha tagħmel biex tiehu(**ghadd**) kampjuni, tittrasportom, tippreparhom u tanalizzhom, wara li dawn ġew migburin mill- (**isem tal-fond**) fi-(**data meta jittiehdu il-kampjuni**) bhala parti mill-investigazzjoni ta' każ jew każ suspett tal-marda tal-Leġjonella.

 (Firma)

Isem u Kunjom :
 F'isem :
 Numru tal-Karta ta' Identità :
 Data tat-Twelid :
 Post tat-Twelid :
 Isem u Kunjom tal-Ġenituri :
 Indirizz ta' Residenza :
 Indirizz fejn tintbghat il-Fattura :
 Numru tal-VAT :

Data :

SKEDA 6

AWTORITÀ TAS-SAHHA

AVVIŻ TA' INFURZAR

(Skond ir-regolament 18(2) tar-Regolamenti ta' 2005 dwar il-Kontroll tal-Legjonella)

Data:

Lil:

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1. Wara li saru investigazzjonijiet mis-Suprintendent tas-Saħha Pubblika, instab li r-riskju ta' infezzjoni mill marda tal-legjonella huwa wiehed sinifikanti fi

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2. Ir-riskju ta' infezzjoni mill marda tal-legjonella ghandu x'jaqsam ma'

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3. Mingħajr preċudizzju għad-dritt li għandu s-Suprintendent li jieħu azzjoni skond id-disposizzjonjoet tar-Regolamenti ta' 1-2005 dwar il-Kontroll tal-Legjonella, qed tiġi mitlub li taghlaq IMMEDJATAMANT il- sakemm tiġi informat xort' oħra.

Suprintendent tas-Saħha Pubblika

L.N. 5 of 2006

**PUBLIC HEALTH ACT, 2003
(ACT NO. XIII of 2003)**

Control of Legionella Regulations, 2006

IN exercise of the powers conferred by article 26 (i) of the Public Health Act, 2003, the Minister of Health, the Elderly and Community Care has made the following regulations:-

1. The title of these regulations is the Control of Legionella Regulations, 2006. Title.

2. In these regulations, unless the context otherwise requires:- Definitions.

“accredited laboratory” means a laboratory which takes part in an external quality assessment scheme for the isolation of legionella from water and where the interpretation of any results is carried out by an experienced microbiologist;

“the Act” means the Public Health Act;

“authorised officer” means any duly qualified person authorised by the Superintendent to carry out any functions under these regulations and includes any nominated officer;

“biocide” means a physical or chemical agent capable of killing micro-organisms, including Legionella;

“clean” means to render free from visible sludge, foam, slime (including algae and fungi), rust, scale, dirt, and any deposit or accumulation of impurities or other foreign material;

“cold water system” means an installation of plant, pipes and fittings in which cold water is stored, distributed and subsequently discharged;

“cooling tower systems” includes:-

(a) a cooling tower, or a number of interconnected cooling towers that use the same recirculating water; and

(b) any machinery that is used to operate any such tower; and

(c) any associated tanks, pipes, valves, pumps or controls;

“cooling tower” means a device whose main purpose is to cool water by direct contact between that water and a stream of air;

“designated area” means any premises or part thereof to which the public or a section of the public has access, whether on payment or otherwise;

“disinfect” means to carry out a process which is intended to kill or remove pathogenic micro-organisms;

“drift” means the water aerosol which emerges from the airflow outlet of a cooling system;

“evaporative condenser” means a device whose main purpose is to cool a fluid by passing that fluid through a heat exchanger which is itself cooled by the contact of water passing through a stream of air;

“guidelines” means the European Guidelines for Control and Prevention of Travel Associated Legionnaires’ Disease produced by the European Working Group for Legionella Infections (EWGLI) and endorsed by the Committee for the Epidemiological Surveillance and Control of Communicable Diseases in the Community, instituted by Decision 2119/98/EC of the European Parliament and the Council;

“heat exchanger” means a device for transferring heat between fluids which are not in direct contact with one another;

“heterotrophic colony count” means an estimate of the number of viable units of bacteria per millilitre of water made using the pour plate, spread plate or membrane filter test (also known as the total bacterial count, total plate count or viable bacterial count test) method;

“legionella” means bacteria belonging to the genus *Legionella*;

“premises” includes all non-domestic premises used for or in connection with the carrying on of a trade or business (whether for profit or not) and should include any healthcare facility and schools;

“responsible person” includes the person who owns, manages or controls the cooling tower systems, or evaporative condensers, or hot and cold water systems, or water fountains or a number of these systems in the same premises;

“sentinel taps”, in relation to a hot water system, means the first and last taps on a recirculating system. For cold water systems (or non-recirculating hot water systems), the nearest and furthest taps from the storage tank. The choice of sentinel taps may also include taps which are considered to represent a particular risk;

“spa pool” includes a bath or a small pool where warm water is constantly recirculated, through high velocity jets or with the injection of air to agitate the water;

“the Superintendent” means the Superintendent of Public Health.

“warm water system” means a piped water supply, including any thermostatic mixing valve, which is designed to supply water at a temperature of between 30°C and 60°C;

“water” means water supplied through the main water distribution system or water supplied by an authorised private water supplier or through a water supply approved by the Superintendent or by the relevant competent authorities;

“water fountain” means any water feature located in a designated area.

3. (1) Cooling tower systems and evaporative condensers are prohibited to be newly installed on healthcare facilities and schools. Installation of new cooling tower systems and evaporative condensers.

(2) Installation of new cooling tower system or evaporative condenser on any other premises should be restricted to those cases only where no other suitable dry cooling facility is possible as an alternative.

4. (1) At the stage of installation of cooling tower system or an evaporative condenser, inspection shall be carried out by competent persons so that the cooling tower and evaporative condenser pose minimal health risk to occupants of the premises and members of the public. Design and construction of cooling tower system and evaporative condenser.

(2) Cooling systems shall be designed and constructed so as to minimise the release of drift and to aid safe operation, regular cleaning and disinfection.

Location of cooling towers and evaporative condensers.

5. The cooling tower or evaporative condenser shall be located at least five metres away from air circulating and ventilating inlets, open windows and occupied areas, pedestrian thoroughfares, traffic areas, areas of public access, exhaust discharge from kitchens, air handling systems or other areas where nutrients conveyed from these systems could assist in the growth of legionella.

Source of water.

6. Make-up water shall be supplied either through the main distribution system or by an authorised water supplier or through a water supply approved by the Superintendent.

Discharge of water.

7. (1) Effluent water from cooling towers and evaporative condensers shall be discharged into the public sewers as approved by the respective competent authorities.

(2) The concentration of chemicals in the effluent shall be within the limits established by the respective competent authorities.

Commissioning and operation.

Cap. 321.

8. (1) Cooling towers and evaporative condensers shall be commissioned, approved and certified by a competent warranted engineer in terms of the Engineering Profession Act before use to ensure that they operate correctly and safely.

(2) The entire air-conditioning system shall be clear of any construction debris and dirt, and cleaned before operation starts.

(3) Precautions shall be taken to control the risks during commissioning, start up and during the normal operation of the system as per guidelines.

Maintenance and testing of cooling tower systems and evaporative condensers.

9. (1) It shall be the duty of the responsible person to ensure that:

(a) any cooling tower system or evaporative condenser in use is maintained and tested in accordance with the guidelines;

(b) the water of the cooling tower system or evaporative condenser is maintained in a clean condition;

Water quality and treatment.

(c) the water of the cooling tower system or evaporative condenser is continuously treated with:

i. one or more biocides to effectively control the growth of micro-organisms, including Legionella; and

ii. chemicals or other agents to minimise scale formation, corrosion and fouling;

(d) a chlorine-compatible bio-dispersant is added to the recirculating water of the cooling tower system or evaporative condenser, and that the system is then disinfected, cleaned and re-disinfected:

Disinfection, cleaning and re-disinfection.

i. immediately prior to initial start up following commissioning, or any shut down period of greater than one month; and

ii. at intervals not exceeding six months;

(e) the cooling tower system or the evaporative condenser are inspected in accordance with the guidelines and Schedule 1;

Routine inspections and testing.

(f) at least once every month take a sample of the recirculating water of the cooling tower system and the evaporative condenser to an accredited laboratory for testing for heterotrophic colony count and once every six months for legionella;

Microbiological sampling frequency.

(g) a water sample shall be taken before the dosing of biocide and in accordance with the guidelines.

Water sampling.

10. (1) The responsible person must ensure that the actions following microbiological monitoring of cooling towers and evaporative condensers is in accordance with the procedures laid down in Schedule 2 to these regulations.

Action levels following microbiological monitoring of cooling tower systems and evaporative condensers.

(2) The responsible person shall immediately inform the Superintendent of any situation provided for in Schedule 2 of these regulations.

(3) The responsible person shall carry out any further monitoring and remedial actions as may be directed by the Superintendent.

(4) The Superintendent may require the systems or part thereof to be shutdown until all necessary remedial actions have been taken by the responsible person and until microbiological sampling results of any system would have returned within the recommended acceptable levels as indicated in Schedule 2 to these regulations.

11. (1) The responsible person shall ensure that:

Maintenance of hot and cold water systems.

(a) unless the system is shut down or drained of water or is otherwise not in use, any hot and cold water system that the responsible person owns, manages or controls is maintained and

tested in the manner set out in these regulations and according to the guidelines;

Start up procedures.

(b) the hot and cold water system is disinfected by heat or chlorination and cleaned immediately prior to initial start up following commissioning, or any shut down period of greater than one month;

Routine disinfection.

(c) the hot and cold water system is disinfected by one or more of the following methods:

- i. at least once each month by heat or chlorination; or
- ii. continuously by means of automatic low level chlorination; or
- iii. continuously by means of ultra-violet light treatment; or
- iv. a method approved in the guidelines;

Routine inspections and testing.

(d) the hot and cold water system is inspected and that the hot and cold water systems are maintained at all times in accordance with the guidelines and Schedule 1 and 3;

Biocide treatments.

(e) when biocides are used to treat water systems, they are meticulously controlled and checked at least weekly or as otherwise indicated to ensure that it is operating correctly;

Microbiological sampling frequency.

(f) at least once every six months a sample of the water from the hot and cold water system is taken and delivered to an accredited laboratory for testing and reporting on Legionella.

Action levels following microbiological monitoring.

12. (1) The responsible person must ensure that the actions following microbiological monitoring of hot and cold water systems are in accordance with the procedures laid down in Schedule 4 of these regulations.

(2) The responsible person shall immediately inform the Superintendent of the situation provided for in Schedule 4 of these regulations.

(3) The responsible person shall carry out any further monitoring and remedial actions as may be directed by the Superintendent.

(4) The Superintendent may require the systems or part thereof to be shut down until all necessary remedial actions have been taken by the responsible person and until microbiological sampling results have returned within the recommended acceptable levels in Schedule 4 of these regulations.

13. (1) It shall be the duty of the responsible person to ensure that: Maintenance and testing of water fountains.

(a) any water fountain under his responsibility is maintained and tested in accordance with the guidelines and Schedule 1;

(b) water in a water fountain is sampled: Microbiological sampling.

i. at least once a month for the purpose of determining the heterotrophic colony counts; and

ii. at least once every six months for the purpose of detecting legionella bacteria.

(2) The responsible person shall immediately inform the Superintendent of the situation provided for in Schedule 2 of these regulations.

(3) The Superintendent may require the responsible person to carry out tests and maintenance of water fountains as he may deem necessary. Notice to carry out inspection, test or maintenance of water fountains.

14. (1) It shall be the duty of the responsible person to ensure that any spa pool and any other type of water system under his responsibility is maintained and tested in accordance with the guidelines and Schedule 1. Maintenance and testing of other risk systems.

(2) Spa pools on display in retail outlets or exhibitions shall be treated in the same manner as if they were being used.

15. (1) The responsible person shall: Risk assessment.

(a) carry out a risk assessment to identify and assess the risk of exposure to legionella bacteria from work activities and the water systems on the premises under his control as identified in the guidelines; and

(b) identify any necessary precautionary measures which may need to be adopted; and

(c) review the assessment either annually or when the situation changes or when the original assessment may no longer be valid; and

(d) keep a fully documented record of the risk assessment.

Control measures. (2) When the risk assessment reveals that there is a foreseeable risk which cannot be eliminated, the responsible person shall adopt a scheme specifying the measures to be taken to minimise the risk of exposure.

External audit. (3) The risk assessment and operation of the control measures shall be audited by an independent competent person at least every two years.

(4) All maintenance and risk assessment records shall be retained for at least five years.

Action plan for an outbreak. **16.** (1) The responsible person shall inform the Superintendent of an outbreak of legionnaire's disease or if it is suspected to have occurred.

(2) In the event or on the suspicion of an outbreak of legionnaires' disease, the responsible person shall implement all instructions which may be issued by the Superintendent.

Duties of the Superintendent. **17.** (1) It shall be the duty of the Superintendent to investigate any case or suspected case of Legionnaires' disease at any premises and to cause the sampling and analysis of any samples required to investigate such case or suspected case.

Initial investigations. (2) The expenses incurred for the elevation, transportation, preparation and analysis of samples in case of initial investigation of a case or suspected case of legionnaire' disease shall be encumbered by the Superintendent.

Follow-up investigations. (3) If the results of the initial samples indicate the presence of Legionella species, or if the investigation is within 24 months of the first notified case or suspected case, the expenses of follow-up samples or initial samples, as the case may be, shall be encumbered by the responsible person:

Provided that the responsible person of the premises shall sign *a priori* the declaration attached as Schedule 5 to these regulations confirming his acceptance to pay any fees due to the Superintendent.

(4) Any person who fails to comply with sub-regulation (3) of this regulation shall be guilty of an offence and the court, besides awarding punishment, shall oblige the accused to pay the due fees.

18. (1) In the event that the responsible person fails to follow the instructions referred to in the preceding regulations, or the Superintendent considers that the risk of infection with legionella from that particular premises is significant, he may order that the premises, part of the premises or any water related system, be immediately closed until the risk of infection is controlled. Closure of premises.

(2) The Superintendent shall issue an enforcement notice to the responsible person and shall be in the form specified in Schedule 6 to these regulations, or in any other modified form as the Superintendent may deem appropriate in the particular circumstances may deem. Enforcement notice.

(3) Once the premises, part of the premises or any water related system has been closed by an enforcement notice issued by the Superintendent, same enforcement notice may be lifted only after it is confirmed by the Superintendent that the risk of infection has been controlled.

(4) Any person who fails to comply with the enforcement notice issued under sub regulation (2) of this regulation shall be guilty of an offence under the Act. Failure to comply with the enforcement notice.

19. Any person who contravenes any of the provisions of these regulations shall be guilty of an offence under the Act. Offences.

SCHEDULE 1**RECOMMENDED INSPECTION FREQUENCIES FOR RISK SYSTEMS****CHECKLIST 1: COOLING WATER INSTALLATIONS**

SYSTEM/SERVICES	TASK	FREQUENCY
Cooling towers and evaporative condensers	Monitor water quality, water use and biocide/chemical use to assess and ensure effectiveness of water treatment regime, including key chemical and microbiological parameters and observations of internal condition of pond, pack and water	6 monthly
	Central control function, conductivity sensor calibration, blow down function, uniformity of water distribution, condition of sprays/troughs, eliminators, pack, pond, immersion heater, fan and sound attenuators	Monthly to 3 monthly, according to risk
	Clean and disinfect cooling towers/evaporative condensers, make up tanks and associated systems, including all wetted surfaces, descaling as necessary. Packs should be removed and cleaned where practicable.	6 monthly

CHECKLIST 2: HOT AND COLD WATER SERVICES

SERVICE	TASK	FREQUENCY
Warm water services	Arrange for samples to be taken from hot water heaters, in order to note condition of drain water	6 monthly
	Check temperatures in flow and return at calorifiers	Daily
	Check temperature up to 1 minute to see if it has reached 50°C in the sentinel taps	Weekly
	Visual check on internal surfaces of water heaters for scale and sludge	Annually
	Check representative taps for temperature as above on a rotational basis	Monthly
Cold water services	Check tank water temperature remote from ball valve and mains temperature at ball valve. Note maximum temperatures recorded by fixed max/min thermometers where fitted	6 monthly
Note: This temperature may not be reached during the summer months in Malta	Check that temperature is below 20°C after running the water for up to 2 minutes in sentinel taps	Weekly
	Visually inspect cold water storage tanks and carry out remedial work where necessary	6 monthly
	Check representative taps for temperature as above on a rotational basis	Monthly
Shower heads	Dismantle, clean and descale shower heads and hoses	Quarterly, or as necessary, whichever comes first
Little used outlets	Flush through and purge to drain	Weekly

CHECKLIST 3: OTHER RISK SYSTEMS

SYSTEM/SERVICE	TASK	FREQUENCY
Spray humidifiers, air washers and wet scrubbers	Clean and disinfect spray humidifiers/air washers and make up tanks including all wetted surfaces, descaling as necessary	6 monthly
	Confirm the operation of non chemical water treatment (if present)	Weekly
Water softeners	Clean and disinfect resin and brine tank – check with manufacturer what chemicals can be used to disinfect resin bed	As recommended by manufacturer
Emergency showers and eye wash sprays	Flush through and purge to drain	6 monthly or more frequently if recommended by manufacturer
Sprinkler and hose reel systems	When witnessing tests of sprinkler blow down and hose reels ensure that there is minimal risk of exposure to aerosols	Quarterly
Lathe and machine tool coolant systems	Clean and disinfect storage and distribution system	6 monthly
Spa baths	Check filters - sand filters should be backwashed daily	Daily
	Check water treatment – pools should be continuously treated with oxidising biocide	3 times daily
	Clean and disinfect entire system	Weekly
Horticultural misting systems	Clean and disinfect distribution pipe work, spray heads and make-up tanks, including all wetted surfaces, descaling as necessary	Annually
Fountains and water features (particularly indoors)	Clean and disinfect ponds, spray heads and make-up tanks, including all wetted surfaces, descaling as necessary	Weekly

SCHEDULE 2

ACTION LEVELS FOLLOWING MICROBIOLOGICAL MONITORING FOR
COOLING TOWER SYSTEMS AND EVAPORATIVE CONDENSERS

HETEROTROPHIC COLONY COUNT ¹ CFU/ML AT 30°C (Minimum 48 hours incubation)	LEGIONELLA BACTERIA CFU/LITRE ²	ACTION REQUIRED ON SYSTEM	NOTIFICATION TO SUPERINTENDENT
≤10,000	≤1000	System under control	None
>10,000 and up to 100,000	>1000 and up to 10,000	Review programme operation – The count should be confirmed by immediate re-sampling. If similar count is found again, a review of the control measures and risk assessment should be carried out to identify any remedial actions.	Following resampling and similar counts are confirmed, the Superintendent is to be informed in writing within 24 hours of receiving the laboratory report and should include copies of laboratory results together with the control measures being taken by the responsible person to remedy the situation.
>100,000	>10,000	Implement corrective action – The system should immediately be re-sampled. It should then be 'shot dosed' with an appropriate biocide, as a precaution. The risk assessment and control measures should be reviewed to identify remedial actions.	Once microbiological results indicate these levels of bacterial counts, the responsible person within 24 hours of receiving the laboratory report shall inform the Superintendent by phone and in writing within 48 hours which report should include copies of the laboratory results together with the control measures being taken to remedy the situation.

¹ Colony count determined by pour plate method according to ISO 6222(20) or by spread plate method on yeast extract agar

² Determined in accordance with ISO 11731(19)

SCHEDULE 3
TEMPERATURE CONTROL FOR HOT AND COLD WATER SYSTEMS

FREQUENCY	CHECK	STANDARD TO MEET		NOTES
		COLD WATER	HOT WATER	
Weekly	Sentinel taps	The water temperature should be below 20°C or less after running the water for up to two minutes	The water temperature should be at least 50°C within a minute of running the water	This check makes sure that the supply and return temperatures on each loop are unchanged i.e. the loop is functioning as required
Monthly	If fitted, input to thermostatic mixer valves (TMV) on a sentinel basis		The water supply to the TMV temperature should be at least 50°C within a minute of running water	One way of measuring this is to use a surface temperature probe
	Water leaving and returning to the water heater		Outgoing water should be at least 60°C, return at least 50°C	If fitted, the thermometer pocket at the top of the hot water storage heater and on the return leg are useful points for accurate temperature measurement. If installed, these measurements could be carried out and logged by a building management system.
Six monthly	Incoming cold water inlet (at least once in the winter and once in summer)	The water should preferably be below 20°C at all times		The most convenient place to measure is usually at the ball valve outlet to the cold water storage tank
Six monthly	Representative number of taps on a rotational basis	The water temperature should be 20°C or less after running the water for two minutes	The water temperature should be at least 50°C within a minute of running the water. The difference between the highest and lowest temperature recorded at the taps after one minute should not be greater than 10°C	This check makes sure that the whole system is working properly

SCHEDULE 4

**ACTION LEVELS FOLLOWING MICROBIOLOGICAL MONITORING FOR
HOT AND COLD WATER SYSTEMS**

LEGIONELLA BACTERIA CFU/LITRE ¹	ACTION REQUIRED ON SYSTEM	NOTIFICATION TO SUPERINTENDENT
≤1000	System under control	None
>1000 and up to 10,000	Either: (i) If only one or two samples are positive, systems should be re sampled. If a similar count is found, then review of the control measures and risk assessment should be carried out to identify any remedial actions; (ii) If the majority of samples are positive, the system may be colonised, albeit at a low level, with Legionella. Disinfection of the system should be considered but an immediate review of control measures and risk assessment should be carried out to identify any other remedial action required.	Following resampling and similar counts are confirmed, the Superintendent is to be informed in writing within 24 hours of receiving the laboratory report, and should include copies of laboratory results together with the control measures being taken by the responsible person to remedy the situation.
>10,000	The system should be re-sampled and an immediate review of the control measures and risk assessment carried out to identify and remedial actions, including possible disinfection of the system.	Once microbiological results indicate these levels of bacterial counts, the responsible person within 24 hours of receiving the laboratory report shall inform the Superintendent by phone and in writing within 48 hours which report should include copies of the laboratory results together with the control measures being taken to remedy the situation.

¹ Determined in accordance with ISO 11731(19)

SCHEDULE 5

CONFIRMATION DECLARATION OF FEES DUE TO THE SUPERINTENDENT OF PUBLIC HEALTH

The Superintendent of Public Health
Health Division

I, the undersigned, in my capacity of(**position**) of(**premises name**) hereby declare that I will pay, within one month's time of receipt of invoice, all the expenses that the Health Division will incur in the sampling, transportation, preparation and analysis of(**number**) of samples, which have been taken from(**premises name and address**) on the(**date of sampling**) as part of the investigation of a case or suspected case of Legionnaire's disease.

(Sgd)

Name and Surname :
o.b.o. :
I.D. No. :
Date of Birth :
Place of Birth :
Parent's Name and Surname :
Residential Address :
Billing Address :
VAT No. :

Date :

SCHEDULE 6

**HEALTH AUTHORITY
ENFORCEMENT NOTICE**

(As per regulation 18(2) of the Control of Legionella Regulations, 2005)

Date:

To:
.....
.....

1. Following investigations carried out by the Superintendent of Public Health, it was found that the risk of infection from Legionnaire's Diseases is significant at
.....
.....

2. The risk of infection from Legionnaire's Diseases relates to
.....
.....

3. Without prejudice to the Superintendent's right to take action in accordance with the provisions of the Control of Legionella Regulations, 2005, you are hereby requested to IMMEDIATELY close down the until further notice.

Superintendent of Public Health

