

Proposed EASR Regulation – Standard Systems and Equipment

AWMA Breakfast Sessions Fall 2013

What This Presentation Will Cover

- New proposed activities to be added to the EASR
- Proposed exemptions to be added to O. Reg. 524/98
- Proposed regulatory changes to handle sites requiring both an EASR and ECA
- Proposed changes to EASR for standby power systems
- Proposed changes in requirements to transition from an ECA to an EASR
- Proposed amendments for requiring when existing EASRs must be updated
- Next steps





Context – Standard Systems and Equipment EASR

- O. Reg. 346/12 (Registrations under part II.2 of the Act heating systems and standby power systems) currently allows businesses to register their heating systems and standby power systems
- To date 1,900+ registrations for these activities have been filed:
 - o >1,300 Heating systems
 - o >600 Standby power systems
- On the basis of these results, it is proposed that O. Reg. 346/12 be broadened and amended to achieve two objectives:
 - 1. Expand EASR-eligible activities to capture more facilities
 - 2. Additional amendments to reflect implementation experience to date





Expanding Eligible Activities

- The goal of activity-type registrations is ultimately to capture entire less-complex facilities through EASR and avoid requiring both EASR and ECA instruments at the same facility. Examples of less-complex facilities include:
 - Multi-residential properties such as apartments and condominiums
 - Retail operations such as grocery stores
 - o Warehousing operations
 - o Office buildings and other commercial spaces
 - o Institutions such as schools, hospitals, and universities
- An expanded offering to cover a range of standard systems and equipment will be included in a single registration process where the registrant will select which systems and/or equipment are present at the site
 - Today, separate registrations must be filed for each heating system and standby power generator
- Single site-wide EASR registration will require payment only of one registration charge
- Existing registrations for heating and standby power will be migrated into the standard systems and equipment framework through transition provisions



Proposed Standard Systems and Equipment EASR Summary

Heating, ventilation and air-conditioning "HVAC" systems

• Expands on heating systems to also include cooling towers and refrigeration

Standby power systems

• Current EASR would be offered as a general activity with some amendments to provide more flexibility (amendments described further on in this presentation)

Dust collection systems at retail and school locations

• Commonly found at hardware stores, home improvement centres, elementary and secondary schools to control particulate emissions from resizing/shaping wood

Fume hoods at school locations

- Secondary schools often have 1 or 2 fume hoods that are used on a low intensity basis for handling small quantities of commonly used chemicals (e.g. methanol) for class demonstrations
- Application to universities and hospitals not included but under evaluation for future consideration

Arc welding equipment

• Welding for maintenance/repair purposes only at a facility – not for mass production of goods



HVAC Systems

Proposed Eligibility Criteria

- The HVAC system must be used for comfort heating and/or cooling purposes only
- Existing eligibility requirements in place for heating systems remain unchanged
- If any cooling towers are part of the HVAC system:
 - They must be equipped with drift eliminators to control particulate emissions from water vapour
 - The total capacity of all cooling towers is limited depending on the efficiency of the drift eliminators
 - 2,500 tons (condos, small schools) for low efficiency drift eliminators
 - 4,500 tons (larger schools, malls) for high efficiency drift eliminators
 - They must be located on the roof of the building or if on the ground be at least 50 m from a receptor or have in place a noise barrier of a minimum density of 20 kg/m² blocking the line of site

- Cannot use chromium-based water treatment chemicals for the cooling towers
- Equipment must be maintained according to manufacturers recommendations
- Drift eliminators must be inspected once every six months
- Standard EASR document/record keeping and complaint notification requirements



Dust Collection Systems

Proposed Eligibility Criteria

- The dust collection system can only be located at a retail establishment or at a school or private school
- The system capacity cannot be greater than 4 m³/s

- Exhaust stack from the dust collector must be oriented vertically
- Equipment must be maintained according to manufacturers recommendations
- Standard EASR document/record keeping and complaint notification requirements





Fume Hoods

Proposed Eligibility Criteria

• Fume hood must be at a school or private school as defined in the Education Act (does not include colleges or universities)

- Exhaust stack from the fume hood must be oriented vertically and located on the roof of the building
- Waste chemicals stored in the fume hood must be stored in a closed and labeled container (prevents someone from using the fume hood to dispose of chemicals by continuously venting to the atmosphere)
- Equipment must be maintained according to manufacturers recommendations
- Standard EASR document/record keeping and complaint notification requirements



Arc Welding

Proposed Eligibility Criteria

- Welding must be done inside a building or structure
- Welding rod cannot emit more than 0.001 g of hexavalent chromium (CrVI) per / kg of rod used

- Welding rod usage limited to 1 kg/hr
- Must maintain records on the type and amounts of welding rod used per month
- Equipment must be maintained according to manufacturers recommendations
- Standard EASR document/record keeping and complaint notification requirements





Additional Exemptions

- In addition to the amendments proposed for O. Reg. 346/12, the proposal also includes amendments to O. Reg. 524/98 (Environmental Compliance Approvals — exemptions from section 9 of the Act)
- Proposed amendments exempting the following from needing Environmental Compliance Approvals under Section 9 of the *EPA*:
 - Equipment used for battery charging
 - Used at warehouses that operate battery powered lift trucks and result in insignificant emissions
 - Equipment used for ripening of fruit and vegetables
 - Grocery distribution centres can use low concentrations of ethylene to advance ripening of fruits and vegetables and this poses insignificant emissions
 - Business copy centres and one-hour photo operations
 - Provides further clarification for printing EASR regulation which does not require these facilities to register due to insignificant emissions from these businesses
- The ministry may seek to identify additional activities that require clarification through exemption on an ongoing basis to support EASR development



Additional Amendments: Reflecting Implementation Experience to Date





EASR at More Complex Sites

- Sites with EASR activities <u>and</u> more complex ECA activities must either operate with multiple instruments (EASR/ECA) or request a director's order (referred to as a 20.18 order) to allow the site to move out of EASR and be covered by a single ECA
- The requirement for both an ECA and EASR has lead to stakeholders requesting 20.18 orders to have all of their activities covered by just the ECA
 - Some stakeholders view requiring both EASR and ECA instruments as duplicative and the 20.18 process as an extra step in process





EASR at More Complex Sites cont'd...

Proposed Amendment

- Remove the requirement to register or get a 20.18 order by making sites ineligible for EASR if they have any air/noise approval requirements (Section 9, EPA) other than those covered by the proposed Standard Systems and Equipment EASR
- Propose to transition existing EASR registrations at complex sites so they are not forced out of the registry unless they make a request for revocation of their EASR





Modifying Standby Power Requirements

Current Situation

- Currently EASR applies to most standby power generators up to 700 kW that burn diesel, propane or natural gas
- Standby power systems that are eligible for EASR must meet Tier 1 EPA emission standards and noise specifications (e.g. 75 dBA at 7 m) as mandatory operating requirements
- Feedback indicates that there could be situations where existing standby power systems do not meet the standards but can still be shown to be within acceptable limits for air/noise
 - For instance, the generator may be far away from any potential receptors and will not cause impacts
 - o Can lead to requests for 20.18 order to account for these types of scenarios





Modifying Standby Power Requirements

Proposed Amendment

- Make the Tier 1 EPA emission standards and noise mitigation part of the eligibility requirements that screen a system into EASR rather than a mandatory operating requirement
 - If the generator meets the standards, it is registered on EASR
 - If not, EASR doesn't apply. An application must be prepared for an ECA and the ministry may approve site specific conditions
- Amendments will also provide additional flexibility for noise in the EASR eligibility criteria by making systems eligible if they are more than 50 m from the nearest property line of a noise receptor
- This approach still provides an incentive to upgrade standby generators to be EASR eligible because getting an ECA for the generator means the whole facility is ineligible for EASR





5 Year ECA to EASR Transition

Current Situation

- Activities do not need to be registered in EASR if they are already covered by an ECA
- EASR registration is triggered if the equipment is changed or replaced which requires an ECA amendment
- However, current EASR regulations (except Solar) specify that this exemption from registering expires after 5 years
- Transition will begin to impact the regulated community and the Ministry in Oct 2016 (heating, standby power and automotive refinishing) and Nov 2017 (waste transport, printing)

Proposed Change

Propose to amend EASR regulations to extend timelines to 10 years from when they were implemented





Existing EASR Registrations must be Updated

- An additional amendment is proposed to ensure existing registrations for heating systems and standby power systems are transitioned to reflect regulatory changes
 - Registrants need to return to the EASR system and update their registrations to ensure they still meet eligibility requirements and to identify any other EASR eligible activities at the site if applicable

Proposed Amendment

- O. Reg. 245/11 (Registrations under part II.2 of the Act General) is proposed to be amended to allow the Director to request that existing registrants provide an update to their registration information
- The Director would make the request through an electronic notification to the registrants specifying the date when an update must be completed
- This will enable Access Environment to reflect current information in accordance with the proposed regulatory changes
 - E.g. heating system will now be HVAC





Next Steps

- Proposed regulatory amendments posted to the Environmental and Regulatory Registries on August 23, 2013 for 45 day comment period – closes October 7, 2013 (EBR No. 011-9631)
- Proposed implementation of the expanded list of eligible activities, delineation between EASR/ECA, and IT deployment tracking for late fall/early winter



