Ministry for the Environment
Manatū Mō Te Taiao

Proposed National Environmental Standard for the Outdoor Storage of Tyres

SUBMISSION FORM

The Government is seeking views on a proposed National Environmental Standard (NES) for the Outdoor Storage of Tyres. The proposed NES will provide a national rule to enable local authorities to appropriately manage the risks that can arise from outdoor tyre storage.

For more information about the Government's proposals read our consultation document: A Proposed National Environmental Standard for the Outdoor Storage of Tyres consultation document.

Submissions close at 5.00pm on Friday 4 August 2017.

Making a submission

You can provide feedback in three ways:

1. Use the online submission form available at www.mfe.govt.nz/consultation/proposed-national-environmental-standard-outdoor-storage-of-tyres. This is our preferred way to receive submissions.
2. Complete this submission form and send to us by email or post.
3. Write your own submission and send to us by email or post.

Contact details can be found at the end of this form.

Publishing and releasing submissions

All or part of any written submission (including names of submitters) may be published on the Ministry for the Environment's website www.mfe.govt.nz. Unless you clearly specify otherwise in your submission, we will consider that you have consented to website posting of both your submission and your name.

Contents of submissions may be released to the public under the Official Information Act 1982 following requests to the Ministry for the Environment (including via email). Please advise if you have any objection to the release of any information contained in a submission and, in particular, which part(s) you consider should be withheld, together with the reason(s) for withholding the information. We will take into account all such objections when responding to requests for copies of, and information on, submissions to this consultation under the Official Information Act.

The Privacy Act 1993 applies certain principles about the collection, use and disclosure of information about individuals by various agencies, including the Ministry for the Environment. It governs access by individuals to information about themselves held by agencies. Any personal information you supply to the Ministry in the course of making a submission will be used by the Ministry only in relation to the matters covered by this consultation. Please clearly indicate in your submission if you do not wish your name to be included in any summary of submissions that the Ministry may publish.

Submission form

The questions below are a guide only and all comments are welcome. You do not have to answer all the questions. To ensure your point of view is clearly understood, please explain your rationale and provide supporting evidence where appropriate.

Contact information

Name*	Cath Wallace or Michael Pringle
Organisation (if applicable)	Environment and Conservation Organisations of NZ Inc
Address	P O Box 11057, Wellington
Phone	04 385 7545
Email*	eco@eco.org.nz
Submitter type*	Individual ☐ NGO ☒ Business / Industry ☐ Local government ☐ Central government ☐ Iwi ☐ Other (please specify) ☐

* Questions marked with an asterisk are mandatory.

Introduction

The Environment and Conservation Organisations of NZ Inc (ECO) is the national alliance of about 45 groups with a concern for the environment and conservation. Some of these member bodies are themselves federations or multiple groups. Not all are conservation or environmental groups.

ECO has followed issues of conservation and environmental management and practice, law and policy since its formation in 1971-2 and we have member groups from all around New Zealand. We have an Improved Environmental management and Law Working Group and another on Conservation, Biodiversity and Biosecurity. This submission was prepared by members of these working groups.

General questions

1. Do you agree with the Government's proposal to develop a national environmental standard to control the activity of storing tyres outdoors? Why/why not?

☒ Yes

☐ No

This Question is ambiguous. ECO agrees that this is a suitable topic for an NES, but we consider the proposal is flawed in several ways, so we cannot answer "yes" in relation to this proposal.

Why do we disagree?

a) The scope of the proposal is limited to >200m3 which will simply mean that we will have many dumps of <or = to 200m3. This will mean a profileration of potentially contaiminated sites.

b) Tyre storage should subject to restricted discretionary consents, not discretionary

c) The default position for storage of <200m3 being a permitted use is wholly unacceptable to ECO since there will be multiple contaminating and fire risk sites with no controls.

d) The paper puts out of scope increasing recycling but this is not the only policy option. In particular, a levy on each tyre imported or sold, on or off the vehicle, with a refund for proper disposal would be potent, if set at say $50, in inducing the return of end of use tyres to responsible collection sites for disposal. Some part of a levy could cover disposal costs and some be refundable for responsible return. That would cut the "waste banking" problem.

e) There is no definition of what "outdoors" is. Is this a heap or a hole with a spinkling of earth on it? Does it include putting tyres in the gully in the water, or in the lake or sea – as we have found them?

f) What does "indoors" mean? Does this include complete containment in a building with walls all round, a floor and a roof, or only some of these things?

2. Do you agree with the proposed definition of tyres (all pneumatic (air filled) tyres for cars, motorcycles, trucks, buses, off-road vehicles, aircraft, and certain solid tyres (forklifts), but not bicycle tyres)? Why/why not?

☐ Yes

☐ No

We are unsure of the rationale for excluding bicycle tyres? Does this exclusion also apply to e-bikes, motorbikes, pushbikes? We are unclear what happens to them now and why they would be excluded?

3. Do you think the proposed volume threshold of 200m³ is appropriate? Why/why not?

☐ Yes

☒ No

The design of measures to avoid pollution, fires, disease-vectors and vermin needs to consider more than one variable. A volume limit will simply induce those with many tyres to create multiple smaller piles, so that they are not caught by the volume threshold. They will find means to avoid being classified as being of a size to meet the standard. This will be incentivised both by the desire to evade the volume limit, and by the incentive to gain "permitted use". That latter incentive should be removed, buit more careful consideration of the specification of what will trigger coming into the

scope of the NES is needed, or it will generate perverse incentives and strategic behaviour without achieving much environmental protection or risk reduction.

IF left as suggested, many smaller but large piles will result, with more places and people subject to contamination and risk.

Some consideration of the nature of where and how tyres are stored, and the sensitivity of the receiving environment is needed.

4. Do you agree with the Government's proposal to classify outdoor tyre stores of more than 200m³ as a discretionary activity under the Resource Management Act 1991 (instead of a restricted discretionary activity)? Why/why not?

☐ Yes

☒ No

No, it is too lax. We oppose the provision for permitted use for those stores of <200m3 – this is a particularly unsuitable provision or outcome.

5. Are you aware of any activities that may involve the storage of tyres outdoors which should be exempt from this proposal? If so, what are they and why should they be exempt?

☐ Yes

☐ No

Why not a converse question too?

We worry that there may be all sorts of use of tyres already polluting the environment. In some Wellington suburbs, and probably elsewhere, tyres were widely used as the basis of retaining walls, and many are still there. There are tyres in creeks, there are tyres in coastal marine farms, in playgrounds, as buffers on wharves and vessels, and many other places as well as for weighing down silage pit/stack covers. "Legitimacy" of use should surely not be the standard for judging how to manage tyres, but rather their pollution, fire risk, biosecurity risks and so on?

6. Do you think it is appropriate to provide direction to consent authorities when processing consents in the NES? What do you think of the matters proposed to be considered in table 1 in the consultation document?

☐ **Yes it is appropriate, iff, the direction is for min'm standards and councils can go**

☐ No

The matters in the table are inadequate. The volume threshold is too easily dodged, the permitted use default for <200m3 is unacceptable and should not be adopted. The nature of the receiving enviornment or the risks to the people and enviornment need more consideration.

We have not had time to find do extensive research on the topic, and we assume you have found materials from other countries.

There is material from the Basel Convention here:

Basel Convention: Technical Guidelines on the Identification and Management of Used Tyres, Basel Convention series/SBC No. 02/10, First Published in October 2000 and reprinted in November 2002. ISBN : 92-1-158610-0, ISSN : 1020-8364. These were adopted by the Basel Convention in 1999 and can be found at:

http://archive.basel.int/meetings/sbc/workdoc/old%20docs/tech-usedtyres.pdf

See particularly the Annexes to the paper.

Note this was produced by a working group and industry and has been through a multilateral process so it is probably very much watered down. It establishes high levels of ecotoxicity to algae and other affected species.

This material is somewhat dated but we also found a 2011 revised version (attached) and another draft of 2014 on the web, apparently also from a Basel convention working group.

The following is an extract from the 2014 paper that was being drafted under the Basel Convention. Since one part cites an NZ paper we assume that this has been seen by NZ. It was last saved in 2014 by one of the authors.

From a draft paper of October 2014 saved by Claudia Anacona Bravo (track changes in the original):

Basel Convention guidelines and other guidelines/instruments

General guidelines:

SBC Revised Technical Guidelines for the Environmentally Sound Management of Used and Waste Pneumatic Tyres – Available at http://www.basel.int/Implementation/TechnicalMatters/DevelopmentofTechnicalGuidelines/AdoptedTechnicalGuidelines/tabid/2376/Default.aspx

National guidelines:

Government of Newfoundland and Labrador, Canada, Guidelines for Establishment and Operation of Facilities for the Outdoor Storage of Tires – Available at http://www.env.gov.nl.ca/env/env_protection/waste/

New Zealand (Ministry for the Environment), End-of-Life Tyre Management: Storage Options – Available at http://www.mfe.govt.nz/publications/waste/end-of-life-tyre-management-jul04/index.html

Argentina (Secretariat of Environment and Sustainable Development), Resolution N° 523/2013 on Sustainable Tyre Management – Available at http://www.ambiente.gov.ar/archivos/web/Ppnud08/file/2013/Cuadernillo%20Neumaticos%20Ingles%20final%20mar14.pdf

Disposal guidelines:

UNEP Guidelines on Best Available Techniques and Provisional Guidance on Best Environmental Practices Relevant to Article 5 and Annex C of the Stockholm Convention on Persistent Organic Pollutants: Waste Incinerators – Available at http://chm.pops.int/Implementation/BATBEP/BATBEPGuidelinesArticle5/tabid/187/Default.aspx

European IPPC Bureau Reference Document on Best Available Techniques for the Waste Treatments Industries – Available at http://eippcb.jrc.ec.europa.eu/reference/

British Standards Institution (BSI) Publicly Available Specification PAS 108:2007, Specification for production of tyre bales for use in construction – Available at http://www.wrap.org.uk/content/pas-108-specification-production-tyre-bales-use-construction

Comment [CAB1]: Please mention Argentina resolution 523/2013. I am sending a related leaflet which I am trying the Secretariat upload in its website.

Comment [CAB2]: The text has been modified in response to the comment.

British Standards Institution (BSI) Publicly Available Specification PAS 107:2012, Specification for the manufacture and storage of size reduced tyre materials – Available at http://www.tyrerecovery.org.uk/specification/pas-107/

American Society for Testing and Materials (ASTM) D6270-08(2012), Standard Practice for Use of Scrap Tires in Civil Engineering Applications

Waste Management

Collection

Tyre users should dispose of wasteused tyres at authorised collection points, which may be tyre dealers or a designated collection point. Used Waste tyres may also be collected from the retailers by a wholesaler using reverse logistics.

Since collection is a logistical process, optimization has to be considered on either a cost or environmental basis. Various types of optimization can be put in place, depending on the economic and legal model used. Two key types are: (a) Collecting the maximum quantity of tyres in one run (perhaps including several stops); (b) Collecting in such a manner that manual handling is minimized.

Storage

Rubber tyres present its own unique hazards, not only for the different storage arrangements but also for the by-products of burned tyres, which include pyrolytic oil (petroleum hydrocarbons, VOCs, SVOCs, heavy metals). Because of their structure, tyres possess inherent air spaces that provide a sufficient amount of air for combustion; though relatively hard to ignite, once started a tyre fire generates a tremendous amount of heat and smoke and is extremely difficult to extinguish. In addition, standing water between in tyres is a breeding ground for mosquitoes, and tyre piles are an excellent rodent habitat, contributing another risk to public health.

Vector-borne diseases such as malaria, dengue, chikungunya and yellow fever are transmitted by some species of container-breeding mosquitoes (i.e. those that develop in a variety of water-holding containers, both natural and artificial).Tyres should be stored in a manner thatTo prevents breeding and habitation of mosquitoes and other vectors, tyres should be storedThis can be done by covering piles with plastic sheets or other impermeable barriers to prevent the accumulation of precipitation, and/or using vector treatment methods that are approved by the local vector control authority or the local health department. Tyres received at the site should be drained of water within 24 hours of receipt.

Tyres should not be stored on wetlands, flood plains, ravines, canyons or steeply graded surfaces.

Storage piles should not be located beneath power lines to reduce the probability risk of fire from that electrical power lines will that could break and land on tyres below, which could lead to a fire in the tyre storage. Scrap tyre storage preferably should be on a level area; the preferred surface for the storage area is concrete or hard packed clay, not asphalt or grass ([i]).Access to any waste tyre site should be controlled through the use of fences, gates, natural barriers or other means.

The venting of the facility and the ability of fire suppression crews to enter safely to extinguish any fire should be considered. Automatic fire protection should also be considered or an approved water supply capable of supplying the required flow to protect exposures and perform fire suppression and overhaul operations should be provided for manual firefighting. Provisions for surface water drainage and measures to provide protection of pyrolytic oil runoff should be provided.

Storage pile sizes should be minimised to restrict the available fuel in the event of a fire (excessively large piles could lead to the inability of manual fire suppression measures to suppress or control the fire); dimensions of tyre storage piles should be restricted, depending on storage arrangement (e.g. on-side storage, on-tread storage, laced storage). Additionally, minimum separation distances between individual piles of tyres and between piles of other stored products, and minimum distances from property lines and buildings, should be established to reduce the probability of fire spread and to reduce the probabilityassureensure that there will be insufficient clear space for access by emergency responders. Establishing and maintaining fire breaks should be taken into consideration to reduce the probability that a fire spreads to vegetation or that a fire involving combustible ground vegetation spreads to a tyre pile. Tyre pile sizes and separation distances are included in the International Fire Code ([ii])—a model code in use or adopted by reference by most states and local governments in the United

Comment [JM3]: It might be an idea to separate this tittle in fire-control and mosquitos

Comment [CAB4]: The text has been rearranged in response to the comment.

Comment [JM5]: We suggest a specific reference to Dengue and Malaria

Comment [CAB6]: The text has been modified in response to the comment.

States—, the National Fire Protection Association (NFPA) Fire Code ([iii]), and other fire safety codes/guidelines (e.g. Ontario Fire Code ([iv]); UAE Fire and Life Safety Code of Practice ([v]); NSW Fire Brigade Guidelines for Bulk Storage of Rubber Tyres ([vi]); Victoria MFB guideline for open air storage of new or used tyres ([vii])). NFPA Standards 13 and 230 provide additional guidance applicable to the storage of tyres and the various methods of fire protection ([viii,ix]).

The venting of the facility and the ability of fire suppression crews to enter safely to extinguish any fire should be considered. Automatic fire protection should also be considered or an approved water supply capable of supplying the required flow to protect exposures and perform fire suppression and overhaul operations should be provided for manual firefighting. Provisions for surface water drainage and measures to provide protection of pyrolytic oil runoff should be provided.

Open burning and smoking (except in designated areas) should be prohibited within the tyre storage area; the operation of cutting, welding or heating devices should also be prohibited ([x,xi]). Potential ignition sources should not be allowed within 6 m of piles of tyre chunks, chips or crumbs ([xii]).

Stored shredded tyres with metal content should be continually monitored for heat build-up due to oxidation of the metal which might generate~~s~~ enough heat to start fires ([xiii]).

The incidence and impact of large tyre pile fires can be reduced through strict fire code enforcement and appropriate fire safety practices. Standards for the storage of rubber tyres should be rigidly enforced.

~~Tyres should be stored in a manner that prevents breeding and habitation of mosquitoes and other vectors. This can be done by covering piles with plastic sheets or other impermeable barriers to prevent the accumulation of precipitation, and/or using vector treatment methods that are approved by the local vector control authority or the local health department. Tyres received at the site should be drained of water within 24 hours of receipt.~~

Storage facilities are generally required to be permitted or registered in order to store any waste tyre quantity above a stated minimum that can typically range from 50 to 10000 tyres. For example, with some exceptions, in New York, United States, a permit is required for storing 1000 or more waste tyres at a time, and disposal facilities may not store more than 1000 waste tyres for longer than 60 days; some facilities storing on-site less than 30 days' supply of waste tyres, based on the design capacity of the facility, are required to obtain a registration rather than a permit ([xiv]). In a different state, Mississippi, retailers, motor vehicle dismantlers or salvage dealers that store more than 500 waste tyres, or more than 100 waste tyres for more than 90 days, require written authorization ([xv]); in addition, commercial waste tyre collection facilities are not generally permitted to store more than 5000 whole tyres at any given time and all waste tyres must be removed from the site within 90 days of arrival ([xvi]). The minimum threshold for permitting or registration should be carefully considered. A low minimum may force retailers to use inefficient collection methods (such as frequent hauling of small quantities of tyres) and it may also unnecessarily increase the burden on both the stores and regulators by requiring registration. The optimum quantity has been found to be 1500 to 2500 tyres, which allows a retailer to accumulate a truckload of tyres for optimum hauling efficiency plus a limited additional scheduling buffer ([xvii]). With regard to individual piles of tyre chunks, chips or crumbs, the NFPA recommends these should not be located on site in excess of 90 days ([xviii]).

Waste tyre storage facilities should maintain daily operating records including the numbers of tyres received and removed from the site; an annual report should be submitted to the relevant authority. Facilities should have communication capabilities to immediately summon fire, police, or other emergency service personnel in the event of an emergency.

Transportation

In general, transporters are required to store and handle tyres so as not to create a nuisance, a hazard to public health or safety, or a fire hazard.

Controls are often necessary to reduce the possibility that transporters will use inappropriate disposal measures (to reduce costs). The transportation of waste tyres (above a certain number) should be registered with the appropriate regulatory authority. Carriers should also maintain records of the number of waste tyres transported and the location where the waste tyres were transported to.

In the United States, several states have licensing, certification, identification, or approval requirements for waste tyre transporters ([xix,xx]). The degree of regulation varies from state to state. The range includes programmes that simply require hauler registration with a state agency to those programmes that require licensing and financial assurance (bonding), and manifesting of waste tyres from the generator through the hauler to the final destination. For example, in Pennsylvania, any person that transports whole waste tyres for business-related purposes (not including persons who haul their own waste tyres in the course of routine tyre replacement) needs to obtain state authorization and must maintain a record of waste tyres transported weekly (tyres disposed are verified through weigh receipts) ([xxi]). On the other hand, in California, every person who transports 10 or more waste tyres is required to hold a valid hauler registration (renewed annually), to use state-issued decals, and to comply with the provisions of the waste tyre manifest programme; in addition a surety bond (bank guarantee) for the amount of USD 10000 must be submitted with the application for registration ([xxii]).

Annexe 7 of the 2000 published paper has US fire department specifications for tyre storage - which give an insight to some of the specifications that are needed. The specs are partly in feet, but our calculation is that they require a maximum much lower than the 200m3 you suggest.

It is clear is that it is not simply the quantity that matters.

We have also found the 2011 Basel Convention *Revised technical guidelines for the environmentally sound management of used and waste pneumatic tyres*, Revised technical version (31 October 2011)

See page 26-28 for the requirements for storage and design, time limits, stacking etc. storage.
(apologies for the strange variations in font – we could not correct these).

The papers are clear that tyres in outdoor storage shoud be:

1 kept covered and dry;

2 that there should be limits on how long the tyres are stored outside since they degrade over time.

3 That the location and steepness of the storage terrain matters and other aspects of the reciving environment such as that it should be flat, avoid wetlands and other sensitive environments.

4 That there should be very wide margins between piles of tyres and adjacent buildings or fences, and between the rows of tyres so that vehicles have access;

5 That maximun height of stack limits should be specified because tyres have a habit of slipping off the pile into the access ways which they then block.

6 Other design aspects of any pile or stack and distances between these, controls on fire and vermin etc, should be specified.

7 Requirements for quanties of water and rate of flow available for fire fighting are outlined in Annexe 7 - such specification like most of those above, should be included in an

8 It is clear to us that the spefication of any tyres disposed to land as your paper puts it, needs to be far more carefully drafted, since the base and drainage are important considerations. A simple layer of earth over the top may not be adequate.

Questions for the tyre industry

7. Do you currently store tyres outdoors? If so how many?

   ☐ Yes

   ☐ No

8. Do you anticipate the introduction of the NES would have either positive or negative impacts for you or your business? If yes, please explain.

   ☐ Yes

   ☐ No

9. Do you anticipate the introduction of the NES would have a cost impact on you or your business? If yes, please explain.

   ☐ Yes

   ☐ No

Questions for local government

10. Do you consider the proposal to be workable in practice, that is, would your organisation be able to issue consents, monitor activities, and enforce the proposed NES?

    ☐ Yes

    ☐ No

11. What additional conditions do you consider should be mandated, if any, by the NES?

12. Do you have any additional information about the impacts from storing tyres on the environment, economy or communities?

Timeframe

13. What are your views on the Government's proposed timeframe for entry-into-force of the NES under part 5 of the RMA?

Mid-2018 seems reasonable, but possibly a little short of time for those with large stores. We do not agree with the volume test and do consider that there needs to be restricted discretionary consents.

14. Are there any issues about the proposed timeframe for entry-into-force of the NES that the Government should consider?

Time. for more careful and specific and informed drafting and adoption

15. Are there any ways the Government could help businesses, consumers and local government to prepare ahead of the regulations' entry-into-force?

We suggest an amnesty and or an incentive payment is given so that tyres improperly disposed of or just left lying around can be gathered for proper disposal, rather than left lurking and polluting.

Other comments

16. Do you have any further comments you wish to make about the Government's proposal?

It should be careful to control the spread of latex dust and chips since those who are allergic to latex can suffer anaphylaxis in response.

Controls on dumping and discharges into water and air are needed.

More work needs to be done in the matters to be specified in the NES, since many conditions are technical and there is no point in each Council researching and doing them.

On the other hand, the ability of councils to make the conditions more stringent is essential.

Permitted use activities for those not covered is unacceptable.

We welcome these initial steps to tackle this problem but believe other policy instruments are need too, particularly deposit-refund systems.

Biosecurity is a major issue only lightly covered.

Releasing submissions

Your submission may be released under the Official Information Act 1982 and may be published on the Ministry's website. Unless you clearly specify otherwise in your submission, we will consider that you have consented to website posting of both your submission and your name.

Please check this box if you would like your name, address, and any personal details withheld. ☒

Note that the name, email, and submitter type fields are mandatory for you to make your submission.

When your submission is complete

If you are emailing your submission, send it to tyre.submissions@mfe.govt.nz as a:

- PDF or

- Microsoft Word document.

If you are posting your submission, send it to A Proposed National Environmental Standard for the Outdoor Storage of Tyres, Ministry for the Environment, PO Box 10362, Wellington 6143.

Submissions close at 5.00pm on Friday 4 August 2017.

---

[i] National Fire Protection Association (NFPA). 2003. NFPA 230: Standard for the Fire Protection of Storage. Available at http://www.nfpa.org/codes-and-standards/document-information-pages?mode=code&code=230

[ii] International Code Council (ICC). 2011. Tire Rebuilding and Tire Storage. In: 2012 International Fire Code®. Available at http://publicecodes.cyberregs.com/icod/ifc/

[iii] National Fire Protection Association (NFPA). 2011. NFPA 1: Fire Code. Available at http://www.nfpa.org/codes-and-standards/document-information-pages?mode=code&code=1

[iv] Ontario Ministry of Community Safety & Correctional Services. 2007. Fire Code (Ontario Regulation 2133/07). Available at http://www.mcscs.jus.gov.on.ca/english/FireMarshal/Legislation/FireCode/FireCode.html

[v] United Arab Emirates (UAE) Ministry of Interior. 2011. UAE Fire and Life Safety Code of Practice. Available at http://www.dcd.gov.ae/civil-defence-regulation.php

[vi] New South Wales (NSW) Fire Brigade. 2009. Guidelines for Bulk Storage of Rubber Tyres. Policy No.2. Available at http://www.fire.nsw.gov.au/page.php?id=28

[vii] Victoria Metropolitan Fire and Emergency Services Board (MFB). 2014. Open Air Storage of New or Used Tyres. Guideline No. GL-42. Available at http://www.mfb.vic.gov.au/Industry/Workplace/Fire-Safety-Guidelines.html

[viii] National Fire Protection Association (NFPA). 2013. NFPA 13: Standard for the Installation of Sprinkler Systems. Available at http://www.nfpa.org/codes-and-standards/document-information-pages?mode=code&code=13

[ix] National Fire Protection Association (NFPA). 2003. NFPA 230: Standard for the Fire Protection of Storage. Available at http://www.nfpa.org/codes-and-standards/document-information-pages?mode=code&code=230

[x] National Fire Protection Association (NFPA). 2003. NFPA 230: Standard for the Fire Protection of Storage. Available at http://www.nfpa.org/codes-and-standards/document-information-pages?mode=code&code=230

[xi] International Code Council (ICC). 2011. Tire Rebuilding and Tire Storage. In: 2012 International Fire Code®. Available at http://publicecodes.cyberregs.com/icod/ifc/

[xii] National Fire Protection Association (NFPA). 2011. NFPA 1: Fire Code. Available at http://www.nfpa.org/codes-and-standards/document-information-pages?mode=code&code=1

[xiii] The Waste & Resources Action Programme (WRAP). 2006. UK Waste Tyre Management Best Practice: Handling of Post-Consumer Tyres–Collection & Storage. Available at http://www.wrap.org.uk/sites/files/wrap/8%20-%20UK%20Waste%20Tyre%20Management%20-%20May%202006.pdf

[xiv] New York Codes, Rules and Regulations. Title 6, Environmental Conservation; Chapter IV- Quality Services; Part 360: Solid Waste Management Facilities (6 NYCRR Part 360); Subpart 360-13: Waste Tire Storage Facilities. Available at http://www.dec.ny.gov/regs/4403.html

[xv] Mississippi Administrative Procedures Act Rules. Title 11: Mississippi Department of Environmental Quality. Part 4, Chapter 4: Mississippi Commission on Environmental Quality Waste Tire Management Regulations. Available at http://www.deq.state.ms.us/mdeq.nsf/page/legal_ENVIRONMENTALREGULATIONSEffectiveAugust262013?

[xvi] Mississippi Department of Environmental Quality, Commercial/Multi-user Waste Tire Collection Facility Permit Application. Available at http://www.deq.state.ms.us/mdeq.nsf/page/SW_Waste_Tire_Program_Information_And_Application_Forms?OpenDocument

[xvii] United States Environmental Protection Agency. 2006. Scrap Tire Cleanup Guidebook: A Resource for Solid Waste Managers Across the United States. EPA-905-B-06-001. Available at http://www.epa.gov/region5/waste/solidwaste/tires/guidance/index.htm

[xviii] National Fire Protection Association (NFPA). 2011. NFPA 1: Fire Code. Available at http://www.nfpa.org/codes-and-standards/document-information-pages?mode=code&code=1

[xix] United States Environmental Protection Agency. 2006. Scrap Tire Cleanup Guidebook: A Resource for Solid Waste Managers Across the United States. EPA-905-B-06-001. Available at http://www.epa.gov/region5/waste/solidwaste/tires/guidance/index.htm

[xx] United States Environmental Protection Agency. 2010. Scrap Tires: Handbook on Recycling Applications and Management for the U.S. and Mexico. EPA-530-R-10-010. Available at http://www.epa.gov/solidwaste/conserve/materials/tires/publications.htm

[xxi] Pennsylvania Waste Tire Hauler Program (WTHP). For further information, refer to http://www.portal.state.pa.us/portal/server.pt/community/waste_tire_program/

[xxii] For further information, refer to http://www.calrecycle.ca.gov/Tires/Haulers/default.htm