Date: August 30, 2015

TEL: NA

To: The Examiner for the Guidelines

Japan International Cooperation Agency (JICA)

Name of the Requester: Association of Colaba-Cuffe Parade Residents (ACCPR) represented in this petition by residents Parag Udani, Fritz D'Silva, Vinod Advani, Shazia Andhyarujina, Manjeet Kripalani, Karin Datta, Kamala Rao, Farooq Issa

Contact information of the Requester:

Contact information of the frequester.	
ACCPR,	
c/o	
Mumbai	
Tele:	
Individual Cell Numbers:	
Parag Udani:	
Fritz D'Silva:	
Vinod Advani:	
Shazia Andhyarujina:	
Manjeet Kripalani:	
Karin Datta:	
Kamala Rao:	
Farooq Issa:	
Address: c/o	
Mumbai	
TEL:	
FAX:	
E-mail	
(Plus:	_
[If the Requester uses an agent]	_
Name of the agent: NA	
Contact information of the agent: NA	
Address: NA	

FAX: NA

E-mail: NA

We desire that our names not be disclosed to the Project Proponent.

Yes • No (NO Circle one)

1. Project with respect to which the objections are submitted

\* Country name: India

\* Project name: Mumbai Metro Line 3 Project

\* Project site: Mumbai

- \* Project outline: Metro Line 3 Colaba-SEEPZ, 32.5km long, fully underground, with 27 stations in Mumbai, and terminating/starting at Colaba Woods in Cuffe Parade.
  - 2. Substantial damage actually incurred or likely to be incurred by the Requester as a result of JICA's non-compliance with the Guidelines:
    - a) ENVIRONMENTAL DAMAGE:
    - i) Loss of Green Cover and Biodiversity in congested urban area:

The proposed station is located in an 8-acre wooded garden in downtown Mumbai. The garden has 806 trees of 99 different species, of which some are rare. It is a living botanical library with students and nature-lovers regularly visiting. The metro will require cutting of trees in and around the Woods with detrimental effect. Attached is a detailed study of the Colaba Wood by well-regarded botanist and former government forest officer, Dr. C. Marathe, see Annexure I.

To quote a part of Dr. Marathe's report:

"The Name of the Garden itself suggests that it is not just a leisure garden, but a good collection of tree species. In the entire Mumbai region 368 tree species were identified in the tree census report, amazingly in Colaba woods 99 species are found. Trees like Undi, Ambada and Variegated Wad, Mysore fig and Mabolo trees are unique to this Garden, this shows the richness of the garden in terms of variety of trees in 3 Ha of land. There are 104 fruit bearing trees. This amounts to 13% of the total trees. The fruit bearing trees play a important role in providing fruits and shelter for birds, bats and squirrels.

"If the metro 3 project begins in this area, many trees would be cut or relocated. Some of the trees here are 40 years old. Considering the size of the trees (except Ficus species) giant trees with more than 150cm girth and 10 mtr height would not sustain the shock due to relocation. The present tree population would be subjected to major threat due to air pollution, rise in local temperature and water logging of the soil. The removal of trees in the garden area will remove the green cover around the garden; this would lead to rise in the temperature. The untreated slurry and muck if allowed to stagnate in the garden area would lead to percolate huge amount of water in the soil. This will hamper the respiration process of the roots of the giant trees. Almost all the trees are showing healthy growth now. However massive civil developmental work would disturb the local climate which would ultimately lead to destruction of trees."

According to a study done by Japan's own Tokyo University (<a href="http://jech.bmj.com/content/56/12/913.full">http://jech.bmj.com/content/56/12/913.full</a>) and National University of

Electro-Communications in Tokyo,

(http://waset.org/publications/4711/evaluation-of-the-degree-of-the-sufficiency-of-public-green-spaces-as-an-indicator-of-urban-density-in-the-chubu-metropolitan-area-in-japan), there is a direct link between availability of green spaces and the longevity and health of humans.

ii) Air Pollution: The detailed project report prepared by RITES for MMRDA/MMRCL is silent on the air pollution levels in Cuffe Parade. While they have given the higher air pollution levels of other proposed stations/areas like Churchgate, etc, Cuffe Parade is not mentioned a all. Therefore it is presumed that the existing air pollution levels are satisfactory because of the ample green cover provided by the said Colaba Woods.

During the construction phase, because of large-scale movement of construction vehicles in a small area, as evidenced by Annexure II, air pollution levels will rise exponentially, to the detriment of the health of the trees and residents alike.

According to Mumbai's well known environmentalist and naturalist Bittu Sahgal, the Intergovernmental Panel on Climate Change (IPCC) states that Mumbai could possibly lose Rs. 2,00,000 crores in infrastructure damage from climate change disaster.

"Buildings on reclaimed lands are at risk from their foundations being subsumed...All transport infrastructure, including rail and road is at sea level. It's not just "drowning" but extreme climatic events that will render such infrastructure useless." He adds, "Slum dwellers will be the first victims of climate change, which will impact the water delivery capacity of the city. But highrises will be subject to "tanker blackmail" leaving owners to deal with problems created by the builder-politician nexus."

Finally, he says, "Altered humidity and temperature will cause vectors to change faster than our immune systems can adapt. A massive health crisis is on the anvil. Again the poor will be the first sufferers."

Therefore, he says, all infrastructure investments should pass through the climate filter. Sahgal also highlights the NDD – Nature Deficit Disorder, which takes a toll on the individual and collective psyche.

"NDD is a very real illness. It was first diagnosed in children whose parents would prefer them staying indoors, because of safety considerations on New York's mean streets for instance. Mumbai's seascapes and its open spaces undoubtedly help to reduce stress and therefore crime, divorce rates and public anger.

"Mumbai is the only city in the world with 20% of its land area under protected forest status. Yet the spaces are under threat from the builder-politician nexus. Even one large tree can improve the 'happiness quotient' of an entire colony or housing estate."

With specific regard to Colaba Woods, to quote Dr. Marathe's report:

"If the metro 3 project begins in this area, many trees would be cut or relocated. Some of the trees here are 40 years old. Considering the size of the trees (except Ficus species) giant trees with more than 150cm girth and 10 mtr height would not sustain the shock due to relocation. The present tree population would be subjected to major threat due to air pollution, rise in local temperature and water logging of the soil. The removal of trees in the garden area will remove the green cover around the garden; this would lead to rise in the temperature. The untreated slurry and muck if allowed to stagnate in the garden area would lead to percolate huge amount of water in the soil. This will hamper the respiration process of the roots of the giant trees. Almost all the trees are showing healthy growth now. However

massive civil developmental work would disturb the local climate which would ultimately lead to destruction of trees."

iii) Noise Pollution: According to the MMRCL's own report, the noise pollution in the Cuffe Parade, is above acceptable norms (see Annexure IV).

During and after construction, there will be a substantial increase in traffic.

During construction, the presence of heavy construction equipment like the massive Tunnel Boring Machine and material and waste movements by trucks, in a congested 400,000 sq ft. area with narrow streets and a population of over 100,000, living cheek-by-jowl, including the daily movements of high security naval vehicles. This will increase the noise pollution during construction.

Even after construction, there will be increased traffic movement in the area from taxis, buses, two-wheelers, cars, which will be dropping off and picking up passengers exiting and entering the station, on the already narrow approach roads.

# b) SOCIAL IMPACT:

i) Colaba Woods is surrounded by high-rises and slums alike. The Woods are a socially integrated recreational facility, cutting across class lines, unlike other gardens in Cuffe Parade which restrict entry to the slum-dwellers – a sizeable population of the area (over 100,000 population). The slums are so densely populated, with 10 people living in a 100-square foot space (<a href="http://www.prospectmagazine.co.uk/features/how-slums-can-save-the-planet;">http://www.prospectmagazine.co.uk/features/how-slums-can-save-the-planet;</a> <a href="http://blogs.guggenheim.org/lablog/10-things-every-urbanist-should-know-about-mumbai/">http://blogs.guggenheim.org/lablog/10-things-every-urbanist-should-know-about-mumbai/</a>, ), that as soon as the Colaba Woods garden opens in the early morning and till it closes at night, it is a refuge of space, air and beauty for the children of the slums, the invalid and the elderly.

In particular, the students of the area use the Woods to study. Seeing their earnestness, the Rotary Club of Bombay, donated funds to provide lighting in a specially demarcated study area, and other facilities like an ampitheatre, basketball courts, gymnasium equipment, etc. for the area. (ANNEXTURE V is the letter from the Rotary Club in support of the Woods)

- ii) Schools in the area use Colaba Woods and its bio diversity to give children practical lessons in nature and introduce them to the wealth of nature and the need to care for the environment. In fact, Envornmental Studies are a compulsory subject in all Indian schools, and Colaba Woods is the very botanical library that is used as a reference.
- iii) This open space provides the outlet for the young and underprivileged of the area. Countless studies all over the world (https://books.google.co.in/books?id=q4B4YvnUS7cC&pg=PA5&lpg=PA5&dq=slums+and+social+unrest&source=bl&ots=opnaWwvCYD&sig=jMqPL7hxBnhDdZPS3RTqOf4SrY4&hl=en&sa=X&ved=0CCIQ6AEwAGoVChMI2tbyjbXsxgIVBJGUCh2NVAYV#v=onepage&q=slums%20and%20social%20unrest&f=falseANNEXURE IV) have shown that in a congested urban setting, where the underprivileged and privileged live side-by-side, depriving the less privileged of

open spaces leads to social unrest and increases the rate of crime. Colaba Woods holds this fragile social balance within its leafy environs.

\ 14

- 3. Relevant provisions of the Guidelines considered violated by JICA and facts constituting JICA's non-compliance, as alleged by the Requester:
  - 1. JICA guidelines 2.1: Information disclosure. JICA says that "In principle, Project Proponents disclose information about the environmental and social considerations of their projects. JICA assists project proponents etc by implementing Cooperation projects as needed and that JICA encourages project proponents etc to disclose and present information about environmental and social considerations to local stakeholders."

In this case, the environmental impact assessment (EIA) has not been properly done. According to the Development Project Report 2011 of the project, does not raise the issues raised by us. Chapter 9 of the DPR which refers to the Social & Environmental Impact does not address during construction and post construction impact on the environment and society. (SEE ANNEXURE VII)

2. Jica guidelines 2.3: Impacts to be assessed. "The impacts to be assessed with regard to environmental and social considerations include Impacts on Human Health and Safety, as well as on the natural environment that are transmitted through air, water, soil, waste, accidents, water usage, climate change, eco-systems, fauna and flora, including transboundary or global scale impacts."

Such an assessment has not been done comprehensively by the project proponents. (See Page 1 of ANNEXTURE 1)

3. a. Jica guideline 2.4: Consultation with local stakeholders. "In principle, project proponents consult with local stakeholders through means that induce broad public participation to a reasonable extent, in order to take into consideration the environmental and social factors in a way that is most suitable to local situations, and in order to reach an appropriate."

There has been no public participation/consultation for this station location in Colaba Woods.

Jica 2.4 also says under point 4, that "in the case of category A projects, Jica encourages project proponents etc to consult with local stakeholders about their understanding of development needs, the likely adverse impacts on the environment and society and the analysis of alternatives at an early stage of the project, and assists project proponents as needed."

If the citizens and local stakeholders were meaningfully engaged during site envaluation, the project could have been structured as a wonderful example of sustainable development in an urban area. The following options have been proposed by us to the MMRCL, since January 2015, which will reduce/eliminate the negative impact on Colaba Woods and the citizens of Cuffe Parade.

3. b. Our practical Alternatives for Station Location ( Alternatives 2,3 & 4 are on same track alignment as planned at present)

#### Alternative 1:

Next to World Trade Centre, in the large empty barren plot owned by MMRDA.

This space is barren, devoid of trees and near no major dwellings. Parking facilities can be built above the station and since it is near the sea, coastal road traffic integration is possible. This site is barely 100 metres west of the Colaba Woods garden. The space requirement of about 2,500 feet is met.

-----

#### **Alternative 2:**

End Metro 3, temporarily, at Vidhan Bhawan Station (on the same track alignment)

Simultaneously build the Coastal road from NCPA to Cuffe Parade. The distance between the MLA hostel (Vidhan Bhavan Station) and Cuffe Parade is just 400 metres. A small bridge can be built to give access to fishing boats. A few hundred crore rupees will be saved.

Adequate parking facilities can be created near the MLA hostel and the coastal road. No additional Air, Dust and Noise pollution will occur other than what will be for the Vidhan Bhavan Station. Later, on depending on traffic requirement, the Metro can be extended either towards Strand or Cuffe Parade or Gateway of India.

-----

#### **Alternative 3:**

BMC Garden plus adjoining plot 105 for parking

If MMRCL wants to destroy a garden, then use the almost vacant garden, 200 metres north of Colaba Woods, belonging to BMC. This spot also has an empty barren plot 105 adjoining it, marked in the current DP as a Parking plot, where the construction yard can initially be built but later on a proper parking structure can be erected. In addition, it would be near the sea and the Coastal Road, for seamless traffic integration and management. The current garden is hardly used and also restricts slum people from using it. A saving of about Rs. 200 crores is possible.

The space requirement of 2,500 feet (800 metres) is also met.	All land is owned by MMRDA
/ BMC.	

\_\_\_\_\_

## **Alternative 4:**

### South towards the Dhobi Ghat and Bus Depot.

In view of this being defence land and since the MMRCL wants about 800 metres of clear land for the station and the cross over tracks. However, permission from the defence department may be required. If MMRCL gets this permission, this is a possible site.

We are a proactive group wanting win-win solutions. We request your support and guidance in this matter

The project proponents are not willing to discuss the merits or demerits of our alternatives.

Jica guidelines 2.5: Concern about social environment and human rights. This has been referred to our above points 2 a) and b).

Jica guidelines 2.6: Laws, regulations and standards of reference: Right to Live, Article 21 (Ecology, Environment, Health), 48A (Protection and improvement of Environment and Safeguarding of Forests and Wild life), 51A (g) (environment and compassion for living creatures), 226 of the Constitution of India.

4. Causal nexus between JICA's non-compliance with the Guidelines and the substantial damage:

Jica's non-compliance will lead to irreversible environment and social damage as explained in points 2 a) and b) above.

5. Resolution desired by the Requester:

The requester, who is not against the Metro Line 3, desires that the station location be shifted away from and away from Colaba Woods as per the alternatives suggested above in point 3 b.

6. Facts concerning the Requesters' consultation with the Project Proponent:

The requestors have made many written, public and personal efforts to engage the Project Proponents, as enumerated in ANNEXTURE VIII.

The project proponents have informed us about their inability to consider our demands for re-location.

7. Facts concerning the Requesters' consultation with JICA's Operational Department:

We have consulted several Japanese agencies, including the consulate in Mumbai, agents of Meti, etc, and were requested to register our objections through the website, as we are now doing.

This petition is or first effort/representation.

8. If a Request is to be submitted by an agent, the Requester must explain the necessity to submit the Request through an agent and attach evidence that the agent has been duly authorized by the Requester.

The Requester hereby covenants that all the matters described herein are true and correct.

[END]

ANNEXTURE IX: Slum density in

Mumbai: http://www.asres.org/2004Conference/papers/Adhikari.doc