



ಮಕ್ಕಳ ರಕ್ಷಣಾ ನಿರ್ದೇಶನಾಲಯ, ಮೂರನೇ ಮಹಡಿ, ವಿಶ್ವೇಶ್ವರಯ್ಯ ಚಿಕ್ಕಗೋಪುರ,  
ಡಾ|| ಬಿ.ಆರ್. ಅಂಬೇಡ್ಕರ್ ವೀದಿ, ಬೆಂಗಳೂರು-560001.

E-mail ID: icps.kar@gmail.com

Ph.No.080-22867383

ಸಂಖ್ಯೆ: ಮರನಿ/ಮರ/ಕೃಷಿ ಹೊಂಡ/111/2020-21

ದಿನಾಂಕ:12.10.2021

### ಸುತ್ತೋಲೆ

ವಿಷಯ: ಕೆರೆ, ಕಟ್ಟೆ, ಕೃಷಿ ಹೊಂಡ, ತೆರೆದ ಬಾವಿ ಇತ್ಯಾದಿ ಜಲ ಮೂಲಗಳಿಗೆ ಮಕ್ಕಳು ಬಿದ್ದು ಮರಣ ಹೊಂದುತ್ತಿರುವ ಪ್ರಕರಣಗಳನ್ನು ನಿರ್ಮೂಲನೆಗೊಳಿಸಲು ಹಾಗೂ ಮಕ್ಕಳನ್ನು ರಕ್ಷಿಸಲು ರಚಿಸಿರುವ ಮಾರ್ಗಸೂಚಿಯಂತೆ (SOP) ಕ್ರಮ ವಹಿಸುವ ಕುರಿತು.

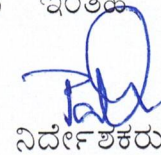
- ಉಲ್ಲೇಖ: 1) ದಿನಾಂಕ:12-11-2020ರ ಕನ್ನಡ ದಿನ ಪತ್ರಿಕಾ ಪ್ರಕಟಣೆ.  
2) ಶ್ರೀ ಕೆ.ಟಿ ತಿಪ್ಪೇಸ್ವಾಮಿ, ಕೌನ್ಸಿಲ್ ಮತ್ತು ಎಕ್ಸಿಕ್ಯೂಟಿವ್ ಕಮಿಟಿ, ಸದಸ್ಯರು ಇವರ ಪತ್ರ ದಿನಾಂಕ:27-11-2020.  
3) ಈ ಕಛೇರಿ ಪತ್ರ ಸಂಖ್ಯೆ:ಕೆಎಸ್‌ಐಸಿಪಿಎಸ್/ಮರ/ಕೃಷಿ ಹೊಂಡ-111/2020-21/09, ದಿನಾಂಕ:03-04-2021.  
4) ಮಹಾ ನಿರ್ದೇಶಕರು, ಆಡಳಿತ ಮತ್ತು ತರಬೇತಿ ಸಂಸ್ಥೆ, ಮೈಸೂರು ರವರ ಪತ್ರ ಸಂಖ್ಯೆ:ATI/289/TRAN/2021 JD Train-ATI, ದಿನಾಂಕ:30-09-2021.

\* \* \* \* \*

ಮೇಲ್ಕಂಡ ವಿಷಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದಂತೆ, ಮಕ್ಕಳು ನೀರಿನಲ್ಲಿ ಆಟವಾಡಲು, ಸೆಲ್ಫಿ ತೆಗೆದುಕೊಳ್ಳಲು ಹಾಗೂ ಇನ್ನಿತರೆ ಸಂದರ್ಭಗಳಲ್ಲಿ ನೀರಿನಲ್ಲಿ ಬಿದ್ದು ಸಾವನ್ನಪ್ಪುತ್ತಿರುವ ಬಗ್ಗೆ ದಿನ ಪತ್ರಿಕೆಯಲ್ಲಿ ಪ್ರಕಟವಾಗಿರುವುದಾಗಿ ಉಲ್ಲೇಖ (2)ರ ಪತ್ರದಲ್ಲಿ ತಿಳಿಸಿರುತ್ತಾರೆ ಹಾಗೂ ದಿನಾಂಕ:12-11-2020ರ ಕನ್ನಡ ಪ್ರಭ ದಿನಪತ್ರಿಕೆಯಲ್ಲಿ ಈ ರೀತಿಯ ಘಟನೆಗಳು ಘಟಿಸಿ ಮಕ್ಕಳು ಸಾವನ್ನಪ್ಪುತ್ತಿರುವ ಬಗ್ಗೆ ಪ್ರಕಟವಾಗಿರುತ್ತದೆ.

ಈ ಹಿನ್ನೆಲೆಯಲ್ಲಿ ರಾಜ್ಯದಲ್ಲಿ ಕೆರೆ, ಕಟ್ಟೆ, ಕೃಷಿ ಹೊಂಡ ಇತ್ಯಾದಿ ಜಲ ಮೂಲಗಳನ್ನು ನಿರ್ಮಿಸುವ ಸಂದರ್ಭದಲ್ಲಿ ಹಾಗೂ ಕಲ್ಲು ಕ್ಷಾರಿಗಳು ನಡೆಯುತ್ತಿರುವ ಸಂದರ್ಭದಲ್ಲಿ ಮಕ್ಕಳ ಸುರಕ್ಷತೆಯ ದೃಷ್ಟಿಯಿಂದ ಅನುಸರಿಸಬೇಕಾದ ಸುರಕ್ಷತಾ ಕ್ರಮಗಳ ಮಾರ್ಗಸೂಚಿಗಳನ್ನು ತಯಾರಿಸಿ ಸಲ್ಲಿಸುವಂತೆ ಉಲ್ಲೇಖ (3)ರ ಪತ್ರದಲ್ಲಿ ಮಹಾ ನಿರ್ದೇಶಕರು ಆಡಳಿತ ಮತ್ತು ತರಬೇತಿ ಸಂಸ್ಥೆ, ಮೈಸೂರು ಇವರನ್ನು ಕೋರಲಾಗಿತ್ತು.

ಈ ಸಂಬಂಧ ಉಲ್ಲೇಖ (4)ರ ಆಡಳಿತ ತರಬೇತಿ ಸಂಸ್ಥೆಯ ಪತ್ರದಲ್ಲಿ ಕೆರೆ, ಕಟ್ಟೆ, ಕೃಷಿ ಹೊಂಡ ಹಾಗೂ ಕಲ್ಲು ಕ್ಷಾರಿಗಳಲ್ಲಿ ಬಿದ್ದು ಮಕ್ಕಳು ಅಪಾಯಕ್ಕೀಡಾಗದಂತೆ ಸಂರಕ್ಷಿಸಲು ಸುರಕ್ಷತಾ ಮಾರ್ಗಸೂಚಿಯನ್ನು ರಚಿಸಿ ಸಲ್ಲಿಸಿರುತ್ತಾರೆ(ಪ್ರತಿ ಲಗತ್ತಿಸಿದೆ). ಈ ಸಂಬಂಧ ತಮ್ಮ ಅಧೀನದಲ್ಲಿ ಬರುವ ಅಧಿಕಾರಿ/ಸಿಬ್ಬಂದಿಗಳಿಗೆ ಅವಶ್ಯ ತರಬೇತಿ ನೀಡಿ ಈ ಮಾರ್ಗಸೂಚಿ ಬಗ್ಗೆ ಅರಿವು ಮೂಡಿಸಿ ಮತ್ತು ಇದರನ್ವಯ ಕಟ್ಟುನಿಟ್ಟಾಗಿ ಕ್ರಮ ಜರುಗಿಸಿ ಮುಂದೆ ಸಂಭವಿಸಬಹುದಾದ ಇಂತಹ ಪ್ರಕರಣಗಳನ್ನು ತಡೆಗಟ್ಟಲು ಅಗತ್ಯ ಕ್ರಮಕೈಗೊಳ್ಳಲು ಸೂಚಿಸಿದೆ.

  
ನಿರ್ದೇಶಕರು,

12.10.2021

ಮಕ್ಕಳ ರಕ್ಷಣಾ ನಿರ್ದೇಶನಾಲಯ,  
ಬೆಂಗಳೂರು.

2....



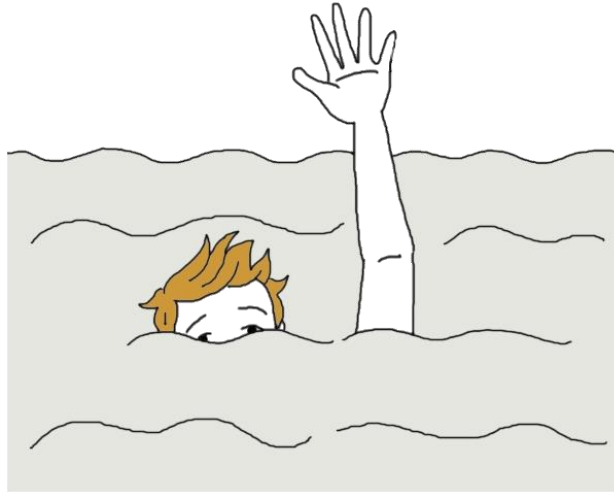
ಪ್ರತಿಯನ್ನು ಕೆಳಕಂಡವರಿಗೆ ಮಾಹಿತಿ ಹಾಗೂ ಸೂಕ್ತ ಕ್ರಮಕ್ಕಾಗಿ:

1. ಎಲ್ಲಾ ಜಿಲ್ಲೆಯ ಜಿಲ್ಲಾಧಿಕಾರಿಗಳು ಹಾಗೂ ಅಧ್ಯಕ್ಷರುಗಳು, ಜಿಲ್ಲಾ ಮಕ್ಕಳ ರಕ್ಷಣಾ ಘಟಕ ಇವರಿಗೆ ಸಲ್ಲಿಸುತ್ತಾ ಸದರಿ ಮಾರ್ಗಸೂಚಿಯನ್ನು ತಮ್ಮ ಜಿಲ್ಲೆಯ ಸಂಬಂಧಿಸಿದ ಅಧೀನ ಇಲಾಖೆಗಳಾದ ಕೃಷಿ ಇಲಾಖೆ, ತೋಟಗಾರಿಕೆ ಇಲಾಖೆ, ಗಣಿ ಮತ್ತು ಭೂ ವಿಜ್ಞಾನ ಇತ್ಯಾದಿ ಇಲಾಖೆ ಇವರಿಗೆ ಸಲ್ಲಿಸಿ ಅಗತ್ಯ ಕ್ರಮ ಕೈಗೊಳ್ಳಲು ನಿರ್ದೇಶಿಸುವಂತೆ ಸೂಚಿಸಿದೆ.
2. ಎಲ್ಲಾ ಜಿಲ್ಲೆಯ ಮುಖ್ಯ ಕಾರ್ಯನಿರ್ವಹಣಾಧಿಕಾರಿಗಳು, ಜಿಲ್ಲಾ ಪಂಚಾಯತ್.
3. ಎಲ್ಲಾ ಜಿಲ್ಲೆಯ ಜಿಲ್ಲಾ ಮಕ್ಕಳ ರಕ್ಷಣಾಧಿಕಾರಿಗಳು, ಜಿಲ್ಲಾ ಮಕ್ಕಳ ರಕ್ಷಣಾ ಘಟಕ.
4. ಎಲ್ಲಾ ಜಿಲ್ಲೆಯ ಮಕ್ಕಳ ಫಾಲನಾ ಸಂಸ್ಥೆಗಳ ಮುಖ್ಯಸ್ಥರುಗಳಿಗೆ.
5. ಶಾಖಾ ರಕ್ಷಣಾ ಕಡತ
6. ಕಛೇರಿ ಪ್ರತಿ



**Government of Karnataka**

**Guidelines**  
**on**  
**Protection of Children against Drowning in Water Bodies**



**Prepared by**  
Centre for Disaster Management  
Administrative Training Institute  
Lalitha Mahal Road,  
Mysuru – 570 011

[www.atimysore.gov.in](http://www.atimysore.gov.in)

0821-2443839 / 2522142 / 2443264

<b>Content</b>	<b>Page No.</b>
1. Background	1
2. Guidelines for Farm Ponds	3
3. Guidelines for Fencing of Farm Ponds	4
4. Guidelines for Protection of Children from Drowning in Farm Ponds at local levels	5
5. Guidelines for Open Wells & Kalyani	7
6. Guidelines for Open/Abandoned Bore Wells	8
7. Guidelines for Storm and Sewage Water Bodies	10
8. Guideline for Manholes	11
9. Guideline for Waterfalls and Lakes	12
10. Guideline for Irrigation Canals	13
11. Guideline for Rivers, Back Waters and Coastal Beach	14
12. Guideline for Sumps	15
13. Guideline for Stone Quarry Troughs	16
14. Guideline for Swimming Pool	18
15. Guideline for Safety of Children in the School Premises	20-21

## **Protection of Children Against Drowning in Water Bodies**

### **Background**

Every year 100s of young children are losing life due to drowning in different water bodies in rural and urban areas in the state. Drowning is the third leading cause of death for children aged 5-14 years. Often at home, children are vulnerable to the dangers of being unsupervised around bathtubs, buckets of water, toilets, sumps, open wells or water troughs etc. Children death due to drowning in water conservation structures built under different government schemes namely, MGNREGS, Krishi Bhagya and other water bodies have been reported every year in the state with Tumakuru district alone reporting more than 300 cases of children drowning in water bodies. A majority of these water bodies are constructed with little or no protection, scientific methods and designs. Such water bodies tend to be hazardous and pose danger to children who come in close proximity to such water bodies for playing and swimming. For instance, there are hidden dangers in farm ponds such as accumulated slush beneath, contaminated water with pesticides, fertilisers, live-stock waste and dung posing serious health problems. Children may end up reporting grievous injuries due to broken bottles, animal bones, sharp edged rocks in the bottom of the ponds. Some ponds may be unfit for swimming due to algae. We have been noticing that children deaths due to drowning are often treated as accidental and ignored in the absence of comprehensive guidelines and legal support. As a result many such deaths are not even reported to the police stations.

Young children with little or no swimming skills often get too close to such water bodies for playing or swimming. These water bodies are usually present in different forms namely farm ponds, open wells, Kalyanis built around temples, lakes, ponds, river canals, abandoned bore wells, sumps, stone quarry troughs etc. Normally innocent children without knowing the danger of slush accumulated at the bottom of the farm ponds enter the water bodies for swimming or playing, experiences in the past in such cases revealed that, often the first child gets struck in the slush underneath, render himself incapacitated to come out and start drowning, co-children witnessing this scene become panic and also attempt to enter the water body to rescue the child, co-children who went into water also got struck in the slush resulting in multiple drowning deaths. Rarely we see children with good swimming skills coming out of such water body safely.

The adolescent drowning are as a result of less supervision and increased independence, increased risk-taking and greater exposure to open water. Unintentional

drowning of infants is mostly the result of a child being left alone or with immature and inexperienced care givers, left alone in or near water. Epilepsy is known to increase the risk of drowning death in all sources of water, including baths, swimming pools, ponds and other natural bodies of water. Lockdowns and holidays for schools have resulted in increased cases of children drowning in water bodies especially in rural areas.

To minimise the drowning cases and to facilitate the concerned departments and agencies to provide safety & protection to the children from drowning in water bodies, the Department of Child Protection, GoK in consultation with Centre for Disaster Management (CDM), ATI, Mysuru prepared the guidelines for implementation by the concerned departments, local bodies and concerned agencies.

## **Guidelines for Farm Ponds**

Deaths due to drowning of children, cattle and other domestic animals have been reported frequently in the farm ponds that have been built across the state in rural areas under the schemes of MGNREGS, Krishi Bhagya including those built by individual farmers. To mitigate the drowning risk of children, State agriculture department has prepared and issued some mitigation measures for implementation.

1. Under the 'Krishi Bhagya Yojane' in 25 districts and 132 taluks in the state, construction of farm ponds was the main component. The Directorate of Agriculture vide government order KE 146 KYK 2015, Bengaluru dated: 23.01.2017 has approved 50% of subsidy for construction fencing-cum-shade net all around the farm pond and to prevent entry of children and cattle. Erection of GI wire fencing all around the farm pond for protection is mandatory to prevent easy accessibility of children coming for swimming, playing and to clean & provide drinking water to cattle in these ponds. It is suggested to adopt a suitable fencing system as per IS:4996-1984. The specifications and designs as per this code are illustrated at figures 1 to 4.
2. Concerned authorities/officials in-charge of implementing farm pond projects in GPs namely PDOs, Junior/Assistant Engineers are accountable for ensuring that all existing and new farm ponds that are executed should have shadenet and fencing as per the specifications. Compliance report for having completed the shade net and fencing to all farm ponds in their respective jurisdiction should be submitted to CEO ZP and the Deputy Commissioner of the District.
3. Geo-tagging of all farm ponds with photograph showing shade net and fencing as per specifications shall be done. This will help CEO ZP to monitor the farm ponds executed with and without shade net and fencing. Plan & estimation for GI Wire network fencing are given below for reference.

## Guidelines for Fencing of Farm Ponds

For construction of appropriate fencing around water bodies such as farm ponds, lakes, natural ponds and tanks or other water bodies that pose drowning risks to children, or wherever needed to protect the children from dangers, the provisions of IS:4996-1984 specifications for reinforced concrete fence posts shall be adopted.

- Line posts cast in reinforced cement concrete (1:1.5:3 mix), either cast in-situ or precast of 1.85 m height are erected at intermediate points spaced at 3 m apart and barbed wires are tied securely to these post.

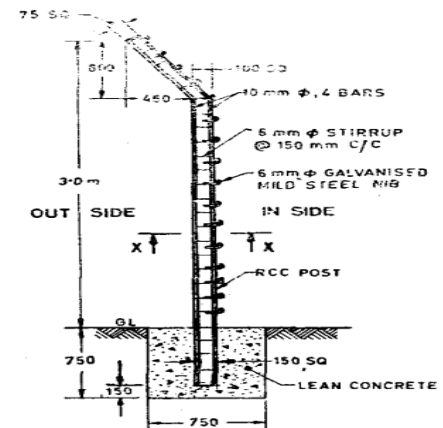


Figure 1: Section of Line Post

- For attachment of fencing wires, the neatest arrangement is to pass the wires through the holes in the post. This method may not be suitable when barbed wire is to be used. In case of barbed wires, the wires may be tied to the posts with short pieces of light wire.

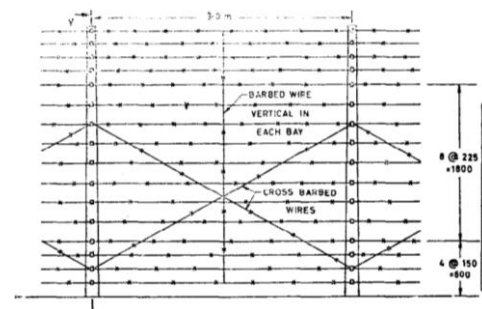


Figure 2; Barbed wire fence

- Strainer Posts** – Strainer posts braced on three sides as shown in figure 4 are required at the corners or ends or at intermediate positions (for every 30 m) are to be erected to secure the fencing.
- Strut or Brace - Member used in incline position for supporting the strainer post as shown in figure 3.

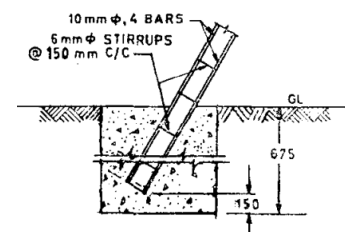
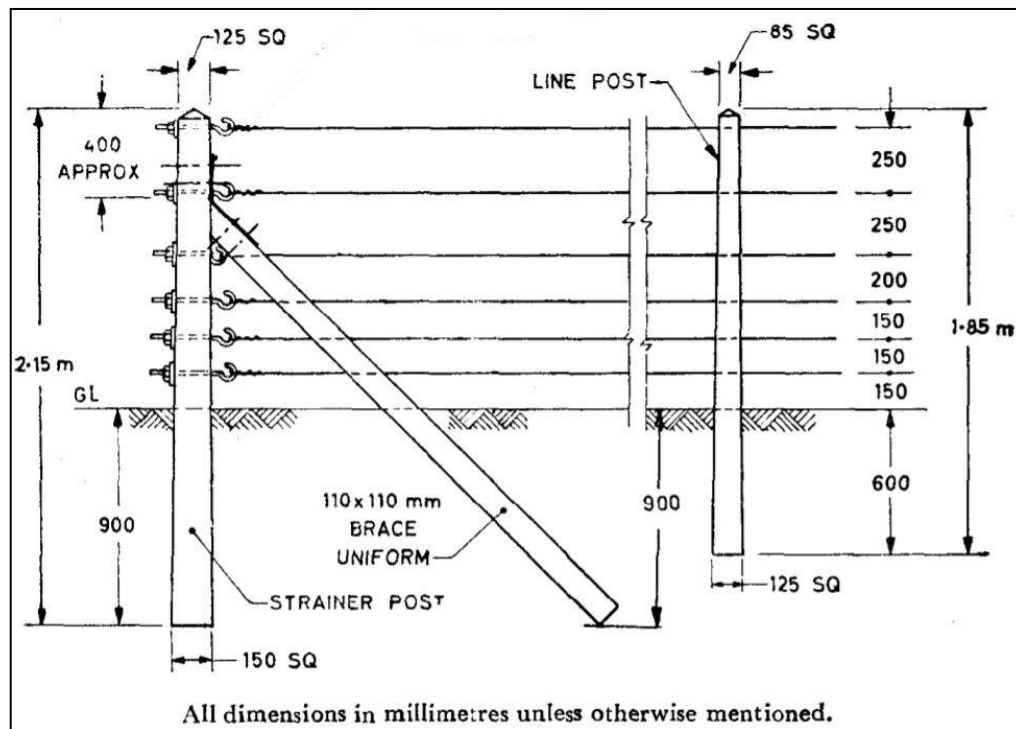


Figure 3: Section of Strut or Brace



**A typical detail and dimensions of a fence posts for farms is shown in the below figure.**



## Guidelines for Protection of Children from Drowning in Farm Ponds at Local Levels

1. Apart from fencing, display or signage boards with signs like “No trespassing, No swimming, Beware of crocodiles, slush at the bottom, deep holes inside, dangerous objects, all or as the case may be, should be erected with visuals in and around the farm ponds to prevent children accessibility.

**Action:** Owner/implementing department/GP/ULB/Contractor as the case may be, must erect display/signage boards before putting them to use.

Farm ponds constructed/erected by individual farmers or group of farmers should ensure to cover it with fencing and shade net. As far as possible, the GP, farmers or the concerned agency must see that the farm pond is located at a distance preferably 500 mts away from the schools. New schools as far as possible shall be located away from the farm ponds/ponds to prevent drowning deaths

**Action:**

- PDOs, MGNREGS Engineers, Technical Staff of MGNREGS and other officials in-charge of farm pond construction under different government schemes.

- School authorities both from government & private should survey & assess the location of the school site and ensure that the site is safe for children & away from the water bodies like farm pond, natural water tanks etc.
2. Children usually do not pay serious attention to the instructions given on the dangers of hazards inside the pond. Adequate awareness programmes need to be initiated among the community and households at every GP and ward levels.

**Action:**

- Child Protection Officer to create awareness among parents and community. Teachers in Anganwadi and primary schools to help children/students know about the harmful consequences inside farm ponds through awareness campaigns and programmes.
3. Children who receive immediate resuscitation before the arrival of medical personnel – have better chance of survival. Therefore, school level CPR skills for teachers and senior students should be imparted on regular basis to have a CPR team available at any point of time. Local Government Medical Officer and Nursing staff or Local Red Cross Society members may be requested to impart CPR Skills.

**Action:** Principal/Head Master of the school to organise regular training and keep the team ready for deployment in emergencies

4. On many instances, verbal instructions on drowning risks given by the teachers and parents might go un-noticed by the children due to the tendency and affinity to play in the nearby water body. Therefore constant supervision and demonstration of dangers of such hazards and drowning risks through mock drills, video screening for better understanding by the children to planned.

**Action:** Head master and physical education teacher with the help of school level disaster Search and Rescue (SAR) team should initiate regular safety mock drills and demonstrations, video screening in association with District Fire and Emergency Service officials. Take up public awareness and highlight the vulnerability of children



**Photos showing 3 children drowned in farm pond in Pandavapura, Mandya District**

## Guidelines for Open Wells & Kalyani

Abandoned open wells, stepped wells, Kalyanis attract children to go too close to them and play. If they are fenceless and not protected, children tend to enter and likely to fall. Such unused open wells must be filled with soil and boulders to the ground level. The wells and Kalyanis that are in use must be fenced all around with display/signage boards indicating dangers inside for children.



### Action:

Owners/GP/Municipalities/Temples/Concerned organisations, as the case may be, should take necessary steps for appropriate fencing; signage boards and security arrangements before any drowning disaster. Take up public awareness and highlight the vulnerability of children.



## **Guidelines for Open/Abandoned Bore Wells**

The hon'ble supreme court in its order dated 11.02.2010 has laid down guidelines as to the measures to be taken to prevent fatal accidents of small children falling into open/abandoned bore wells and tube wells, Following the Supreme Court directions, Karnataka Government issued GO No. MID and AJAA 2012, dated 31.12.2012 to implement the following Supreme Court guidelines.

1. The owner of the land/premises before constructing bore well must inform in writing to the District Ground Water Authority/concerned authorities in the jurisdiction at least 15 days in advance and take prior permission
2. Under Karnataka Groundwater Act 2011, bore well drilling agencies who are registered shall declare jointly both owners and drilling agencies with a commitment that the bore well drilled with safety measures
  - i) In case of successful bore wells, they must be safely capped to avoid caving and collapse
  - ii) In case of failed and abandoned bore wells, which should be completely refilled to avoid caving, collapse thus avoiding further dangers. The drilling agency shall jointly with the owner submit a pro-forma under Karnataka Groundwater Act and Rules 2012 soon after completion of the bore well to the nearest GP or VA in the case of rural areas and working junior engineer/AE of the respective municipality of the jurisdictional ULBs. These two authorities must keep total account of bore wells drilled in the pro-forma and submit the same to the Deputy Commissioner of the district/ CEO of the ZP respectively. Failing which the drilling agency is liable to the consequences and subjected to the decision of the authority or the hon'ble court.
3. Sign boards have to be erected near the site of drilling at the time of construction/rehabilitation of well with complete addresses of both drilling agency and owner of the well.
4. The drilling agencies shall erect barbed wire fencing or any other suitable barrier around the well during the construction. After installation of the rig on the point of drilling and to erect flags 50mts around the drilling point to avoid entry of people.



5. Owner to construct a cement/concrete platform measuring 0.5 x 0.5 x 1.2mts (0.6mt above the ground level and 0.6mt below the ground level) around the well casing for successful bore wells.
6. After completion of the bore well the drilling agencies have to cap the bore well properly by welding steel plate/steel cap with bolts and nuts with threaded cap so that it cannot be removed or handled for the safety of the public. Owner has to cover the bore well with drilled wet soil at least 1 to 2 feet above the cap of bore well in conical form and fix thorny shrubs over the soil to protect the bore well and prevent people to enter.
7. In case of pump repair, owner of the land or implementing agency have to cap the bore well properly by welding steel plate/cap with the same procedure explained at sl.no 6.
8. In case the bore well is failed or in-completed, the bore well structure has to be capped and maintained. Otherwise the entire drilled hole is to be completely filled with soil/mud at least 2ft above the ground level from the entire depth of the bore well and fix thorny shrubs on it to avoid further subsidence and collapse.
9. After the bore well is drilled, the entire site shall be brought to the normal ground level by spreading the entire leftover drilled soil, after complete protection as contended in sl. nos. 6 & 8.
10. At the time of drilling of bore well, water oozed out shall have to be allowed to flow away from the drilling site so that no water should percolate into the bore well creating cracks, cavities and collapse.
11. Any operating bore wells put for non-operation due to repairs shall have to be safely closed and covered to avoid casualties.

**Action:** The PDO, GP Secretary in case of rural areas and Junior Engineer and Municipal Chief Officer/Commissioner in case of ULBs has to keep vigil on the bore well drilled/failed/abandoned/repared, shall have to be thoroughly closed to avoid human casualties, maintain register with proper entries and inform to the member secretary of the district ground water authority and Deputy Commissioner from time to time.



**Abandoned bore well being filled with sand, boulders, pebbles from bottom till ground**



## Guidelines for Storm and Sewage Water Bodies

Storm water in many urban and rural areas is mixed with sewage. As we know most of the sewage water is not fully treated. Children from economically weaker sections often go for recreational swimming and playing in such water bodies. There are dangerous pathogens in untreated sewage namely E.coli. This can cause



acute diarrhoea and fever and may cause kidney infection, haemorrhage and even death among children. We see children from poor families bathing and swimming in such polluted water bodies. Therefore concerned authority must prevent children from entering these water bodies. Take up public awareness and highlight the vulnerability of children



### Drowning in sewage

**Action:** PDO and Secretary of GP in case of rural areas and Municipal Chief Officer/Commissioner in case of ULBs should take necessary actions to erect barbed wire fencing on all sides of storm and sewage water bodies to prevent children from playing and swimming in such water bodies.

Awareness camps by child protection officers on dangers of sewage and storm water bodies shall be initiated in rural and urban areas especially to create awareness among poor families. Teachers must regularly educate the children on health hazards of such water bodies.

## Guideline for Manholes

Manholes that are damaged and not covered with cap will pose danger of falling in open holes. Particularly the children and persons with disabilities are most vulnerable. During rains, such open manholes are filled with water. Children and disabled persons unable to visualise such open holes that are filled with water and flowing over them tend to fall while crossing the roads, many incidents of drowning deaths of children, disabled persons, old age persons including drowning vehicles have been reported in urban and rural areas every year.

**Action:** JE/AE/AEE of respective GP and Municipalities must survey and map all such damaged, unsafe and hazardous open manholes in their jurisdictional area and take necessary steps to cover them with appropriate caps with approval from the competent authorities in their department/office. Compliance report must be submitted to the deputy commissioner of the district in case of urban local bodies and CEO of the ZP in case of rural local bodies.



## Guideline for Waterfalls and Lakes

Waterfalls and lakes attract large number of tourists especially school children on tour every year. Incidents of drowning have been reported frequently while playing and taking selfie inside the water falls and on the rocks inside. Students/children curiously tend to play by climbing down and up in the water falls and lakes resulting in sudden slippages in the water and deep valleys leading to grievous injuries and drowning deaths. Take up public awareness and highlight the vulnerability of children



**Action:** PDO/JE/AE of GP/Chief officer/Municipal Commissioner of ULB/In-charge officer in the dept./Private body, as the case may be, who are managing the water fall and lakes must ensure signage boards and barbed wire fencing all around the areas of hazard or danger to protect the people, especially children who tend to enter such dangerous spots in and around the waterfalls and lakes. Security must be arranged for surveillance of any trespassing. Warning messages may be broadcasted through loud speakers in the hazard prone areas for alerting the public and children from time to time. A dedicated search & rescue team with necessary floating devices and rescue equipment should be formed and deployed in the area by the district administration.





## Guideline for Irrigation Canals

Water flowing in the irrigation canals attracts large number of children from the nearby rural areas. Incidents of children sweeping away along the fast flowing water in the canals leading to drowning have been reported. Children also bring their cattle for cleaning and to provide drinking water, while doing so children with little or no swimming skills got drowned on many occasions. Take up public awareness and highlight the vulnerability of children



**Action:** JE/AE/AEE of the irrigation department and GP shall identify such spots along the canal way where children assemble for cattle cleaning and playing. JE/AE/AEE shall take necessary precautions such as fencing, security, alarm bell to caution at times of water releases from the dam. GP should deploy search & rescue persons like swimmers and divers, whose contact numbers and addresses are maintained at GP. Appropriate signage boards shall be erected. Warning messages may be broadcasted through loud speakers in the hazard prone locations along the canal for alerting the public and children from time to time.



## Guideline for Rivers, Back Waters and Coastal Beach

A large number of tourist and school children on trip visit rivers, back waters and coastal beaches. Children tend to enter the water for amusing activities like swimming and playing. Children while swimming, playing & taking selfies under the water have been reported accidental drowning and deaths on many occasions. Take up public awareness and highlight the vulnerability of children



**Action:** Concerned EE/AEE/JE of irrigation department/GP/ULB shall take all precautionary measures for barbed fencing of unsafe back water/river/beach areas and hazardous spots based on the past history of drowning cases. Signage boards indicating dangers and do's & don'ts to be displayed at the entrance and exit points. In case of trespassing, penal provisions shall be indicated on the display boards. Warning messages should be broadcasted through loud speakers in the hazard prone areas for alerting the public and children from time to time. A dedicated search & rescue team shall be formed with equipment and deployed in the area.





## Guideline for Sumps

- Children of construction workers are most vulnerable to drowning in open sumps at construction sites
- School children are vulnerable to drowning in sumps at school premises
- Children at home while playing unattended near sumps are vulnerable to drowning
- Barricades and signboards must be installed in the construction area prohibiting the movement of children.
- Water storage sources for such constructions must be covered to prevent small children from any possible mishap.
- Provide safe places (for example, a crèche) away from water/sump for children with child care facility
- Take up public awareness and highlight the vulnerability of children



### Action:

- The Engineer & Contractor of the project should ensure that the sump is fenced all round to prevent children from going near the sump at construction site.
- Safety plan for children must be implemented in all construction project sites by the contractor and engineers both from government and private.
- School head master/principal must take all precautionary measures to stop entry of children near sumps and ensure closing of sumps with caps and locking.

## Guideline for Stone Quarry Troughs

The owner/ contractor shall take following necessary safety steps at a quarry, where there is a risk of intentional/unintentional fall and drowning from -

- the edge of the trough
- a structure adjacent to or above water

Must be secured with fencing all around the trough, structure, as appropriate, to prevent such a fall, subject to allowing movement of persons, materials and equipment with appropriate precautions ensuring safety and health of workers.



In case there is a risk of persons likely to fall, following measures must be taken

- suitable rescue equipment is provided, properly maintained and ready for use,
- arrangements are made for the prompt rescue of any such person who is in danger of drowning, and
- personal flotation devices conforming to standards & specifications to be made available
- trespassing must be completely banned and appropriate security ensured at quarry site
- hazard indicator sign boards shall be erected at vulnerable spots

The contractor/owner of the stone quarry shall ensure that personal flotation devices provided are -

- properly maintained,
- checked before each use,
- inspected in accordance with the instructions, and
- subjected to a thorough examination by a competent person every 12 months.

Where there is a risk of persons falling into water and drowning during the course of their work at a quarry, the contractor is required to provide;

- suitable rescue equipment such as lifebuoys, rescue boats etc, properly maintained and ready for use,
- arrangements for prompt rescue, and prohibiting lone working near water,
- personal flotation devices (PFD) which are properly maintained, checked before use and tested every 12 months, worn at all times by persons at risk.

**Actions:**

- Department of Mines and Geology shall give directions to all licensed quarries to fence their pits in the district/GPs at their own cost.
- GPs shall identify working and abandoned quarry pits in their jurisdiction that pose danger of falling & drowning and report to ZP,CEO and DC
- GPs must take steps to install warning boards and fencing if needed, the boards should also inform people about the depth and other dangers of the quarries.
- School head masters shall identify nearby quarries and pits and take up regular awareness activities about the risk of falling and drowning by children
- Take up public awareness and highlight the vulnerability of children



## Guideline for Swimming Pool

- Children should be taught to stay away from water and pools when unsupervised, but for outdoor pools, care must also be taken to prevent unauthorized entry (especially by young children). For domestic pools, barriers such as fences or walls will prevent drowning by preventing a child from entering a swimming pool area unsupervised.



**Action :** Owners of the pools should implement the above guideline under the regulation and permission by concerned authority/local body/municipality.

- No swimming pool will be constructed without prior permission of competent authority (Municipality, City Corporation, Urban Development Authorities, Town Planning Department or GP or any competent authority as the case may be).
- If swimming pool is constructed in school premises, it must be constructed as per the prescribed norms laid down by the competent authority as per the NBC and byelaws and should also be maintained as prescribed.

**Action:** Principal/Head master/school authority of the government or private institutions.

- Swimming pool wherever available must compulsorily be provided with life jackets. Life jackets shall confirm to required quality and inspected periodically
- Every swimming pool should have adequate number of life guards on duty during peak hours and during children's time in the pool, to avoid drowning accidents.



- Trained life guards in CPR technique and mouth to mouth resuscitation must be made available at swimming pool location.
- Regular experienced swimmers may be requested or assigned the responsibility to keep an eye on the learners.
- A list of expert swimmers and divers shall be prepared and kept ready for deployment and assignment in the swimming pools located both in urban and rural areas.

- Number of swimmers in a pool should be limited to avoid overcrowding.
- A standby vehicle during swimming camps, to transport the victim in case of emergency should be made available.
- Take up public awareness and highlight the vulnerability of children

**Action:**

- Engineers/Town planner/Health officer in case of Municipalities, City Corporation, Urban Development Authorities, Town Planning Department and PDOs/ GP Engineers in case of GP, should inspect the private and government run swimming pools regularly and allow the pools to operate only if the guidelines are practiced.
- Owners of the swimming pools wherever swimming camps are organised must have awareness programmes on children safety.



### **Guideline for Safety of Children in the School Premises**

- School recognized under Karnataka Education Act has to *fence* all the dangerous areas within the premises of the education institution for the safety of its students, as prescribed under Karnataka Educational Institutions (Classification, Regulation and Prescription of Curricula etc.,) Rules, 1995. Rule 8.
- New schools as far as possible shall be located away from the farm ponds/ponds to prevent drowning deaths
- The wells and ponds if exist in the campus are to be provided with protective wall and iron grills covering the well and the movements of the students should be restricted towards it.
- Children should not be allowed to go towards the nearby river, canals, ponds and railway tracks and to take bath using water from the overhead tanks by climbing on the terrace.
- Fencing should be provided to the steps of overhead tank to avoid children climbing overhead tank
- Movements of children are to be strictly watched through formation of response group by school authorities.
- Children should not be permitted to go outside the school premises during the school hours.
- The presence of the students in the school campus at all times should be strictly enforced. Strict discipline and to check the unauthorized absence of the students from the School is to be given paramount importance.
- The root cause for such behaviour of the child must be ascertained, parents should be informed accordingly and corrective steps should be taken
- For certain ritual and functions which are observed in the school, necessary precautions and arrangements to be made in advance. Children should not be permitted to go on rallies for immersion of idols in tanks, ponds and wells etc.
- No procession should be allowed to move from school out of the campus in the eve of any religious celebrations.
- No swimming pool will be constructed without prior permission of competent authority.

- If swimming pool is constructed in school premises, it must be constructed as per the prescribed norms of competent authority as per the NBC and byelaws and should also be maintained as prescribed.
- Take up public awareness and highlight the vulnerability of children
- First responder training to school level response team, GP/ULB level search & rescue teams on how to respond appropriately to drowning incidents and rescue children properly

**Action:**

- Head Master/Principal of the school should form a small team to supervise the safety of a children in case the water bodies are present inside the campus. Team may have members comprising physical training teacher, NSS/NCC officer, 2 senior students who have search & rescue skills namely first aid, CPR, swimming & diving. Additional security if needed must be deployed.
- Engineers from ZP/GP/Municipality as the case may be, will visit the government & private schools periodically to inspect the safety of the water bodies namely swimming pool, water sump, water tank, overhead water tank, percolation pit, open wells/ bore wells etc., and take necessary action to implement safety and protection measures by the school authorities.