Semestral Report
June 2011

L2499-PAK: Sindh Cities Improvement Investment Program

ENVIRONMENTAL MONITORING AND COMPLIANCE
SEMI-ANNUAL PROGRESS REPORT

(January –June 2011)

(Environmental Safeguards- Report – 3)

ENVIRONMENTAL SAFEGUARDS CELL
14-A Sindh Muslim Cooperative Housing Society, Airport Road, Sukkur
Phone: 071 9310866, 9310440
TABLE OF CONTENTS

PART I INTRODUCTION .......................................................................................................................... 3

1.1 Projects Progress ............................................................................................................................. 3
  1.1.1 Improvement of Sewerage, Khairpur Project .......................................................... 3
  1.1.2 Larkana Sewerage Priority Improvement Project .................................................. 4
  1.1.3 Water & Waste Water Projects in Sukkur & Khairpur CB-3 Project ................... 5

PART II ENVIRONMENTAL MONITORING ......................................................................................... 6
  Project: Improvement of Sewerage, Khairpur ........................................................................ 6
  Project: Larkana Sewerage Priority Improvement Project ................................................ 7

PART III ENVIRONMENTAL MANAGEMENT ..................................................................................... 7
  Project: Improvement of Sewerage, Khairpur ........................................................................ 7
  Project: Larkana Sewerage Priority Improvement Project ................................................ 8

ANNEXURES ........................................................................................................................................ 11
  Annexure-1A: NOC for Sewerage Project, Khairpur ............................................................ 12
  Annexure-1B: NOC for Sewerage Project Larkana ............................................................. 14
  Annexure-2: Photographic Profile of Improvement Of Sewerage, Khairpur .................. 17
  Annexure-3: Noise Monitoring Results for Improvement of Sewerage, Khairpur .......... 18
  Annexure-4: Handling and burying Asbestos Cement Pipe Pieces .............................. 19
ENVIRONMENTAL MONITORING AND COMPLIANCE
SEMI-ANNUAL PROGRESS REPORT

PART I INTRODUCTION

North Sindh Urban Services Corp. (NSUSC) has been established as a part of Sindh Cities Improvement Program under the Companies Ordinance 1984 for the secondary cities of Northern Cluster of Sindh Province. This Urban Services Corporation will aggregate participating TMA’s Water supply, Waste Water and Solid Waste Management operation in a single institution to leverage economies of scale, introduce new skills and management, and increase focus on operations, maintenance and financial management.

Environmental Safeguards cell is to review and finalize all the documents prepared by consultants relating to environment, assure its implementation, evaluate implementation progress and submit to Sindh EPA, ADB, SCIP and any other relevant agency as per reporting requirements. The cell is responsible for Ensuring IEE is being implemented including its updating. It provides support to NSUSC for environmental compliances and ensuring that Board of Director’s approved policies are implemented for Environment and Health and Safety.

During the reporting period, NSUSC Environmental Safeguards Specialist has been mainly dealing with following projects:

1. Improvement of Sewerage, Khairpur Project
2. Larkana Sewerage Priority Improvement Project
3. Water & Waste Water Project in Sukkur, Khairpur & Shikarpur - ICB-3 Project
4. IEE of Renovation of 13 Disposal Stations, Shikarpur

1.1 Projects Progress

1.1.1 Improvement of Sewerage, Khairpur Project

The contractor M/S MOON has started his activities from 5th of March 2010. M/S JERS Lahore has been awarded for monitoring and supervision consultancy of the project. Total period of contract was 6 months. The total cost of the Project is 198 M PRs. The overall scope of work of the contractor is

- Laying of sewer
- New construction of Main disposal station
- Major rehabilitation of Ostagahi disposal station
- Rehabilitation of 13 disposal station and
- Laying of Force Main
- Compliance of EMP
Keeping in view the need of the project, NSUSC has awarded extension of the project for 5 months ending in February 2011 and then up to July 2011. The contractor has completed more than 95% of his work. The NSUSC received approval of IEE from Sindh Environmental Protection Agency –SEPA and complied to all conditions of NOC including IEE conditions of SCIP Loan including –Asbestos Management Framework (Annex-1 as SEPA NOC, Annex-2 Pictorial Profile)

During the reporting period the EMP compliance progress was satisfactory, keeping in view the capacity constraints of the contractor. In October 2010, environmental engineer left the job and the vacancy refilled during November 2010. Similarly in February environmental engineer of Consultant left the job and the post is still vacant.

Various capacity development sessions have been organized to enhance their professional capacity. Weekly/Fortnightly visits was followed for best implementation of EMP and further various meeting done at NSUSC head office to improve the compliance progress.

1.1.2 Larkana Sewerage Priority Improvement Project

The IEE of the project was in-house prepared by NSUSC and SCIP facilitated its NOC from SEPA (NOC of SEPA Attached as Annex-1). Construction was awarded to KSB pumps and supervision to GHK, the construction activities started in March 2011 with cost of Project as 255 Million PRS.

The proposed project involves three main components:

1. Civil work at disposal stations mostly rehabilitation
2. Replacement of machinery as pumps, generators, screens, transformer; and
3. Providing polyethylene pipe rising main at 10 disposal stations.

Further details of the work under proposed project are:

- Supplying & installation of non-clogging submersible sewerage pumps at 12 pumping stations
- Construction of 10 new and rehabilitation of 2 existing screen chambers
- Construction of 6 new and rehabilitation of 6 existing sumps
- Construction of 5 new operator rooms, repair of boundary walls and existing civil structures at all pumping stations
- Providing, laying, jointing and testing of polyethylene water rising mains at 10 pumping stations
- Supply and installation of DG (Diesel Generator) sets at 13 various pumping stations
- Supply and installation of 630 kva transformer for main disposal no. 01

Environmental engineers of both consultant and contractor are in place and EMP compliance is progressing satisfactory. The Environmental specialist has coordinated closely with consultant and contractor, build their capacity, involved to prepare site
specific plans and checklists and tried best to enhance capacity and improve efficiency of the project.

### 1.1.3 Water & Waste Water Projects in Sukkur & Khairpur CB-3 Project

The project is under Bid Evaluation Process, expected to be awarded in August 2011 as ICB -3. The sites of the project are over the locations of Sukkur and Khairpur cities, in Sindh province Pakistan. The project components located in Khairpur City are:

1. Rehabilitation of Khahi Shah Water Treatment Plant (WTP);
2. Rehabilitation of Banarsi Disposal Station;
3. Rehabilitation of Sewers at different locations in Khairpur

The project components located in Sukkur includes:

1. Rehabilitation of Bunder Road Water Treatment Plant (WTP);
2. Rehabilitation of Numaish Water Treatment Plant (WTP)

Later on project of renovation and installing machinery at Shikarpur was also made component of the project as per need of the Project during design process.

The EIA report of the bid is prepared by P&P Consultants, comprehensively reviewed and upgraded by environmental specialist and GHK and submitted with ADB and Sindh EPA. As requirements of Pak-EPA public hearing was successfully conducted on 10th June 2011 at Inter Pak Inn hotel Sukkur under supervision of director of EPA Sindh. The director EPA had positive remarks for the project, the EIA report is under their review. The SCIP has written letter, and more follow up is required so EIA NOC is provided in August, so the Work Award is not hampered.

**IEE of Renovation of Disposals, Shikarpur:** The IEE is being prepared in house and being reviewed and finalized by GHK. it will be forwarded to Sindh-EPA for review and awarding NOC. It is expected that with support from SCIP, the NOC will be solicited by End or Early Sep 2011.

The proposed project involves following scope of work:

1. Civil renovation work at all disposal stations
2. Replacement and Repair of machinery as pumps, screens and electric panels; and

Further details of the work under proposed project are:

- Supplying & installation of centrifugal sewerage pumps at Disposal Stations
- Fixing and renovation of existing screen chambers
- Renovation of existing sumps
- Renovation and repair of boundary walls, old structures, gates, ground and existing civil structures at various Sewerage Disposal stations
The work will cover following pumping/disposal stations:

1. 36” Disposal station
2. Ghari Morre Disposal station
3. Alif Shah Disposal station
4. Rain Water Disposal station
5. Low Level Disposal station
6. Khanchndabad Disposal station
7. Rustam Morr Disposal station
8. Sanjrani Mohallah Disposal station
9. Eid Gah Disposal station
10. Gaman Shah Disposal station
11. Allah Abad Disposal station
12. Pathan Colony Scarp Drain Disposal station
13. Marri Naka Disposal station

The EMP of the project provides detail list of mitigation measure with responsibilities and implementation frequency. The EMP is also made part of tender document with environmental conditions of contract.

**PART II ENVIRONMENTAL MONITORING**

All the monitoring aspects were within parameter, no major irreversible environmental situations is reported during reporting period. The aspects are summarized and presented in table below:

<table>
<thead>
<tr>
<th>Project: Improvement of Sewerage, Khairpur</th>
<th>Aspect</th>
<th>Monitoring Results</th>
<th>Mitigations</th>
<th>Remarks</th>
<th>Traffic Light</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Noise and Vibration</strong></td>
<td>Acceptable with standards sometimes exceeding within range of 5 – 10%</td>
<td>Ear Muffs to employees</td>
<td>This is not a major issue, result exceeding at sewer lying due to traffic on roads. Short term, minor and reversible impacts (Annex-3: Monitoring results)</td>
<td>Green</td>
<td></td>
</tr>
<tr>
<td><strong>Water Quality</strong></td>
<td>All results within limits</td>
<td>NA</td>
<td>Acceptable</td>
<td>Green</td>
<td></td>
</tr>
</tbody>
</table>
Air Quality
Not a major issue, due to project does not contain major air quality impacting activities

Flora and fauna monitoring
No tree cut occurred

Improvement plan developed

To improve the aesthetics, trees plantation and grass turfing done at disposal station

Project: Larkana Sewerage Priority Improvement Project

Noise and Vibration
Acceptable with standards sometimes exceeding

Ear Muffs to employees

Work has started and only limited to disposal stations

Water Quality
All results within limits

NA

Air Quality
Results acceptable activities

Flora and fauna monitoring
No tree cut occurred

Improvement plan developed

To improve the aesthetics, trees plantation and grass turfing done at disposal station

PART III ENVIRONMENTAL MANAGEMENT

Project: Improvement of Sewerage, Khairpur

EMP, Daily check list, site specific plan and PPE are available on site and complied with satisfactory performance. Environment Specialist of NSUSC visited with fortnightly.
Project: Larkana Sewerage Priority Improvement Project

EMP, Daily check list, site specific plan and PPE are available on site and complied with satisfactory performance. Environment Specialist of NSUSC visited with fortnightly and recorded comments of compliance/non-compliance in register placed at project site.

The overall compliance progress of projects as above is presented in the tabular for as under:

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Impact</th>
<th>Compliance Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Plans to control environmental and associated impacts.</td>
<td>Avoid impacts from unplanned activities</td>
<td>All situation were under control</td>
</tr>
<tr>
<td>2. Loss of trees and vegetation cover of the areas work-areas and aesthetics</td>
<td>To avoid several negative impacts due to unnecessary removing of trees and other street foliage.</td>
<td>No tree cut, further enhancement of aesthetic was done</td>
</tr>
<tr>
<td>3. Orientation for Contractor, and Workers</td>
<td>Ensure that the CSC Contractor and workers understand and have the capacity to ensure that the environmental requirements and mitigation measures must be implemented by them.</td>
<td>Main capacity development done by NSUSC, day to day by consultant and contractors</td>
</tr>
<tr>
<td>4. Institutional strengthening and capacity building</td>
<td>To ensure that NSUSC and PMU officials are trained to understand and to appreciate EMP</td>
<td>Main capacity development done by NSUSC, day to day by consultant and contractors</td>
</tr>
<tr>
<td>7. Construction Waste Disposal</td>
<td>To minimize the impacts from the disposal of construction waste.</td>
<td>Satisfactorily disposed of all waste generated</td>
</tr>
<tr>
<td>8. Worker canteen and toilet facilities</td>
<td>To ensure that the operation of the works and worker facilities does not adversely affect the surrounding environment and residents in the area.</td>
<td>Complied satisfactorily</td>
</tr>
<tr>
<td>9. Safety Precautions for the Workers and first aid.</td>
<td>To ensure safety of workers</td>
<td>Initially contractors staff was reluctant to use PPEs but in last three months compliance was satisfactory</td>
</tr>
<tr>
<td>10. Traffic Condition</td>
<td>Minimize disturbance of vehicular traffic &amp; pedestrians during haulage of materials,</td>
<td>Good and sufficient arrangements were done</td>
</tr>
</tbody>
</table>
NORTH SINDH URBAN SERVICES CORPORATION  
Semi-Annual Report Jan-June 2011

<table>
<thead>
<tr>
<th>Spoil, equipment &amp; machinery. No blocking access near construction sites.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>11. Nuisance to nearby properties</strong></td>
</tr>
<tr>
<td>Control nuisances and reduce impacts on property value or interruption to neighbouring land uses.</td>
</tr>
<tr>
<td>Some minor access issue observed but solved with proper arrangements of access</td>
</tr>
<tr>
<td><strong>12 Erosion control</strong></td>
</tr>
<tr>
<td>To minimize wind and water erosion of exposed surfaces during excavation</td>
</tr>
<tr>
<td>Satisfactory shuttering was done</td>
</tr>
<tr>
<td><strong>13 Sluge collection and disposal from existing DSs</strong></td>
</tr>
<tr>
<td>To protect health of the local public</td>
</tr>
<tr>
<td>Complied satisfactorily</td>
</tr>
<tr>
<td><strong>Asbestos Handling</strong></td>
</tr>
<tr>
<td>Reduce Risk of Health</td>
</tr>
<tr>
<td>A minor case in November 2010, fully complied as Annexure-4</td>
</tr>
<tr>
<td><strong>Reports</strong></td>
</tr>
<tr>
<td>Compliance Progress</td>
</tr>
<tr>
<td>Submitted monthly by consultant and contractor</td>
</tr>
</tbody>
</table>

**Project: Larkana Sewerage Priority Improvement Project**

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Environmental Objective</th>
<th>Compliance Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mobilization Problems</strong></td>
<td>Prevent traffic/road/Street Blockade</td>
<td>• No issue occurred, all in compliance and control</td>
</tr>
<tr>
<td><strong>Institutional strengthening and capacity building</strong></td>
<td>To ensure that Contractor staff are trained to understand and to appreciate EMP</td>
<td>• NSUSC safeguards cell support in building the capacity of consultant and contractor</td>
</tr>
<tr>
<td><strong>Wastewater Overflow</strong></td>
<td>Avoid Overloading of the System</td>
<td>• Some minor problem due to power shut down, but matter was controlled and now progressing</td>
</tr>
<tr>
<td><strong>Safety Precautions for the Workers and first aid.</strong></td>
<td>To ensure safety of workers</td>
<td>• First aid box present, male nurse hired • Workers are 50% complying to PPEs due to very hot weather</td>
</tr>
<tr>
<td>Safety Precautions for nearby communities</td>
<td>To ensure safety of residents</td>
<td>• All matters under control, no any non-compliance revealed</td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>-----------------------------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>Reports</td>
<td>Compliance Progress</td>
<td>Submitted monthly by consultant and contractor since May 2011, initial two months missing</td>
</tr>
</tbody>
</table>
ANNEXURES

1. NOC for Sewerage Projects, Khairpur and Larkana
2. Photographic Profile of Improvement of Sewerage, Khairpur
3. Noise Monitoring Results for Improvement of Sewerage, Khairpur
4. Asbestos Compliance Record for Improvement of Sewerage, Khairpur
Annexure-1A: NOC for Sewerage Project, Khairpur

Appendix-B

References No: DPM-2009/117/EC/60

ENVIRONMENTAL PROTECTION AGENCY
GOVERNMENT OF SINDH
Post # BT-01, Sector 23, IA, Karachi -75330
Ph: 306003, 306008, 306837
306832, 306846, 306827
admin.epa@swat.gov.pk
Fax: 306800

Dated: 25-11-2009

SUBJECT: - DECISION ON INITIAL ENVIRONMENTAL EXAMINATION (IEE)

1. Name and Address of Proponent:
   Mr. Tahir Memon
   Managing Director
   North Sindh Urban Services Corporation
   D-43, Clifton, Block No 1-K-D-A
   Scheme No 5 near Clifton Grammar School, Karachi, Pakistan.

2. Description of Project:
   Improvement Of Sewerage in Khairpur City, Sindh

3. Location of Project:
   Khairpur City, Sindh

4. Date of Filing of IEE:
   17th November, 2009.

5. After careful review of the Initial Environmental Examinations (IEE) the Environmental Protection Agency (EPA), Government of Sindh, has decided to accord its approval subject to the following conditions:

   (i) That frequent sprinkling of water on lanes/tracks and exposed surface will be ensured to mitigate fugitive dust emissions, the cuts and side slopes will be stabilized with provision for drainage arrangements to avoid soil erosion.

   (ii) That careful construction planning including diversion arrangements will be ensured to avoid chances of ponding of waste-water in the streets.

   (iii) Proponent would be responsible for efficient disposal of the solid waste sludge and sanitary wastewater before its discharge. For this purpose transportation of sludge will be carried out in closed container or having liner to avoid spillage/leakage.

   (iv) The landfill will be properly designed having HDPE liner on the sides and bottom to avoid seepage into adjoining land and in ground water. To ensure
Appendix-B

8. This approval and any consideration thereof shall be treated as null and void if the conditions, stipulated in para (b) above, are not complied with.

9. The proponent shall be liable for noncompliance of Regulations 13, 14, 17 and 18 of the FEMA Act, 2008, which direct for condition of approval, confirmation of compliance, report, inspection and monitoring.

10. This approval does not absolve the proponent or the due to obtain any other approval of concern that may be required under any law or decree.

11. The approval is accorded only for the project activity described in the IEE Report. The proponent will submit separate EIA or IEE as required under regulation for any enhancement or change in the design of project.

12. Implementation Report of all the mitigation measures and EMP laid down in the IEE report will be ensured by North Sindh Urban Services Corporation. No violation of any regulations, rules, instructions and provisions of PEP Act, 1997, shall be made and in case of any such violation of the aforesaid, the approval shall stand cancelled without any further notice.

13. All the environmental conditions of this approval shall be incorporated in the terms and conditions of contract document of the project for compliance.

[Signature]
Director General

236 of 241 (Vol 1/3)
Annexure-1B: NOC for Sewerage Project Larkana

Reference No: EPA 2010/10/21/EE/10

ENVIRONMENTAL PROTECTION AGENCY
GOVERNMENT OF SINDH
Plot # GT-2/1, Beside 23, KIA, Karachi-74900
Ph: 5065950, 5065998, 506637
5065932, 5065940, 5066621
epasindh@cyber.net.pk
Facsimile: 5065940

Dated: 09-12-2010

Subject: DECISION ON INITIAL ENVIRONMENTAL EXAMINATION

1. Name & Address of Proponent: Mr. Tariq mehmood
   Managing Director
   North Sindh Urban Services Corporation,
   14-A Sindh Muslim Cooperative Housing
   Society, Airport road, Sukkur.

2. Description of Project: Larkana sewerage priority investment project
   (enhancement/improvement of waste water
   disposal system)

3. Location of Project: Larkana

4. Date of Filing of IEE: 13-10-2010

5. After careful review of the Initial Environmental Examination (IEE) report, the
   Environmental Protection Agency (EPA), Government of Sindh, has decided to
   acced its approval subject to the following conditions.

6. This approval shall be treated as null and void if the conditions, mentioned in
   above Para # 5, and are not complied with.

   a) That frequent sprinkling of water on katcha tacks and exposed surface will be
      ensured to mitigate fugitive dust emissions, the cuts and side slopes will be
      stabilized with provision for drainage arrangements to avoid soil erosion.

   b) Implementation on better construction management plan must be ensured
      including bypassing of disposal stations through standby machinery and
      installation of all PSs will be carried out as one by one to avoid overflow of
      system

   

Always Remember:-- Reuse, Reduce & Recycle
c) Odor must be controlled by better designs provisions.

d) Provisions of best engineering and contractual clauses in the agreement with contractor must be ensured.

e) That careful construction planning including diversions arrangements will be ensured to avoid chances of ponding of waste-water in the streets.

f) Proponent would be responsible for efficient disposal of solid waste / sludge and sanitary waste water before its discharge. For this purpose transportation of sludge will be carried out in closed container or having liner to avoid spillage /leakages.

g) The land fill will be properly designed having HDPE liner on the sides and bottom to avoid seepage into adjoining land and in ground water. To ensure its minimum impact the sludge will be open dried and mixed with the soil having ratio of 1:3 before disposal in to the landfill.

h) Proponent will inform residents about schedules of activities and mitigation measures being implemented to avoid inconvenience to them.

i) Contractor would provide safety equipments such as helmets, goggles, safety shoes etc to the workers.

j) All O & M staff will be trained in operation procedures designed to avoid infection from waste water, and health and safety procedures to protect against any exposures to hazardous conditions.

k) Mitigation recommended in the IEE report must be strictly adhered to minimize negative environmental impact during construction and operational phase.

7. The proponent shall be liable for compliance of section 13, 14, 17 and 18 of EMP IEE Regulation, 2000, which direct for condition for approval, confirmation of compliance, entry, inspection and monitoring.

8. This approval is accorded only for the project activity described in the IEE report. Proponent should submit separate IEE for any enhanced change in the project.

9. This approval does not absolve the proponent of the duty to obtain any other approval or consent that may be required under any law in force.

10. Implementation report of all conditions/mitigation measures and EMP laid down in the Approval/IEE report shall be ensured by North Sindh Urban Services Corporation (NSUSC). No violation of any regulations, rules, instructions and
provision of PEEP, Act 1997 shall be made. In case of such violations of the rules law, the approval shall stand cancelled without any further notice.

11. All the environmental conditions of this approval shall be incorporated in the terminal conditions of contract documents of the project for compliance.

[Signature]

NAEEM A MUGHAL
DIRECTOR GENERAL
Annexure-2: Photographic Profile of Improvement Of Sewerage, Khairpur
### Annexure-3: Noise Monitoring Results for Improvement of Sewerage, Khairpur

#### Table A: Noise level at different sites of Khairpur city sewerage improvement project

<table>
<thead>
<tr>
<th>Noise Monitoring Point</th>
<th>Average Noise Level dB (A)</th>
<th>Peak Noise Level dB (A)</th>
<th>Noise Producing Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sewer route (Point A)</td>
<td>83.0</td>
<td>88.2</td>
<td>Excavator+ Dewatering pumps+ Roadside traffic</td>
</tr>
<tr>
<td>Sewer route (Point B)</td>
<td>81.1</td>
<td>82.3</td>
<td>Excavator+ Mixer Machine</td>
</tr>
<tr>
<td>Sewer route (Point C)</td>
<td>79.9</td>
<td>80.0</td>
<td>Excavator+ Dewatering pumps</td>
</tr>
<tr>
<td>Sewer route (Point D)</td>
<td>75.5</td>
<td>78.0</td>
<td>Water pump</td>
</tr>
<tr>
<td>Main Disposal (Point A)</td>
<td>79.6</td>
<td>80.9</td>
<td>Dragline Excavator</td>
</tr>
<tr>
<td>Main Disposal (Point B)</td>
<td>76.6</td>
<td>84.8</td>
<td>Excavator</td>
</tr>
<tr>
<td>Pre-cast Factory (Point A)</td>
<td>73.1</td>
<td>78.3</td>
<td>Mixture Machine</td>
</tr>
<tr>
<td>Pre-cast Factory (Point B)</td>
<td>79.5</td>
<td>83.7</td>
<td>Running RCC pipe moulding unit</td>
</tr>
<tr>
<td>Pre-cast Factory (Point C)</td>
<td>67.5</td>
<td>74.5</td>
<td>Roller Machine</td>
</tr>
<tr>
<td>Contractor Camp</td>
<td>61.2</td>
<td>66.7</td>
<td>Background noise</td>
</tr>
<tr>
<td>Along Roadside (Sewer route)</td>
<td>82.3</td>
<td>87.1</td>
<td>Traffic Noise</td>
</tr>
<tr>
<td>Along Roadside (Factory)</td>
<td>79.6</td>
<td>86.7</td>
<td>Traffic Noise</td>
</tr>
<tr>
<td>Along Roadside (Disposal point)</td>
<td>81.2</td>
<td>88.9</td>
<td>Traffic Noise</td>
</tr>
</tbody>
</table>
Annexure-4: Handling and burying Asbestos Cement Pipe Pieces

Handling and burying AC Pipe Pieces

AC pipe pieces at site
Placing AC pipe pieces on plastic sheets

Wrapping AC pipe pieces on plastic sheets
Wrapping AC pipe pieces on plastic sheets
<table>
<thead>
<tr>
<th>Placing AC pipe pieces in trench</th>
<th>Placing yellow tap after soil cover</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
</tr>
<tr>
<td>Finally covering with soil</td>
<td>Wrapping gloves and masks</td>
</tr>
<tr>
<td><img src="image3.png" alt="Image" /></td>
<td><img src="image4.png" alt="Image" /></td>
</tr>
<tr>
<td>Placing along same trench</td>
<td>Placing yellow tap after soil cover</td>
</tr>
<tr>
<td><img src="image5.png" alt="Image" /></td>
<td><img src="image6.png" alt="Image" /></td>
</tr>
</tbody>
</table>