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Joint Secretary
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GOVERNMENT OF INDIA
MINISTRY OF HOUSING AND URBAN AFFAIRS



संजय कुमार, आई.ए.एस.

संयुक्त सचिव
एवं मिशन निदेशक (दी.अ.यो.-रा.श.आ.मि.)
भारत सरकार
आवासन और शहरी कार्य मंत्रालय

D.O. no.K-12014(18)/1/2017-UPA-I

Date: 24th January, 2019

Dear Sir,

As you may be already aware that DAY-NULM is supported by Technical Support Unit (TSU) established to facilitate convergence between DAY-NULM and Swachh Bharat Mission (SBM). The TSU supported by Urban Management Centre carried out a Skill Gap Study in the Faecal Sludge and Septage Management (FSSM) sector in collaboration with Sector Council for Green Jobs.

2. One of the key outcomes of the FSSM skill gap assessment is the identification and development of the relevant National Occupational Standards (NOS) and Qualification Packs (QPs) in the FSSM sector. The three qualification packs identified after the skill gap study include (I) Septic Tank Technician (II) Desludging Operator, and (III) Faecal Sludge Treatment Plant O&M Technician. A note is attached with more details of the individual QPs for your reference.

3. These Qualification Packs and their model curriculum have been approved by the Qualification Review Committee (QRC) of National Skill Development Corporation (NSDC) on 30th November 2018. Post the QRS approval, these QPs have been established as national training standards in FSSM sector.

4. As the Sub-Mission on FSSM is being launched, the skilling of sanitation workers engaged in FSSM value chain is extremely critical to have continuous supply of skilled workforce to manage the existing and newly created FSSM related infrastructure. In this regard it is requested to include skill training programs pertaining to these QPs and additional FSSM related QPs as part of FSSM sub-mission. We will be happy to work with you to take this initiative forward.

With regards

Yours Sincerely,

(Sanjay Kumar)

Shri Shiv Das Meena, I. A. S.
Additional Secretary and Mission Director (AMRUT)
Ministry of Housing and Urban Affairs,
Government of India

Note on Skilling for Sanitation Workers in FSSM for FSSM Sub Mission

Introduction:

According to Census of India - 2011, toilets connected with on-site sanitation system (60%) are higher than the toilets connected with the sewer network (40%). Though the on-site pit latrines and septic tanks account for substantial proportion, its safe emptying/desludging and treatment continues to be a huge challenge. There are major gaps in the safe disposal of faecal sludge and septage management (FSSM) across the FSSM value chain including septage collection, conveyance, treatment, and reuse/disposal.

In India, the skill training ecosystem in the FSSM sector is fragmented with the non-availability of the national standards for the training programs. The FSSM sector is evolving with the introduction of recent technologies and methods to reuse the faecal sludge, hence strengthening the existing skills set of the workforce is critical. Moreover, maintenance of the health and safety standards for the sanitation workers working in the FSSM sector is a concern area and needs due focus.

To explore the current and future state of FSSM sector, employment opportunities across the sector, existing skill gaps in training infrastructure (demand-supply gap) and action plans for all the stakeholders, the FSSM skill gap assessment study was conducted by the Urban Management Centre (UMC) with support of Sector Council for Green Jobs (SCGJ). The skill gap study provided an As-Is scenario of skill gap in terms of numbers of human resources estimates and required skills and recommended three major potential qualification packs (Job roles) in the FSSM value chain. These are viz. (i) Septic tank technician (ii) Desludging Operator and, (iii) Faecal sludge treatment plant (FSTP) Operation and Maintenance (O&M) technician.

1. Septic Tank Technician:

Septic Tank Technician is responsible for the fabrication of different types of septic tanks/ soak pit and install at the site (commercial/institutional/residential). He/ She is responsible for selecting a suitable configuration of septic tanks as per the CPHEEO Norms and execute its fabrication and installation with fellow masons. He/ She also undertake the work of repair and maintenance of existing septic tanks. Further QP on the septic tank technician is equipped with various national occupation standards (NOS). These NOS are (i) Assessment of site and size of septic tank /soak pit, (ii) Excavation, fabrication and installation of septic tank /soak pit, (iii) Installation of prefabricated septic tank, (iv) Repair and maintenance of septic tank, (v) Maintain personal health and safety in FSSM (vi) work effectively with co-workers etc.

2. Desludging Operator:

The Desludging Operator, also known as Sludge Emptier is an individual, who is responsible for emptying, transport and disposal of faecal sludge from the septic tank to desludging site / Faecal Sludge Treatment Plant. He /She has to operate pumps, suction hoses and other machinery/equipment to empty the septic tank and appropriately dispose the sludge. Desludging Operator would further specializes as an entrepreneur. He/she would be trained to venture into desludging services for

managing Faecal Sludge. Further QP on the desludging operator is equipped with various national occupation standards (NOS). These NOS are (i) Emptying of septic tank, (II) Preventive maintenance, transportation and safe disposal of sludge (iii) Health and safety of workplace while doing desludging services (iv) work effectively with a co-worker and, (v) Entrepreneurship skills for FSSM services etc.

3. Faecal Sludge Treatment Plant O&M Technician:

The Faecal Sludge Treatment Plant (FSTP) operation and maintenance technician is a person who is responsible for carrying out the day-to-day technical operations of the plant. He /She is also responsible for repair and maintenance of pumps, engines, motors, filters, bar screens, valves, pipes, and any other equipment at the FSTP. Further QP on the Faecal Sludge Treatment Plant O&M technician is equipped with various national occupation standards (NOS). These NOS are (i) carry out operation of FSTP, (ii) Carry out routine maintenance of FSTP (iii) Maintain personal health and safety at FSTP and, (iv) work effectively with co-workers etc.

Recently, the qualification packs on FSSM have been approved by the National Skill Development Corporation (NSDC). The training materials on approved QPs on FSSM is being prepared and can be utilized for conducting the capacity building training program for the sanitation workers. The Urban Local Bodies (ULBs) across the country can take the lead in building the capacity of sanitation workers as there is a dire need for adequately trained human resources to implement the various services of FSSM ranging from construction of toilet with septic tanks to emptying to conveyance and in septage treatment plants.