Report on participation in the seminar on Waste Management held on 21 – 22 Sept 2019 at Bokaro

The Institution of Engineers (IEI) in association with Steel Authority of India (SAIL) organised a two day “All India seminar onsolid Waste Management – An Industrial perspective” at Bokaro on 21 -22 Sept.2019. A technical paperentitled “OB Dump Stabilisation of slime and fly ash with the use of Jute Geotextile – two Case Studies” authored by M/s P K Choudhury, VK Despandey and Arvind Kumar M submitted for presentation was accepted by the IEI. On invitation from the organisers Sri P K Choudhury – Principal Technologist participated in the seminar. About 74 engineers/ professor/ environment specialist / decision makers from different organisations like SAIL, MECON, TATA STEEL, NTPC, Dalmina Cement, ISM (IIT Dhandab), KMDA, Gorantla Geosynthetics, CGCRI, NJB etc. participated in the event. Total 12 no. of technical papers most of which were based on Solid WasteManagement (SWM) of Iron and steel plants and fly ash management of Thermal Power Plants. It was emerged from the deliberations of the eminent speakers that India produces about 230 MT of non-hazardous wastes and 4.5 MT of hazardous wastes per year (Ref-C D Goswami- MECON) where the major contributors are steel & iron plants and thermal power plants. The unutilised wastes are dumped on lands nearby that cause serious environmental pollution which needs to be addressed judiciously. However, M/s Gorantla Geosynthetics’s paper was on application of synthetics geotextile for use is MSWM.The paper of NJB highlighted the properties jute with special focus on environment, standards & specification of jute geotextiles, their effectiveness in stabilising the vulnerable earthen / hill slopes along with two case studies on OB Dump stabilization of slime generated from iron mines and fly ash generated from thermal power plants justified by results. The theme of the paper and its presentation had created immense interest among the delegates. Number of queries raised by the participants were addressed.

In the valedictory session the Bokaro Steel (BSL) Plant authority expressed their gratitude to NJB for contributing such a unique paper in the seminar and educating the delegates on the new technology.

Being highly impressed on effectiveness of JGT, in consultation with the authorities of BSL like, Sri R C Srivastav – ED, R Kumar-CEO and others Sri N P Srivastava- Head of Environment-SAIL, Bokaro requested Sri P K Choudhury to kindly agree for a visit to OB Dump site nearby on the same day evening. Considering the seriousness of BSL, Sri Choudhury along with their four engineers / officers visited a site of 45 years old OB Dump of pond (fly) ash at Mahur Basti. The slope of dump appeared to be very stiff (more than 45 degree) and the ingredients were mainly unburnt coal in dust form mixed with fly ash. Before suggesting the remedial measures with the use of JGT, the BSL authority was requested to give feedback on some parameters like, exact composition of dump material, existing slope angle, angle of its internal friction, present height of slope, and total area of undulated vulnerable slope of dump.

PHOTO GALLERY ON PARTICIPATION IN SEMINAR ON WASTE MANAGEMENT HELD ON 21-22 SEPT2019 AT BOKARO

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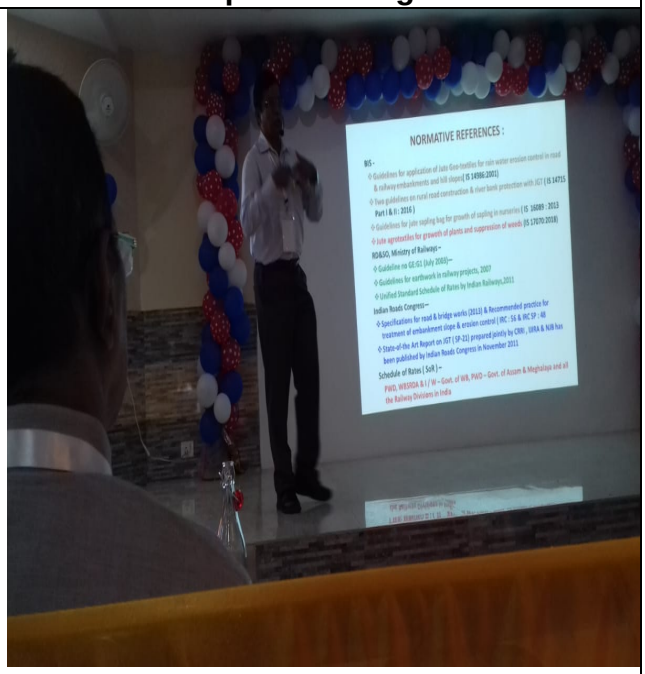
<tr><td>Opening Ceremony</td><td>Glimpse of Delegates</td></tr>
<tr><td> </td><td> 
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<tr><td>Technical Discussion on Jute Geo textiles</td><td>Presentation onJute Geotextile by P K Choudhury</td></tr>
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POND (FLY) ASH DUMP OF THERMAL POWER PLANT , BOKARO