

1.0 INSPECTOR ROLES

1.1 ACTIVITY INSPECTORS

Activity Inspectors will report directly to the Chief Inspector or Assistant Chief Inspector and will have direct contact with the Field Engineer, Safety Specialist, and Field Environmentalist for appropriate input from these disciplines.

Prior to the commencement of the construction activities and during the orientation process, all inspectors will be thoroughly briefed on their duties and responsibilities and on the environmental, safety and technical requirements associated with each activity.

Each Inspector shall ensure that safety and environmental policies and overall quality of the completed system is not compromised during construction.

Refer to the lines of communication on the organization charts.

Each Inspector will report both quality and progress of the Work on the applicable Daily Report Form.

Some of the more project-specific duties and responsibilities of individual Activity Inspectors are summarized below.

Each Inspector will prepare the necessary Daily Reports for their specific activity and maintain a daily diary.

1.2 STOCKPILE INSPECTOR

Responsibilities:

- a) Ensure adequate and proper signage is erected to facilitate traffic turning from the main road into the stockpile site. Signage must comply with the requirements of the Authority governing the road;
- b) Ensure any powerlines in vicinity of stockpile work are marked in accordance with the project safety requirements;
- c) Ensure Contractor conducts hazard assessment of site prior to commencing work;
- d) Ensure Contractor conducts safety and tool box meetings in accordance with the project safety standards;
- e) Ensure pipe is handled safely during offloading/stockpiling operations;
- f) Ensure pipe is handled/stockpiled such that the integrity of the pipe and coating is not damaged;
- g) Ensure placement of wooden supports and chocks are placed in accordance with the typical drawing to ensure pipe is not subjected to undue stress;
- h) Collect pipe transfer sheets from truckers and maintain a list of total pipe stockpiled by wall thickness (various wall thicknesses to be stockpiled separately).

Quality Checks

- Conduct a visual inspection of the pipe and coating to assess whether there has been any damage occur during handling and transportation. Identify and record damaged bevels, coating or pipe damage.

1.3 BURIED FACILITIES INSPECTOR

Responsibilities

- a) Liaise with the Field Engineer to confirm all Crossing Agreements are in place prior to any ground disturbance work;
- b) Liaise with the Survey Contractor regarding the staking of all buried facilities shown on the Alignment Drawings;
- c) Ensure that all buried facilities are staked and positively identified in accordance with the Project Ground Disturbance requirements;
- d) Confirm that the Contractor has made all necessary owner contacts regarding all buried facilities;
- e) Ensure that all ramps over buried facilities are installed in accordance with the Crossing Agreements and the Specifications;
- f) Ensure that all excavations/site holes are fenced or covered in accordance with the Contract documents;
- g) Maintain a punch list identifying all buried facilities encountered during the investigation work. Keep Chief Inspector advised of revisions to buried facilities from those shown on the Drawings;

1.4 CLEARING INSPECTOR

Responsibilities:

- a) Liaise with Environmental Inspector to ensure all timing constraints, wildlife, rare plant and ASRD regulations/commitments are met;
- b) Check Right-of-Way alignment and widths against route sheets;
- c) Ensure boundaries are flagged correctly and are visible prior to any clearing;
- d) Check Construction Line List for landowner requirements and restrictions;
- e) Maintain contact with land agent;
- f) Monitor temporary fencing requirements;
- g) Ensure all Ground Disturbance is carried out in accordance with the Contract Documents and the Authorities Having Jurisdiction.
- h) Ensure that power lines are identified in accordance with the Specifications prior to clearing;
- i) Confirm merchantable timber is being salvaged in accordance with the requirements;
- j) Ensure clearing and grading for access in the vicinity of watercourses is as per the Specifications;
- k) Ensure equipment crossings of watercourses are implemented correctly and in compliance with regulatory approvals;
- l) Record lengths of temporary fencing and note type of fencing used.

Quality Checks:

- confirm timber harvesting is in accordance with timber salvage requirements;
- check Right-of-Way widths;

Other Requirements:

- Confirm appropriate approvals are in place prior to any work off of the defined Right-of-Way;
- Participate in the development of the clear, grade and reclamation plan (CGR Plan) and ensure compliance with the approved plan;
- Ensure that identification of all buried facilities and any hand/hydro vac exposing is complete prior to any grading in accordance with the specifications;
- Ensure existing legal survey pins are marked to protect from equipment;
- Ensure all overhead power lines are marked in accordance with the Project Safety requirements.

1.5 GRADING INSPECTOR

Responsibilities

- a) Participate in development of grade plan and ensure Contractor crew has adequate copies on site (changes in grade plan must be managed through a documented process)
- b) Liaise with Environmental Inspectors regarding soil management practices.
- c) Ensure all Ground Disturbance requirements are implemented prior to any ground disturbance work.
- d) Ensure Crossing Agreements are in place and owner of buried facilities are contacted in accordance with the Contract or Crossing Agreement;
- e) Ensure buried facilities are hand or hydro vac exposed in accordance with the Contract Documents:
- f) Ensure power line guard poles and warning signs in place;
- g) Ensure topsoil is handled in accordance with the Contract Documents and the Grade Plan;
- h) Ensure buried facilities are properly ramped, as per Specifications, prior to crossing with any equipment;
- i) Maintain contact with land agent to ensure landowner cautions and restrictions are complied with;
- j) Ensure grade work is carried out in accordance with the Grade Plan;
- k) Ensure equipment crossings of watercourses are installed in accordance with the Specifications and EPP;
- l) Record lengths of temporary fencing and identify type being installed.

Quality Checks:

- document topsoil salvage procedures (width and depth of topsoil being salvaged).

1.6 TOPSOIL REMOVAL INSPECTOR

Tasks To Be Performed

- a) Liaise with third party inspection representatives such as the North Central Landowner Association in the White Area and address issues and concerns raised by these representatives.
- b) Liaise with Environmental Inspectors to ensure adherence to all Project and regulatory commitments regarding soil management practices.
- c) Check that topsoil removal requirements are staked and in accordance with the AGR Plan, drawings, specifications and line list;
- d) Ensure work activities stay outside of any staked safety buffer zones;
- e) Ensure that approval has been granted by the owner of the buried facility prior to placing any material over or in close proximity to adjacent parallel pipelines,
- f) Ensure that work in close proximity to buried facilities is conducted in accordance with the owner requirements and conditions on the safe work permits and ground disturbance check lists,
- g) Check that adequate depth of topsoil is removed in accordance with the specifications;
- h) Ensure adequate separation (1 m) is maintained between stripped topsoil and any trench spoil or grade spoil.

Quality Checks:

- start and stop stations of different topsoil removal types;

Special Considerations:

- Allow topsoil removal only when climatic conditions are suitable;
- Ensure buried facilities are managed in accordance with the Project Ground Disturbance requirements and that all workers are aware of the locations and depth of buried facilities.
- Ensure safe work permits and ground disturbance check lists are completed in accordance with the Project requirements and the Authorities Having Jurisdiction;

1.7 PIPE STRINGING INSPECTOR

Tasks to be performed:

- a) Monitor general trucking safety;
- b) Ensure pipe loads are properly secured and tarped as required;
- c) Check truck tally sheets against actual pipe delivered; data to be recorded;
- d) Check lifting hooks are as per the Specifications;
- e) Ensure changes in wall thickness are staked prior to stringing and correct pipe is strung at these locations;
- f) Ensure that maximum lifting angles between lifting cables and pipe are not exceeded;
- g) Check condition of pipe upon receipt on Right-of-Way, record any damage to pipe bevels or coating;
- h) Ensure pipe is strung on skids, supported adequately off the ground and blocked in a safe fashion to prevent movement;
- i) Record accumulated totals of various wall thicknesses on a daily basis.

Quality Checks:

- Ensure landowners access and livestock crossings are maintained in accordance with the specifications and landowner requirements;
- Ensure that stringing equipment crosses buried facilities in accordance with the specifications;

1.8 PIPE BENDING INSPECTOR

Tasks to be performed

- a) Ensure that bending equipment crosses buried facilities in accordance with the Contract requirements and terms of Crossing Agreements
- b) Ensure completed bends are within tolerances specified in the Specifications;
- c) Check bending equipment, shoes and stiffbacks and mandrels for neoprene padding or equivalent;
- d) Check pipe handling techniques;
- e) Monitor and record damaged pipe;
- f) Check setup on Right-of-Way after bending.

Quality Checks:

- ovality and other damage checks
- check pipe end defects for compliance with construction specifications.

1.9 TRENCH INSPECTOR

Tasks to be performed:

- a) Confirm trench stakes are in place prior to trenching operations;
- b) Ensure ground disturbance procedures are completed in accordance with the Contract Documents and that Safe Work Permits and Ground Disturbance Checklists are filled out.
- c) Ensure that trenching equipment maintains close limits of approach with buried facilities;
- d) Check trench dimensions and depth, ensure sufficient sidewall clearance and additional depths required for bedding,
- e) Check pipeline crossings and ramps are in accordance with Contract Documents;
- f) Check buoyancy control requirements (where set-on weights are installed minimum cover is measured from the top of the weight);
- g) Check that warning signs and fencing are installed at open excavations accessible to the public;
- h) Monitor rock excavation techniques, where blasting occurs special attention is to be paid to safety measures.
- i) Measure rock excavation - cubic measure;
- j) Document lengths of bedding and padding for payment purposes.

Quality Checks:

- confirm trenchline is staked correctly in accordance with the Drawings;
- ensure all buried facilities are staked in accordance with Ground Disturbance requirements;
- confirm trench depths; and
- confirm bedding and padding depths are in accordance with Specifications

Other Requirements:

- Ensure that all necessary hand or hydro vac exposures of existing pipelines has been carried out in advance of excavating a particular section;
- Ensure Safe Work Permits and Ground Disturbance Checklists are in place as required;
- Ensure that trenching equipment only crosses existing pipelines in accordance with the specifications; and
- Ensure that trench wall slopes are in accordance with safety standards in areas where workers are required to work in the trench.

1.10 GEOTECHNICAL INSPECTOR

Tasks to be performed include

- Report directly to the Chief Inspector on a daily basis.
- Provide support to the Chief Inspector and/or his designate regarding muskeg and buoyancy control surveys to determine placement and requirement for buoyancy control devices;
- Document trench conditions during trenching operations (soil type, water content, soil stability etc.)
- Provide support to the Chief Inspector and/or his designate regarding summer trench line compaction requirements/results;

Quality Checks

- Confirm compaction results comply with project standards;

1.11 WELDING INSPECTOR

Tasks to be performed on the pipe gang:

- a) Ensure that welders are tested/qualified for the wall thickness they are welding on;
- b) Check pipe end preparation;
- c) Check interior cleanliness of pipe;
- d) Check availability and application of correct welding procedures;
- e) Make random checks on welding parameters contained in welding procedures i.e. pre heat cool down procedures; welding consumable; voltage, amperage and travel speeds; ensure clamps being held for required time; ensure that hot pass on bottom of pipe completed prior to moving pipe;
- f) Ensure 'induced voltage' mitigation measurements are employed;
- g) Note weather conditions and record ambient temperatures and wind conditions;
- h) Note time and duration of any shutdowns with the cause for shutdown.

Tasks to be performed on back end welding:

- a) Check wind breaks and shelters for effectiveness;
- b) Check availability and application of correct welding procedures;
- c) Make random checks on welding procedures, e.g., pre heat; cool down procedures; welding consumable; voltage, amperage and travel speeds; ensure clamps being held for required time;
- d) Ensure 'induced voltage' mitigation measures are employed;
- e) Ensure proper grounding techniques are observed;
- f) Ensure cooling control is employed in accordance with welding procedures;
- g) Check weld identification is occurring properly;
- h) Check with NDT inspection crews as to weld quality;
- i) Monitor repairs and cut-outs;
- j) Conduct visual inspections on finished welds;
- k) Undertake alignment sheet checks to ensure appropriate wall thickness are in place;
- l) Record the time and duration of any shutdowns with the cause for shutdown;
- m) Ensure that night caps are installed on section ends;
- n) Ensure that NDT crews are maintaining required production rates.

Quality Checks:

- ambient temperatures;
- preheat temperatures;
- bevel and gap dimensions;
- voltages and amperages; and
- weld cycle time and rate of travel.

1.12 FIELD COATING INSPECTOR

Tasks to be performed:

- a) Conduct visual inspection for jeeps and ensure they are repaired as per Specifications;
- b) Ensure only approved coating materials/sleeves on site and being used by Contractor;
- c) Check that appropriate MSDSs are on site and proper PPE being used/worn by workers;
- d) Check that coating materials/sleeves are properly stored (e.g., dry, warm);
- e) Ensure that sandblasting and pre-heating are as per Contract or manufacturer's specifications; and
- f) Ensure proper application of coating material/sleeves as per Specifications.
- g) Ensure 'induced voltage' mitigation measures are employed;
- h) Ensure proper grounding techniques are observed;

Quality Checks:

- blast profiles of metal surfaces to be coated;
- pre-heat temperatures;
- coating thickness: and
- visual inspection to ensure integrity of sleeve installation.

Other Requirements:

- Ensure that the Contractor has the necessary equipment and that regular testing of breathing air is conducted to ensure its safety; and
- Ensure that coating equipment crosses existing pipelines in accordance with the Specifications.

1.13 LOWERING-IN INSPECTOR

Tasks to be performed:

- a) Inspect trench bottom for rocks, clogs or high spots which could damage coating or pipe;
- b) Check condition of lowering-in cradles and rollers;
- c) Check that cradles/rollers are not damaging joint coating/sleeves;
- d) Perform holiday detector checks with Contractor supplied volt meters, and ensure detectors are set at correct voltage and have proper grounding;
- e) Ensure jeeps are repaired as per specifications;
- f) Ensure that water is pumped from ditch/trench to allow inspection of trench bottom and to ensure pipe rests on trench bottom;
- g) Check for proper "pipe to trench" fit, do not allow "bridging";
- h) Check that correct bedding and padding materials are installed and to the required depths;
- i) Check buoyancy control (weights/anchors) placement and ensure they are installed such that no pipe or coating damage will occur;
- j) Check connection of C.P. Test Lead wires where installed; and
- k) Ensure that nightcaps are installed on section ends.

Quality Checks:

- confirm holiday detector voltage readings;
- confirm depth of cover;
- confirm bedding and padding depths and locations;

Other Requirements:

- Ensure that lowering-in equipment crosses buried facilities in accordance with the Specifications.

1.14 BUOYANCY CONTROL (WEIGHTS OR ANCHORS) INSPECTOR

Tasks to be performed:

- a) Check trench to determine/confirm where buoyancy control is required;
- b) Check that the trench depth is adequate to provide proper cover over buoyancy control devices;
- c) Check that the installation locations are clearly marked on pipe and that they correspond with the buoyancy control requirements, as determined relative to trench conditions;
- d) Ensure rock shield adequately secured to pipe if installing rock shield prior to weight placement,;
- e) Check the weights to ensure: 1) they are clean and free of ice or debris on the internal surface; 2) that felt padding is in good condition; 3) crew removes any excess concrete (left from the forming process) that could contact and damage the pipe;
- f) Ensure that buoyancy control measures are installed in such a manner that will not damage or affect the integrity of the pipe; and
- g) Ensure that weights/anchors are installed as per specifications (e.g., away from girth welds, level position, lagging if required, etc.).
- h) Ensure excavations are safe during anchor installation work;
- i) Record type of buoyancy control device installed, starts and stops, spacing, number installed and lagging if installed;

Quality Checks:

- depth of cover; and
- installation torque, depth and extra extensions for screw anchors for both work side and spoil side.

Other Requirements:

- Ensure that trench is dewatered prior to installation of screw anchor installation and, where practical for installation of swamp weights;
- Check that safety measures are implemented during installation of weights or anchors to ensure worker safety; and
- Notify survey so that installations are as built prior to backfill.

1.15 BACKFILL INSPECTOR

Tasks to be performed:

- a) Liaise with third party inspection representatives such as the North Central Landowner Association in the White Area and address issues and concerns raised by these representatives.
- b) Ensure proper padding material installed to required thickness;
- c) Check rock shield installation, ensure sufficiently secure and installed at correct location;
- d) Check proper backfill material is being used and reject out-of-specification stones and boulders;
- e) Check water course reinstatement is correct and that drains are functioning;
- f) Ensure proper compaction of trenchline as per Specifications;
- g) Check trench plugs and sack breakers are installed at the locations staked by others; and
- h) Check buoyancy control measures are correctly installed and secure on the pipe;
- i) Record starts and stops of padding or rock shield.

Quality Checks:

- depths of padding;
- depth of cover;
- land drain locations and depths.

Other Requirements:

- Ensure that “sight holes” are carefully backfilled and compacted.

1.16 BORING INSPECTOR

- a) Ensure trench wall stability and proper back sloping in bore area;
- b) Ensure no undermining of other buried facilities occurring during excavation of bore bays;
- c) Ensure any shoring requirements are in place before work commences;
- d) Check cover depths are in accordance with the drawings;
- e) Ensure minimum distances are maintained between open excavations and the edge of roads and railways in accordance with the Specifications;
- f) Ensure that pipe is properly supported and backfill compacted in accordance with the Specifications:

Quality Checks:

- check cover depth;
- confirm section jeeped prior to pulling through bore;
- check condition of coating after section pulled into place.

Other Requirements:

- Ensure that buried facilities are managed in accordance with the Project requirements and Crossing Agreements:
- Ensure Safe Work Permits and Ground Disturbance Checklists are in place as required:
- Ensure equipment crossing ramps are used for buried facility crossing as required in accordance with the Specifications and Crossing Agreements.
- Inform Cathodic Protection Specialist on completion of bores so that he can perform the necessary continuity tests.
- Ensure that abrasion coated pipe is used where specified on the Drawings.

1.17 TIE-INS INSPECTOR

Tasks to be performed, in addition to tasks defined above for welding inspectors:

- a) Check cover depths, trench wall stability and back slopes; ensure any shoring requirements are in place before work commences;
- b) Ensure Ground Disturbance requirements are met prior to any excavation work;
- c) Ensure stress free line-ups prior to welding;
- d) Liaise with NDT contractor for purpose of obtaining most rapid results for weld acceptance;
- e) Ensure proper support of carrier pipe, particularly at bore hole entrance/exit;
- f) Check pipe wall transition requirements:
- g) Ensure bell-holes are as dry as possible and that the Contractor's pumping facilities are sufficient to ensure that water will not encroach onto the pipe surface until the weld is completed, cooled and coated:
- h) Monitor joint coating and conduct holiday checks, using approved holiday detector;
- i) Ensure that all test leads required are installed in accordance with the Specification;
- j) Ensure that full pipe identification is available on all pipe included in the tie-in;
- k) Ensure that all pups cut and not used on the tie-in are clearly identified with the pipe number, heat number, length and wall thickness;
- l) Ensure that the Contractor moves pups forward on a regular basis; and
- m) Monitor pipe and coating protection, pipe support and compaction with backfill operation;

Quality Checks:

- confirm required depth of cover achieved;
- carry out welding and coating parameter checks;

Other Requirements:

- Ensure that full identification of buried facilities is conducted in accordance with Ground Disturbance requirements at road crossings and slip bore locations prior to excavating operations commencing; and
- Ensure that heavy equipment does not cross buried facilities without crossing ramps in place in accordance with the Specifications and Crossing Agreements.

1.18 RIVER AND STREAM CROSSINGS INSPECTOR

Tasks to be performed:

- a) Liaise with Environmental Inspector and ensure all regulatory commitments are fulfilled.
- b) Ensure all ground disturbance requirements have been complied with prior to any ground disturbance work;
- c) Ensure that crossing procedure plan is completed prior to commencement of work;
- d) Check Right-of-Way and extra work space boundaries for compliance with Drawings and Grade Plan;
- e) Oversee bank and watercourse valley grading operations and ensure bank integrity/stability is maintained;
- f) Ensure proper warning signs are in place on navigable waterways;
- g) Ensure the crossing is being installed in accordance with procedures identified in Contract Documents;
- h) Check buoyancy control devices to ensure installed properly;
- i) Assist as necessary in hydrostatic pre-tests;
- j) Monitor trenching and backfill operations.

Quality Checks:

- assist Environmental Specialist in water quality sampling, as necessary;
- confirm trench depth and width dimensions prior to installation of crossing assembly'.
- ensure surveyors confirm cover depth meets minimum specified requirements prior to allowing backfill;
- confirm as-built work has occurred at crossing prior to allowing backfill to commence;

Other Requirements:

- Ensure all buried facilities are properly identified and exposed where required prior to any excavation work;
- Ensure that emergency response equipment and material are on site for mitigation of any environmental situations.

1.19 DIRECTIONAL DRILL INSPECTOR

Tasks to be performed:

- a) Confirm all Ground Disturbance requirements are complied with prior to any Ground Disturbance work;
- b) Ensure topsoil is conserved and protected in accordance with the Specifications;
- c) Confirm the HDD plan has been completed and approved prior to commencement of site preparation;
- d) Confirm all emergency response material is on site prior to commencement of drilling operations;
- e) Confirm location and approval for disposal of drilling fluids has been completed;
- f) Confirm water withdrawal approvals have been acquired prior to any water withdrawal;
- g) Ensure pipe section is welded, coated and pre-tested in accordance with the Specifications;
- h) Ensure Contractor has adequate lifting capabilities to thread section into bore hole "stress free";

Quality Checks

- Confirm as-built of pilot hole meets minimum requirement of the Specifications;
- Confirm drilling fluids comply with the HDD plan and the Contract requirements (fluid data sheets on site);
- Ensure Contractor cleans off exposed ends once section installed in bore hole, so coating can be checked to ensure no damage occurred during pipe installation;
- Coordinate continuity test once section is installed in bore hole.

1.20 FABRICATION INSPECTOR

Tasks to be performed, in addition to those listed under Welding:

- a) Check drawing dimensions and details are being adhered to;
- b) Check any isometric drawings produced by the Contractor;
- c) Allocate and check weld numbers to a given fabrication prior to welding taking place and develop weld map;
- d) Coordinate regular radiographic inspections to minimize disruption to the Contractor's work program;
- e) Ensure handling procedures protect the Project materials used; and
- f) Assist in hydrostatic testing procedures; ensure test caps or test heads are of the proper rating.

Quality Checks to be taken; in addition to welding criteria;

- information to develop weld map;
- dimensional checks; and
- hydrostatic test details.

Other Requirements:

- Ensure that welding is carried out in accordance with the Construction Specifications.
- Monitor welding parameters to confirm within specified tolerances;
- Conduct an internal inspection of completed assemblies to ensure no damage and no debris left inside.

1.21 CLEANUP INSPECTOR

Tasks to be performed:

- a) Liaise with third party inspection representatives such as the North Central Landowner Association in the White Area and address issues and concerns raised by these representatives.
- b) Monitor Construction Line List to ensure landowner requirements are incorporated into cleanup;
- c) Ensure removal of rocks, boulders and general debris from the Right of Way in accordance with the Specifications;
- d) Check placement of berms and erosion control measures;
- e) Liaise with company Land Agent on any special cleanup requirements of landowners;
- f) Ensure topsoil replacement procedures are observed and that topsoiling operations are carried out when suitable climatic conditions prevail;
- g) Verify that drains are operational and no pooling is evident;
- h) Ensure marker posts and warning signs are properly located and that fences are satisfactorily restored;
- i) Ensure that final Right-of-Way preparation is suitable for the application of fertilizers and seeds;
- j) Assist with final continuity check of test leads and ensure correct installation of test lead posts;
- k) Ensure no surplus construction or pipeline materials are left on the Right-of-Way;
- l) Ensure appropriate equipment is used to remove compaction; and
- m) Liaise with Environmental Specialist on any special cleanup procedures, which he may require to be carried out.

Quality Checks:

- continuity of depth of replaced topsoil;
- monitor compaction depths;
- confirm fences repaired to the original condition;
- ensure any required temporary fencing is installed;

Other Requirements:

- Ensure trench line compaction is completed in accordance with the Specifications and the North Central Land Owner Association in White Zone agricultural land.

- Ensure all crossing of buried facilities is conducted in accordance with the Ground Disturbance requirements.

1.22 PIGGING AND HYDROSTATIC TESTING INSPECTOR

Tasks to be performed:

- a) Monitor pigging operations and check quality and types of pigs;
- b) Measure pig rubbers to ensure minimum specifications achieved;
- c) Liaise with Environmental Specialist and Field Engineer in notification to authorities and regulatory agencies prior to any dewatering,
- d) Ensure that all permits for water withdrawal or disposition are in place prior to commencement of work;
- e) Check test head installation and instrumentation manifolds;
- f) Check hydrotest water is only obtained from approved sources;
- g) Check warning signs are properly displayed;
- h) Check filling and dewatering procedures;
- i) Liaise with Construction Survey for elevation checks;
- j) Check all instruments used for recording tests are suitable and have recent calibration certificates available;
- k) Check marking and identification of security pipe is carried out in accordance with the Specifications;
- l) Check erosion control is exercised during disposal of test water;
- m) Carry out Right of Way monitoring activities during test periods;
- n) Check warning signs are removed after testing is complete; and
- o) Ensure dewatering is not conducted directly into water sources.

Quality Checks:

- a) pig run speed calculations;
- b) recording of pressures obtained during pigging;
- c) record state of pigs upon exit, including any foreign material present,
- d) pressure and temperature plots;
- e) dead weight tester readings;
- f) yield plots;
- g) caliper run chart review with technician;
- h) depressurization rates; and
- i) confirm minimum project pipe drying is achieved correctly.

Other Requirements:

- Hydrostatic testing is a particularly sensitive operation in terms of environmental protection, care should be exercised when withdrawing or disposing of test water. Water should not be withdrawn at rates above those defined in applicable permits and when water is returned to a water course or water body its rate of return should be regulated to minimize erosion and turbidity.

1.23 RECLAMATION INSPECTOR

Tasks to be performed:

- a) Liaise with Lands Agent and monitor Construction Line List for any special restoration requirement of landowners;
- b) Liaise with third party inspection representatives such as the North Central Landowner Association in the White Area and address issues and concerns raised by these representatives.
- c) Ensure final fencing, marker posts and warning signs are installed satisfactorily;
- d) Ensure that installed test lead posts have not been damaged during cleanup and reclamation activities;
- e) Liaise with the environmental inspector regarding status of compaction and any decompaction requirements;
- f) Verify fertilizing and seeding requirements as shown on the drawings and line lists;
- g) Check Contractor's seed and fertilizer spreading equipment is suitable for the purpose;
- h) Check on fertilizer and seed application rates to ensure required coverage is obtained;
- i) Liaise with Environmental Specialist on any seed quality analyses which may be required to be carried out;
- j) Confirm straw crimping requirements; and
- k) Check straw for cleanliness and type.

Quality Checks:

- ambient temperatures;
- volumes of seed and fertilizer used;
- record areas (ha) seeded; and
- record straw crimping areas (ha) by application rate.