UNF
DRIVER(dri _no, dri_licence_num, dri_name, dri_dob, dri_taxfile_num, (truck_vin, truck_rego_num, truck, make, truck_year)

1NF
DRIVER(dri__no, dri_licence_num, dri_name, dri_dob, dri_taxfile_num)
TRUCK (truck_vin, truck_rego_num, truck_model, truck_make, truck_year)

CKs for DRIVER:
dri_no (choose this)
licence_no
taxfilenumber

CKs for TRUCK:
truck_vin (choose this)
truck_regonum

partial dependency:
No partial depency

2NF
DRIVER(dri__no, dri_licence_num, dri_name, dri_dob, dri_taxfile_num)
TRUCK (truck_vin, truck_rego_num, truck, make, truck_year)

Transitive dependency:
No transitive dependency

3NF
DRIVER(dri__no, dri_licence_num, dri_name, dri_dob, dri_taxfile_num)
TRUCK (truck_vin, truck_rego_num, truck_model, truck_make, truck_year)

Full dependencies:
dri_no dri_licence_num, dri_name, dri_dob, dri_taxfile_num
truck_vin truck_vin, truck_rego_num, truck_model, truck_make, truck_year

UNF
CONTRACT(contract_num, waste_id, waste_type_desc,
collection_frequency(collection_date, dri_no, dri_contact, truck_vin(bin_rfid,
bin_collected_kgs, bin_overweight)))

1NF
CONTRACT(<u>contract_num</u>, waste_id, waste_type_desc, collection_frequency)

REPORT (<u>collection_date</u>, dri_no, dri_contact, truck_vin, <u>contract_num</u>)

BIN(<u>bin_rfid</u>, bin_collected_kgs, bin_overweight, <u>collection_date</u>)

Partial dependency:
No partial dependency

2NF
CONTRACT(<u>contract_num</u>, waste_id, waste_type_desc, collection_frequency)

REPORT(<u>collection_date</u>, dri_no, dri_contact, truck_vin, <u>contract_num</u>)

BIN(<u>bin_rfid</u>, bin_collected_kgs, bin_overweight, <u>collection_date</u>)

Transitive dependencies
waste_id waste_type_desc
dri_no dri_contact

3NF
CONTRACT(<u>contract_num</u>, waste_id, collection_frequency)

REPORT(<u>collection_date</u>, dri_no, truck_vin, <u>contract_num</u>)

BIN(<u>bin_rfid</u>, bin_collected_kgs, bin_overweight, <u>collection_date</u>)

WASTE(<u>waste_id</u>, waste_type_desc)

DRIVER(<u>dri_no</u>, dri_contact)

Full dependencies:
con_num waste_id, collection_frequency
date_of collection, contract_num dri_no, truck_vin
bin_rfid, collection_date bin_collected_kgs, bin_overweight
waste_id waste_type_desc
dri_no dri_contact

Collected 3NF Relations
1. DRIVER(<u>dri_no</u>, dri_licence_num, dri_name, dri_dob, dri_taxfile_num)
2. TRUCK (<u>truck_vin</u>, truck_rego_num, truck_model, truck_make, truck_year)
3. CONTRACT(<u>contract_num</u>, waste_id, collection_frequency)
4. REPORT(<u>collection_date</u>, dri_no, truck_vin, <u>contract_num</u>)
5. BIN(<u>bin_rfid</u>, bin_collected_kgs, bin_overweight, <u>collection_date</u>)
6. WASTE(<u>waste_id</u>, waste_type_desc)
7. DRIVER(<u>dri_no</u>, dri_contact)

Attribute Synthesis
1, 8
DRIVER(<u>dri_no</u>, dri_licence_num, dri_name, dri_dob, dri_taxfile_num, dri_contact)

2
TRUCK (<u>truck_vin</u>, truck_rego_num, truck_model, truck_make, truck_year)

3
CONTRACT(<u>contract_num</u>, waste_id, collection_frequency)

4
REPORT(<u>collection_date</u>, dri_no, truck_vin, <u>contract_num</u>)

5
BIN(<u>bin_rfid</u>, bin_collected_kgs, bin_overweight, <u>collection_date</u>)

6
WASTE(<u>waste_id</u>, waste_type_desc)